Ideological orientation and social context as moderators of the effect of terrorism: The case of Israeli-Jewish public opinion regarding peace

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Abstract

The study investigated the effect of severe terror attacks on Israeli-Jewish public opinion regarding peace in a context of progress toward peace (1994–1997) compared to a context of conflict escalation (2001–2002). We hypothesized that ideological orientations supporting peace (doves) or opposing it (hawks), as well as the social context in which terror occurs, would moderate its effects. We used the database of Peace Index polls, administered monthly to representative samples of Israeli Jews. Polls pose three recurring questions regarding peace. We selected eight polls conducted within a week or less following a severe terror attack, and matched each to a “control” poll, taken at the nearest available time and not preceded by terror. Findings showed that during the 1990s, hawks’ opinions regarding peace became less favorable following terror, whereas doves exhibited minimal opinion change. During 2001–2002, however, doves’ opinions regarding peace became less favorable following terror, whereas hawks’ support for peace increased while their belief in peace did not change. This suggests that the effect of terror on opinions regarding peace varies according to ideological orientations and the transitional context in which terror occurs, implying that contextual factors from multiple levels may interact to affect individuals’ opinions. Copyright © 2009 John Wiley & Sons, Ltd.

The intractable Israeli–Palestinian conflict has been going on for over 100 years. It is a protracted and violent conflict, which plays a central role in the lives of the involved parties, both as collectives and as individuals (Bar-Tal, 2007a,b; Kriesberg, 1993). The conflict has caused extensive losses of life and property to the Palestinian as well as the Israeli side, and both parties have had to adapt to living with constant violence and/or threats of violence. In these violent confrontations, Israelis have had to adjust to living under the threat of terrorism for prolonged periods (Bleich, Gelkopf, & Solomon, 2003; Hobfoll, Canetti-Nisim, & Johnson, 2006). This context led most Israeli Jews to develop firm ideological beliefs regarding the conflict and its resolution (Hermann & Yuchtman-Yaar, 2002; Peleg, 1998). The aim of the present study was to investigate the effects of large-scale terror attacks on Israeli Jews’ beliefs about conflict resolution and peace as a function of their ideological orientations as well as the social context within which terror takes place.

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Effects of Terrorism on Public Opinion

Public opinion on political issues is responsive to ongoing political events (Sears, 2002). Accordingly, studies conducted among Israeli Jews have demonstrated that beliefs about the Israeli–Palestinian conflict are influenced by the occurrence of major events, which are defined as events that resonate widely, have relevance to the well-being of society members and society as a whole, and occupy a central position in the public discourse (Bar-Tal & Sharvit, 2008; Bar-Tal, Bar-Tal, & Cohen-Hendel, 2006; Oren, 2006). Moreover, several studies conducted in Israel and elsewhere in recent years have revealed effects of exposure to terror on public opinion, particularly regarding issues pertaining to intergroup relations (Bar-Tal & Labin, 2001; Canetti-Nisim, Halperin, Sharvit, & Hobfoll, in press; Echebarria-Echabe & Fernandez-Guede, 2007; Hobfoll et al., 2006; Huddy, Feldman, Taber, & Lahav, 2005; Huddy, Khatib, & Capelos, 2002; Skitka, Bauman, & Mullen, 2004). Specifically, these studies show that exposure to terror is associated with greater hostility toward outgroups and increased conservatism. The findings are consistent with research about the effects of threat in intergroup relations in general, which has found that threat is associated with conservatism (Jost, Glaser, Kruglanski, & Sulloway, 2003; Jost, Napier, Thorisdottir, Gosling, Palffai, & Ostafin, 2007), prejudice, intolerant attitudes toward outgroups (Duckitt & Fisher, 2003; Stephan & Renfro, 2002; Stephan & Stephan, 2000; Watts, 1996), and preference for harsher and less compromising policies (Arian, 1995; Arian, Talmud, & Herrman, 1988; Gordon & Arian, 2001; Schafer, 1999). Since terror attacks are threatening events they are likely to influence Israeli–Jews’ views of the conflict with the Palestinians and their opinions about the resolution of this conflict and the attainment of peace.

Most studies that investigated the effects of terror on opinions related to intergroup relations examined the consequences of a single isolated terror event, such as the 9/11 attacks in the United States (Huddy et al., 2005; Huddy et al., 2002; Skitka et al., 2004) or the 3/11 attack in Madrid (Echebarria-Echabe & Fernandez-Guede, 2007). The Israeli context is unique due to the ongoing nature of terrorism and conflict-related violence, to which Israelis are continually exposed. In such a context, it is possible to examine whether the observed effects of terror generalize across several incidents, and whether the effect of terror changes as a function of broader changes to the social context over time.

Several studies attempted to investigate the effects of exposure to ongoing terrorism in Israel, rather than the effect of a single terror event, by examining the relationship between the degree of direct exposure to terror (e.g., being personally injured or present at the site of a terror attack) and attitudes and opinions related to intergroup relations (Canetti-Nisim et al., in press; Hobfoll et al., 2006; Solomon & Lavi, 2005). The findings showed that degree of direct exposure was positively related to hostile attitudes toward outgroups, conservatism, and decreased support for peace negotiations. However, such findings do not reveal whether the opinions of individuals who were not directly exposed to terror attacks, and only learned about them vicariously, are also responsive to terror.

One of the characteristics of terrorism is that it attempts to influence a public that is broader than the actual victims, and usually succeeds in doing so (Atran, 2003; Crenshaw, 1986; Long, 1990). Thus, there is reason to expect observable effects of terrorism on the general public, even in the absence of direct exposure. Such effects are particularly likely given the vast coverage of terror attacks in the Israeli media (Ben-Shaul, 2006; Witztum, 2006; Wolfsfeld, 2004), which results in extensive vicarious exposure to terrorism for nearly all members of the Israeli society. Indeed, studies have demonstrated considerable psychological effects of indirect exposure to terrorism via the media (Keinan, Sadeh, & Rosen, 2003; Slone, 2000), and one study found effects of such indirect exposure on the activation of beliefs about the Israeli–Palestinian conflict (Sharvit, 2008). The relationship between degree of direct exposure and opinions about intergroup relations does not reveal these vicarious effects of terrorism. Such effects can only be revealed by comparing opinions observed in the aftermath of terror attacks to those that are observed in the absence of terror attacks. The present study employs such a strategy in order to investigate the effects of ongoing terrorism on opinions regarding peace among the general Israeli-Jewish public.

Factors that Moderate the Effects of Terrorism

Although most Israeli individuals are exposed to terrorism, either directly or vicariously, the effect of terror may not necessarily be uniform. Psychology has long recognized that individuals’ reactions to stimuli in their environment are products of an interaction between the nature of the stimuli and individual dispositions, which shape the manner in which stimuli are encoded and interpreted (Magnusson & Törnqvist, 1992; Mischel & Shoda, 1995; Ross & Nisbett, 1991).
Environmental stimuli, and particularly social stimuli, can be analyzed at several levels. The most general level includes the stable structural characteristics of a given environment, such as climate and culture, which persist for long periods and change very slowly. Within such generally stable environments, specific events may occur, which briefly alter the immediate conditions and may elicit specific responses from individuals. However, the effects of such specific events usually dissipate after a short period. Bar-Tal and Sharvit (2008) suggested the concept of transitional context as a level that is situated between the stable structural features of the environment and short-term events. Transitional context refers to temporary environmental conditions that come about as a result of major events and/or major information. These are events and information that have wide resonance and relevance to the well-being of society members and of society as a whole, and that occupy a central position in the public agenda. Consequently, transitional contexts, although temporary, are longer lasting and more influential than short-term events. Furthermore, short-term events may take place within a given transitional context, and their short-term effects may vary depending on the social or environmental conditions that constitute the transitional context.

In the present study, we consider terror attacks as short-term events, and explore whether their effects on public opinion regarding peace vary depending on the transitional context within which they take place. Moreover, in keeping with the research regarding the interactive effects of dispositional and situational factors on individuals’ behavior (Mischel & Shoda, 1995; Ross & Nisbett, 1991), we suggest that both short-term events such as terror attacks and the longer-lasting conditions of a transitional social context may interact with dispositional characteristics of individuals in their effect on opinions. Specifically, we suggest that individuals’ ideological orientations may moderate the effect of short-term terror attacks and the effect of the transitional social context on public opinion regarding peace.

Ideological Orientation, Opinions about Peace, and Terror Attacks

In the Israeli-Jewish society, ideological orientations and political beliefs vary on a continuum between hawkish and dovish views. Most political parties in Israel position themselves along the hawkish–dovish ideological continuum, and usually align with the dovish or hawkish bloc in forming coalitions (Arian & Shamir, 2002). This positioning is a central factor that determines citizens’ voting behavior (Arian, 1995; Arian & Shamir, 2002). The hawkish–dovish continuum has many parallels to the left–right or liberal–conservative dimensions that characterize political attitudes in numerous societies and cultures around the world (Jost, 2006). According to Jost et al. (2003), political orientations along the liberal–conservative continuum involve core aspects, which are common to many societies and contexts, and peripheral aspects, which vary depending on the culture and historical context and relate to issues that occupy a given society at a given time.

In Israel society, the conflict with the Palestinians is an issue that receives extensive public attention (Bar-Tal, 2007a). Hence, beliefs regarding the conflict and its resolution are central aspects of individuals’ positioning along the dovish–hawkish ideological continuum (Bar-Tal, Raviv, Raviv, & Dgani-Hirsh, 2009). Doves support compromises, especially territorial, for the sake of peace. Therefore, this group generally supports attempts to achieve peace with various Arab nations. Hawks hold uncompromising views about peace, and support holding on to the territories occupied by Israel since 1967 or at least a considerable part of them. This group usually does not support peace initiatives (Arian, 1995; Peleg, 1998).

An empirical study of Israelis’ opinions about peace during the 1990s and up until 2001 found that while the gap between hawks and doves remained relatively stable over the years, there were also considerable changes over time in the opinions of each group, usually related to salient events and developments in the conflict (Hermann & Yuchtman-Yaar, 2002). This suggests that Israelis’ opinions about peace are comprised of two components: one relatively stable that relates to core ideological orientations, and the other more variable and responsive to environmental events. In the present study, we are interested in the effects of one specific type of environmental events, namely terror attacks, on Israelis’ opinions about peace. Including ideological orientations as an independent variable allows us to separate the relatively stable aspect of these opinions from the more situationally malleable aspects, thus enabling a more precise understanding of the effects of terror on the latter.

Research has shown that ideological orientation can affect information processing and attitude formation (see e.g., Iyengar & Ottati, 1994; Jost & Thompson, 2000; Kinder, 1998; Lau & Sears, 1986; Zaller, 1992). Specifically, ideological orientation may function as a prism through which social information is processed and inferences are drawn, which may lead to selective or biased conclusions (Kinder, 1998; Wanke & Wyer, 1996; Zaller, 1992). For instance, individuals with a
right-wing or conservative orientation differ from those with a left-wing or liberal orientation in their tendencies to attribute conditions and behaviors to dispositional versus situational factors (Feather, 1985; Gaffie, Marchand, & Cassagne, 1997; Skitka, Mullen, Griffin, Hutchinson, & Chamberlin, 2002; Vala, Monteiro, & Leyens, 1988). These differences may lead to differential support for various social policies (Skitka, 1999; Skitka & Tetlock, 1993).

In the Israeli context, hawks and doves represent saliently opposing ideological groups with respect to the Israeli–Palestinian conflict and prospects for its resolution. Hence, hawks and doves may interpret information about terror attacks in different ways and draw different inferences from the same events. Thus, existing ideological orientations may moderate the effect of terror on individuals’ opinions.

One possible moderation pattern may be polarization of existing opinions, whereby each side’s position becomes more extreme and the disparity between opposing sides grows. A polarization effect is likely when political elites are in disagreement over an issue, and the public is exposed to arguments favoring both sides (Zaller, 1992). In the case of Israeli public opinion regarding peace, a polarization effect would be observed if hawks become more opposed to compromises for the sake of peace and have less faith in the possibility of reaching peace, whereas doves become more supportive of compromises and have greater faith in the possibility of peace.

However, moderation of the effect of terror by ideological orientation may also take a different pattern. Dovish and hawkish opinions about peace may be responsive to terror in different, but not necessarily opposite, ways. For example, even if both groups change their opinions in the same direction following terror, the opinion change in one group could be greater or lesser than in the opposing group. We suggest that the degree of opinion change among hawks and doves following terror depends on the transitional context in which terror attacks occur.

The Role of the Transitional Social Context

Our interest in the present study is in short-term processes of opinion change, namely the effect of terror attacks, within a longer-lasting transitional context, which may be characterized by identifiable environmental conditions as well as by the prevalence of different types of information transmitted by different sources. Studies have shown that processes of opinion change are affected by the information that is available in a given context (Zaller, 1992). We suggest that the information that characterizes the context within which a terror attack occurs may affect the confidence with which opinions regarding peace are held, and consequently the likelihood of change in these opinions in response to an attack.

Individuals’ confidence in a given judgment or decision is a function of the amount of available evidence in favor of the chosen response (Vickers, Smith, Burt, & Brown, 1985). Accordingly, a study by McGarty, Turner, Oakes, and Haslam (1993) found that exposure to agreeing feedback from others increased confidence in original judgments, whereas feedback that disagreed decreased confidence. The greater the confidence or certainty with which beliefs or attitudes are held, the more likely they are to resist change and remain stable over time (Bassili, 1996; Petrocelli, Tormala, & Rucker, 2007). Thus, a context in which information that supports existing views is highly prevalent should increase certainty and decrease the likelihood of opinion change, whereas a context in which information that contradicts existing views is prevalent should decrease certainty and increase the likelihood of opinion change.

Different social contexts may be characterized by different types of prevalent information, and may vary by the extent to which the information is heterogeneous or homogeneous. Homogeneous information would support the opinions of some individuals and contradict the opinions of others, whereas heterogeneous information would support different opinions. Exposure to a context of homogeneous information should lead those whose opinions are consistent with the information to display high certainty in their opinions and to resist changing them in response to short-term events, whereas those whose opinions are inconsistent with the information should display low certainty and greater likelihood of opinion change. Indeed, a study by Visser and Mirabile (2004) found that exposure to a social network that conveyed homogeneous opinions supporting those of the participants resulted in opinions that were more resistant to change than exposure to a more heterogeneous network, which included opinions both consistent and inconsistent with those of the participants.

The above discussion suggests that opinion change in response to terror attacks, which are short-term events, may be dependent on individuals’ existing opinions and on the information that is most prevalent in the transitional social context within which a terror attack occurs. Terror attacks in Israel have taken place during periods of escalation in the conflict with the Palestinians, as well as during periods of progress toward peace. These two contexts were characterized by
prevalence of different types of information, which may have resulted in differential effects of terror on opinions regarding peace.

More specifically, the decade of the 1990s was characterized by progress in the peace process between Israelis and Palestinians, in which treaties were signed and gradually implemented. Although most of this progress took place under the leadership of the dovish Rabin/Peres government (in office between 1992–1996), even the hawkish Netanyahu government (in office between 1996–1999) signed treaties with the Palestinians and partially implemented previous treaties (Pundak, 2001; Reich, 2002). Despite fierce opposition from extreme hawkish circles, especially when the dovish government was in power (Karpin & Friedman, 1999; Sprinzak, 1998), the main message to the Israeli public during this period was that peace was imminent and that certain compromises would have to be made (Wolfsfeld, 2004). Within this transitional context, information supportive of the dovish position, which advocated the possibility and desirability of advancing peace, would have been more prevalent than information to the contrary, supportive of the hawkish position. We may therefore hypothesize that in this context doves would have greater confidence in their existing opinions than hawks.

In such a context, hawks would be looking for any information that might restore confidence in their opinions. Terror attacks provided such information, because they sharply contrasted the progress in the peace process: they supported the hawkish position that the concessions included in the treaties with the Palestinians endangered the security of Israel. Indeed, continued terror served as a central argument for opposition to the peace process among hawks during this period (see e.g., Weimann & Wolfsfeld, 2002). Thus, we might expect opinions to move toward the hawkish position in response to terror attacks. However, given that doves would have been more confident in their existing views in this context, they would have also been less likely to change their opinions in response to terror attacks. Accordingly, we may expect the effect of terror attacks on opinions regarding peace during the 1990s to be greater among hawks than among doves.

In contrast to the 1990s, the years 2001–2002, which followed the collapse of the peace talks in July 2000 and the outbreak of violence in September 2000, were characterized by escalation in the conflict between Israel and the Palestinians, along with greater consensus among political camps in Israel. During this period, even the moderate dovish leadership was disseminating messages arguing that peace with the Palestinians was unlikely in the near future (Bar-Siman-Tov, Lavie, Michael, & Bar-Tal, 2007; Ben Ami, 2004; Dor, 2004; Drucker, 2002; Enderlin, 2003; Halperin & Bar-Tal, 2007; Pressman, 2003; Sher, 2001; Swisher, 2004; Wolfsfeld, 2004). Bar-Tal and Sharvit (2008) suggested that these major events and the major information that accompanied them created a powerful transitional context, which considerably affected Israeli Jews’ views about the conflict. In this powerful transitional context, information supporting the hawkish opposition to the peace process would have been more prevalent than information supporting the dovish position. Consequently, hawks would have been more confident in their existing opinions and less likely to change them in response to immediate events than doves. In such a context, we may expect that doves more than hawks would change their opinions toward greater opposition to the peace process following terror.

The Present Study

In order to test our hypotheses we used the database of Peace Index polls, which are monthly polls that have been conducted by the Tami Steinmetz Center for Peace Research at Tel-Aviv University since 1994 (for more information about the Peace Index project see www.tau.ac.il/peace). All Peace Index polls include several fixed questions regarding support for and belief in the peace process between Israel and the Arab world in general and particularly support for the Oslo Accords, which are interim peace agreements between Israel and the Palestinians. Our aim in the current study was not to examine long-term changes in the Peace Index measures, which have been reported elsewhere (Hermann & Yuchtman-Yaar, 2002). Our focus is on the short term effects of terror attacks on the Peace Index measures, as compared to measures taken within the same period of time, but not in proximity to terror attacks. For this purpose, we compared polls taken within a week or less of a terror attack (“terror polls”) to “control polls,” taken at the nearest available times to the “terror polls,” but not preceded by a terror attack for at least one month. We used six pairs of polls that met the selection criteria (see below) taken during the 1990s, and two pairs of polls that met the criteria taken during 2001–2002. Although we tried to keep the time distance within matching pairs of polls as short as possible, the polls in each pair were still taken a few weeks apart from each other. It may therefore be argued that the differences between each single “terror poll” and its matching “control poll” could reflect changes resulting from factors other than the terror attack. However, if our analyses
reveal a consistent pattern of differences between “terror polls” and “control polls” across all, or most, matching pairs, the likelihood that the differences reflect the effect of terror attacks rather than other factors would increase.

We used these matching pairs of polls to test our hypotheses that during the 1990s, the effect of terror on opinions regarding peace would be greater among hawks than among doves, whereas during 2001–2002 the effect of terror would be greater among doves than among hawks. Accordingly, we expected that the differences between “terror polls” and “control polls” taken during the 1990s would be larger among hawks than among doves, whereas the differences between terror and control polls taken during 2001–2002 would be larger among doves than among hawks.

METHOD

Selection of Polls for the Study

The Peace Index database contains all the monthly polls conducted since 1994, out of which we had to select polls that would allow us to test our hypotheses regarding the differences between “terror polls” and “control polls.”

Since public opinion regarding peace may be influenced by many factors other than terror, we expected that polls taken very closely following terror attacks would reveal the effect of terror above other factors most clearly. Therefore, the “terror polls” we selected for our study were all taken within a week or less of a terror attack. Another consideration was the fact that terror attacks vary in their severity, ranging from small-scale attacks in which no one is injured or killed, to extremely severe attacks in which dozens are killed and many more are injured. Both of the periods examined, and especially the period between 2001–2002, included terror attacks of different levels of severity. Since we were interested in the effect of terror on public opinion above other influential factors, we selected only polls that were proximal to relatively severe attacks, which we expected to have a salient and readily observable effect on public opinion. We defined severe attacks as those involving suicide bombers, car bombs or shooting, in which at least four persons were killed. All the attacks took place within Israel’s 1967 borders and in civilian settings. We excluded attacks that specifically targeted military facilities or on-duty military personnel, as those may not necessarily be considered terrorist activities.

Our next step was to select “control polls,” to which the terror polls would be compared in order to assess the effect of terror. Each terror poll was paired with a matching control poll taken at the smallest possible distance from the respective “terror poll,” with the additional criterion that a severe terror attack had not occurred for at least 1 month prior to the control poll.

We were able to select six pairs of terror and control polls from the 1990s and two pairs of polls taken during 2001–2002, all of which met the selection criteria (see Table 1). Peace Index polls are conducted in the last week of every calendar month. Therefore, the minimum distance between any two polls is one month. Most of the pairs of matching polls in our study were indeed taken a month apart from each other. The only exception was the terror poll of August 1995, for which a control poll meeting the selection criteria and taken one month apart was not available. Therefore, we used a control poll taken two months apart from this terror poll.

The Samples

Peace Index polls include approximately 500 telephone interviews each month, among a random probability sample representing the adult Jewish population of Israel. Our analyses included only respondents whose political orientation could be determined according to their vote in the most recent parliamentary elections (see below), which left us with sample sizes that varied between 323 and 473 respondents in each poll (see Table 1).

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1We realize that these criteria are somewhat arbitrary, yet they were necessary in order to decide which polls were included in the study and which were excluded. The use of these selection criteria should not be seen as an attempt to theoretically define what does or does not constitute terror, nor should they be understood as implying that less severe attacks should not be taken seriously.

2Removal of the polls taken in August and October 1995 from the analysis did not meaningfully alter the findings.
Political Orientation

As noted above, most political parties in Israel clearly position themselves on the hawkish–dovish ideological continuum, and this position is a major factor in determining voting in Israeli elections (Arian, 1995; Arian & Shamir, 2002). Hence, we classified poll respondents as hawks or doves according to the party for which they reported voting in the parliamentary elections that most recently preceded the poll (1992, 1996 or 1999, depending on the timing of the poll). Respondents who reported voting for the left-wing parties Avoda, Meretz, and Hadash or Arab parties were classified as doves, and those who reported voting for the right wing parties Likud, Moledet, Tzomet, Mafdal, Haichud Haleumi, and Israel Beiteinu or the ultra-orthodox parties Yahadut Hatorah and Shas were classified as hawks.3 Respondents who voted for other small parties, did not report the party for which they voted, or did not vote at all, were excluded from the analyses.

The election system in Israel had changed several times during the periods covered in our study. Until the elections of 1992, voters voted for the parties they supported, and seats in the Knesset (parliament) were divided proportionally to the votes each party received. In the 1996 elections the vote for Prime Minister was separated from the vote for party to the Knesset, and the candidate who won the majority of votes became Prime Minister regardless of the number of seats his party earned. This system was in place in the 1999 elections as well, whereas in 2001, a special election for Prime Minister, but not for parties to the Knesset, was called. In our study, the classification of voters as hawks or doves was based on the party for which they had voted in the most recent Knesset elections in order to maintain consistency across all the periods investigated. Thus, we disregarded the votes in the 2001 elections.4

The voters of nearly all parties that participated in the 1992 and 1996 elections could be classified as either hawks or doves. However, two parties that gained a significant number of seats in the 1999 elections could not be clearly classified as hawkish or dovish (Shinuy and the Center Party). Yet only a small number of respondents in the 2001–2002 polls reported voting for these parties, and therefore were excluded from further analyses.

Dependent Measures

The Peace Index polls include three recurrent questions assessing different aspects of support for or belief in peace between Israel and the Arabs.

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3Information about the distribution of votes for different parties in different elections can be found in Israel’s official elections website: http://www.knesset.gov.il/description/eng/eng_mimshal_res.htm. Since the samples in our study were representative, the sample distributions are highly similar to the population distributions. Information about the division of parties into blocs can be found in Arian and Shamir (2002).

4The 1999 election led to the appointment of a dovish Prime Minister, Ehud Barak, whereas in 2001 the hawkish Ariel Sharon became Prime Minister, despite no change in the division of parliament seats. Hence, it might be argued that the votes in the 1999 parliamentary elections are not valid bases for the classification of hawks and doves in 2001–2002. To address this possibility, we conducted additional analyses of the polls from this period using the votes in the 2001 elections as bases for classification. The findings were highly similar to those obtained using the 1999 votes, and are therefore not reported in detail.
Support for the Peace Process

To assess general support for the peace process, participants respond to the following question: “In general, do you consider yourself a supporter or opponent of the peace process between Israel and the Arabs?” Responses are given on a 5-point scale ranging between greatly opposed and greatly supportive.

Belief in Peace

To assess belief in peace, respondents respond to the question: “Do you believe or not believe that in the coming years there will be peace between Israel and the Arabs?” Responses are given a 5-point scale ranging between certain that there will be peace and certain that there will not be peace.

Support for the Oslo Accords

In a more specific question, referring to the Oslo Accords between Israel and the Palestinians, participants are asked: “What is your opinion about the agreement that was signed in Oslo between Israel and the PLO (Declaration of Principles)?” Responses are given on a 5-point scale ranging between strongly in favor and strongly opposed.

Design and Analyses

We tested our hypotheses using two separate analyses of variance (ANOVA) for each dependent variable: one analysis for the period of the 1990s and one for the period of 2001–2002. The independent variables were type of poll (terror vs. control), political orientation, and time. We did not use time as a serial variable in these analyses. Instead, each pair of matching terror and control polls was considered a single point in time, even though the polls in each pair were taken one or two months apart. We did this in order to separate the variance due to differences between terror and control polls within each pair, which may be attributed to the effects of terror, from the variance due to differences between pairs, which reflects changes over time due to factors other than terror. Since changes over time per se were not the focus of the present research, below we only report effects of time to the extent that they interact with the effects of terror and political orientations, which are the focuses of the present research.

In addition, in order to test whether the patterns of effects of terror and political orientation did in fact differ from each other in the two periods of interest (1990s vs. 2001–2002) as hypothesized, we conducted an additional ANOVA for each dependent variable, in which we averaged the different time points within each period. Thus, the independent variables in these analyses were type of poll, political orientation, and period.

RESULTS

The responses to each of the Peace Index questions were recoded so that high scores always reflect high support of or belief in peace.

In each poll, there were a certain percentage of respondents who responded “do not know” to the dependent measures. This percentage was always less than 5% per poll on the questions referring to support of or belief in the peace process in general, and always less than 10% per poll on the question referring to support of the Oslo Accords. The respondents who responded “do not know” were not entirely removed from the samples, but were excluded from the analyses of the measure to which they did not meaningfully reply.

Correlations among Dependent Measures

The correlations between support for the Oslo Accords and support for the peace process ranged between .55 and .70 in the polls taken during the 1990s, and between .37 and .46 in the polls taken during 2001–2002 (all ps < .001).
analyses indicated that additional findings for these two measures were highly similar, hence we decided to combine them into a single index, labeled “support for peace.”

Belief in peace was also correlated with the two other measures. The correlations with support for the Oslo Accords ranged between .25 and .65 in the polls taken during the 1990s, and between .28 and .30 in the polls taken during 2001–2002. The correlations with support for the peace process ranged between .26 and .66 in the polls taken during the 1990s, and between .24 and .33 in the polls taken during 2001–2002 (all ps < .001). Given these somewhat lower correlations as well as the difference in meaning between believing that peace is possible and supporting measures taken toward the attainment of peace, we decided to keep this last measure as a separate index in further analyses.

Support for Peace

Figure 1 displays the mean levels of support for peace in the different polls, and Table 2 displays the mean levels of support for peace in the two periods examined (1990s vs. 2001–2002) collapsed across the different polls. We first analyzed the polls from the 1990s using a 2 (type of poll: terror vs. control) × 2 (political orientation: hawks vs. doves) × 6 (time) ANOVA. The analysis revealed the predicted main effect for political orientation, indicating that support for peace was higher among doves than among hawks, \( F(1,4701) = 2,310.62, p < .001, \eta^2 = .330 \) (see Table 2). The main effect for type of poll was significant as well, indicating that support for peace was lower in the terror polls compared to the control polls, \( F(1,4701) = 20.73, p < .001, \eta^2 = .004 \) (see Table 2). These main effects were qualified by a political orientation × type of poll interaction, \( F(1,4701) = 6.93, p = .009, \eta^2 = .001 \). Post hoc comparisons using the Bonferroni method (\( \alpha = .05 \)) indicated that among hawks, support for peace was lower in the terror polls than in the control polls (\( p < .001 \)), whereas among doves, the difference between terror polls and control polls was not significant (see Table 2). Additional comparisons indicated that support for peace was higher among doves than among hawks in both terror and control polls.

Figure 1. Mean support for peace by type of poll (terror vs. control), political orientation, and time
The additional analysis with period instead of time as an independent variable revealed a significant type of poll × political orientation × period interaction, \( F(1,6104) = 102.14, p < .001, \eta^2 = .016 \), confirming that the pattern of the interaction between type of poll and political orientation was different in the 1990s compared to 2001–2002, as indicated by the analyses reported above. All the other effects in this analysis essentially replicated the findings reported above and were all qualified by the 3-way interaction, hence they are not reported in detail.

**Belief in Peace**

Figure 2 displays the mean levels of belief in peace in the different polls, and Table 2 displays the mean levels of belief in peace in the two periods examined (1990s vs. 2001–2002) collapsed across the different polls. The analysis of polls from the 1990s revealed the predicted main effect for political orientation, indicating that belief in peace was higher among doves than among hawks, \( F(1,1379) = 878.65, p < .001, \eta^2 = .160 \) (see Table 2). The main effect for type of poll was significant as well, indicating that belief in peace was lower in the terror polls than in the control polls, \( F(1,4598) = 58.22, p < .001, \eta^2 = .013 \) (see Table 2). These main effects were qualified by a significant political orientation × type of poll interaction, \( F(1,4598) = 19.32, p < .001, \eta^2 = .004 \). Post hoc comparisons indicated that among hawks, belief in peace following terror attacks was lower than in the control polls (\( p < .001 \)), whereas among doves, the difference between terror polls and control polls was not significant (see Table 2). Additional comparisons indicated that belief in peace was higher among doves than among hawks in both terror and control polls (both \( p < .001 \)).

However, in this case the political orientation × type of poll × time interaction was also significant, \( F(1,4598) = 2.53, p = .027, \eta^2 = .003 \). Post hoc comparisons indicated that this interaction results from doves reporting higher belief in peace than hawks in all of the terror polls (all \( p < .001 \)), but only in five control polls (all \( p < .001 \)) out of six (see Figure 2). In

### Table 2. Means and standard deviations (in parentheses) of support for peace and belief in peace by period, poll type, and political orientation

<table>
<thead>
<tr>
<th></th>
<th>1990s</th>
<th></th>
<th>2001–2002</th>
<th></th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Terror polls</td>
<td>Control polls</td>
<td>Total</td>
<td>Terror polls</td>
</tr>
<tr>
<td>Support for peace</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hawks</td>
<td>2.52 (1.12)</td>
<td>2.72 (1.14)</td>
<td>2.62 (1.14)</td>
<td>3.21 (1.15)</td>
</tr>
<tr>
<td>Doves</td>
<td>3.97 (0.90)</td>
<td>4.02 (0.89)</td>
<td>4.00 (0.89)</td>
<td>3.35 (1.12)</td>
</tr>
<tr>
<td>Total</td>
<td>3.26 (1.24)</td>
<td>3.40 (1.21)</td>
<td>3.33 (1.23)</td>
<td>3.27 (1.14)</td>
</tr>
<tr>
<td>Belief in peace</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hawks</td>
<td>2.22 (1.22)</td>
<td>2.65 (1.27)</td>
<td>2.44 (1.26)</td>
<td>2.13 (1.20)</td>
</tr>
<tr>
<td>Doves</td>
<td>3.44 (1.22)</td>
<td>3.54 (1.13)</td>
<td>3.49 (1.18)</td>
<td>2.39 (1.29)</td>
</tr>
<tr>
<td>Total</td>
<td>2.85 (1.36)</td>
<td>3.12 (1.28)</td>
<td>2.98 (1.33)</td>
<td>2.24 (1.24)</td>
</tr>
</tbody>
</table>
the control poll of June 1997, there were no significant differences between hawks’ and doves’ belief in peace. Yet with respect to the effect of terror, the 1997 polls revealed the same interaction pattern described above: hawks’ belief in peace was lower in the terror poll than in the control poll ($p < .001$), whereas among doves there was no significant difference between the terror poll and the control poll. This indicates that the 3-way interaction with time reflects changes in hawks’ and doves’ belief in peace in the control poll of 1997 compared to the other control polls (i.e., changes in the absence of terror), whereas the nature of the effect of terror in 1997 remained similar to the other time-points during the 1990s.

The analysis of polls from 2001–2002 again revealed the predicted main effect for political orientation, indicating that belief in peace was higher among doves than among hawks, $F(1,1355) = 52.50, p < .001, \eta^2 = .037$ (see Table 2). The main effect for poll type was not significant, indicating no consistent differences between terror and control polls, $F(1,1355) = 3.04, p > .05, \eta^2 = .002$. The political orientation x type of poll interaction was again significant, $F(2, 1355) = 11.58, p = .001, \eta^2 = .008$, but the pattern was different from that obtained for the 1990s. Post hoc comparisons indicated that among doves, belief in peace was lower in the terror polls compared to the control polls ($p = .003$), whereas among hawks, there was no significant difference between terror polls and control polls (see Table 2). In addition, belief in peace was higher among doves than among hawks in both terror and control polls (both $ps < .05$). The political orientation x type of poll x time interaction was again not significant ($F < 1$), indicating a consistent pattern over time.

The additional analysis with period instead of time as an independent variable revealed a significant type of poll x political orientation x period interaction, $F(1,5977) = 28.33, p < .001, \eta^2 = .005$, confirming that the pattern of the interaction between type of poll and political orientation was different in the 1990s compared to 2001–2002, as indicated by the analyses reported above. All the other effects in this analysis essentially replicated the findings reported above and were all qualified by the 3-way interaction, hence they are not reported in details.

Figure 2. Mean belief in peace by type of poll (terror vs. control), political orientation, and time
The findings provide support for our general proposition that ideological orientations and the transitional social context would moderate the effect of terror on Israeli Jews’ opinions regarding peace. These findings demonstrate that environmental conditions of different levels may influence individuals’ opinions, and that it is necessary to consider the broader transitional social context in order to understand and predict the specific effects of short-term events such as terror attacks.

Our specific hypotheses regarding the effect of terror on different ideological groups were mostly, though not fully, supported. We expected that in the transitional context of progress in the peace process during the 1990s, doves’ confidence in their existing opinions favoring peace would be greater than hawks’ confidence in their opinions opposing peace, and that consequently terror attacks would have a greater effect on the opinions of hawks than on those of doves. The findings were consistent with this prediction, and showed that during the 1990s, hawks became more extreme in their opposition to peace following terror, whereas doves’ opinions did not change in response to terror.

We also expected that in the transitional context of violent conflict escalation during 2001–2002, doves would have less confidence in their opinions favoring peace compared to hawks’ confidence in their opinions opposing peace, and that consequently doves’ opinions regarding peace would be more responsive to terror than hawks’ opinions. The findings were partially consistent with this prediction. We did find that doves’ opinions regarding peace became less favorable following terror during 2001–2002, in contrast to the 1990s. However, our finding also showed that hawks’ support for peace became more favorable following terror during 2001–2002, although their belief in peace did not change following terror. Thus, hawks’ opinions about peace were at least partially responsive to terror both in the context of progress toward peace and in the context of conflict escalation, although the direction of the effect was reversed in the latter context. This finding was not predicted, and we attempt to offer some explanations for it below.

The present findings extend those of previous studies, which examined the effects of single terror events on opinions pertaining to intergroup relations (Echebarria-Echabe & Fernandez-Guede, 2007; Huddy et al., 2005; Huddy et al., 2002; Skitka et al., 2004), by demonstrating that it is possible to identify consistent effects of terror across multiple events. Yet our findings also demonstrate that the effect of terror on opinions regarding peace may vary when the transitional social context within which it takes place changes, providing another meaningful extension of previous research. The findings are consistent with the multilevel analysis of environmental conditions and the notion of interactive effects of conditions from different levels on individuals’ opinions.

The present study also extends past research on ongoing terrorism in Israel, which examined the effect of direct exposure to terrorism on opinions pertaining to intergroup relations and willingness to compromise for peace (Canetti-Nisim et al., in press; Hobfoll et al., 2006; Solomon & Lavi, 2005). Our findings reveal effects of ongoing terror on opinions regarding peace in the general public, not necessarily those who were directly exposed to terror attacks. Furthermore, the present findings demonstrate that the effect of terror on opinions regarding peace is not uniform across all segments of the population, but varies according to existing ideological orientations. This issue has rarely been addressed in previous research regarding the effects of terror on opinions related to intergroup relations.

The design of our study was not longitudinal, but relied on aggregate cross-sectional data collected from different samples at different times. Although different individuals participated in each poll, the identical population and sampling method across all polls create equivalent samples, which allow us to draw conclusions about opinion change. The consistent patterns of change following terror, observed in our study across several points in time, suggest that the differences between terror and control polls reflect systematic changes and not random differences between samples. A similar method of using equivalent samples in order to assess changes over time was used in past studies in order to investigate changes in stereotypes among college students (Gilbert, 1951; Karlins, Coffman, & Walters, 1969). It should be noted, however, that our findings for the period of 2001–2002 relied on two pairs of polls only, hence we can be less certain about the generalizability of the findings for this period compared to the 1990s, for which we had six pairs of polls. Unfortunately, no other polls in the Peace Index database from the period of 2001–2002 met our selection criteria; therefore we are unable to corroborate our conclusions with additional data. More generally, our findings cannot affirm unequivocally that the changes in response to terror observed at the aggregate level are a product of similar changes at the individual level. Only a longitudinal design where the same individuals are interviewed at different points in time can address this, and future research may employ such a design in order to observe changes at the individual level and corroborate our findings.
It may also be argued that due to the cross-sectional nature of our data, the individuals categorized as hawks or doves in different polls taken at different times may not necessarily represent the same populations, and may therefore be incomparable. Indeed, studies suggest that Israeli Jews’ categorization of themselves as hawks or doves had changed during the periods covered in our studies (Halperin & Bar-Tal, 2007). However, our analysis focused on the differences between matching terror and control polls taken only 1 or 2 months apart from each other. It is unlikely that any major changes in the categorization of hawks and doves would have taken place in such short periods. In addition, it should be pointed out that even in the 2001–2002 polls, our categorization of hawks and doves is based on the votes in the 1999 elections. Research indicates that the categorization into the hawkish and dovish camps remained relatively stable between 1992 and 1999 (Arian & Shamir, 2000), which is a period that includes all the elections that served as the basis for the categorization of hawks and doves in our study.

Another question that might be raised regarding the use of ideological orientation as an independent variable in our study is whether this variable is distinct from our dependent variable of opinions regarding peace, given the strong relationship between the two that we and others (Arian, 1995; Hermann & Yuchtman-Yaar, 2002) have observed. As noted above, we believe that the hawkish–dovish dimension represents a stable core aspect of political ideology that parallels other societies, whereas opinions about peace represent a peripheral aspect that is unique to the Israeli context (Jost et al., 2003). Furthermore, a previous study, which also relied on the Peace Index database, demonstrated that despite the relative stability of the gap between hawks and doves over the years, it is possible to observe variations in the opinions of each group regarding peace in response to salient events and developments in the conflict (Hermann & Yuchtman-Yaar, 2002).

Accordingly, we suggested that controlling for the relatively stable variation in opinions about peace by including political orientation as an independent variable might allow us a more precise understanding of situational variations in these opinions, particularly in response to terror. Indeed, our findings demonstrated that exploring the effects of terror on hawks’ and doves’ opinions separately led to insights that would have been obscured otherwise. For example, if we had not made the distinction between hawks and doves, we might have concluded that terror had no effect on Israelis’ opinions regarding peace during 2001–2002, since the main effect of poll type (terror vs. control) for this period was not significant. Clearly, such a conclusion would be inaccurate given the significant interaction between poll type and political orientation. In sum, it appears that political orientation and opinions about peace, although highly related, represent theoretically distinct concepts that are also empirically separable, justifying their treatment as two different variables in the present study.

Ideological Orientations, Transitional Social Context, and the Effect of Terror on Opinions Regarding Peace

We suggested above that the likelihood of opinion change in response to terror would depend on individuals’ existing ideological orientations and their confidence in their existing views, which would be a function of the information that is prevalent in a given social context. The more information available in support of existing opinions, the greater the confidence in these opinions, and the lower the likelihood of changing them (Bassili, 1996; McGarty et al., 1993; Petrocelli et al., 2007; Visser & Mirabile, 2004). This reasoning may account for the greater changes in doves’ opinions in response to terror in the context of conflict escalation during 2001–2002 compared to the context of progress in the peace process during the 1990s. It may also account for the greater opinion change in response to terror among hawks than among doves in the context of progress in the peace process. However, it does not account for hawks’ increased support for peace in response to terror in the context of conflict escalation.

A possible explanation for this latter finding may be that the major events of the second half of 2000, namely the collapse of the Camp David summit and the outbreak of violence, along with the major information that accompanied them, created a powerful transitional context that undermined both hawks’ and doves’ confidence in their existing views and increased the likelihood of opinion change in both groups. This is consistent with the notion that this powerful transitional context resulted in a “psychological earthquake” among the majority of the Israeli-Jewish public (Bar-Tal & Sharvit, 2007). Furthermore, the context of conflict escalation was characterized by high levels of external threat. Research indicates that external threats lead groups to emphasize their homogeneity and unity (Branscombe, Schmitt, & Harvey, 1999; Rothgerber, 1997; Turner, Hogg, Oakes, & Smith, 1984). Terror attacks would have intensified the threat and increased the pressure toward homogeneity among Israeli Jews, which may have led both hawks and doves to shift their opinions toward the center, thus decreasing the differentiation between the two groups. Our findings reveal such
convergence of opinions only in the immediate aftermath of terror attacks, but this process may be the harbinger of a broader change observed in Israeli politics in subsequent years. The accumulation of violent events over a long period may have intensified the pressures toward homogeneity, which might explain the subsequent growing popularity of “centrist” parties in Israeli politics, which position themselves as neither hawkish nor dovish, but somewhere in between.

It should be noted that our hypotheses and explanations for the findings attribute a central role to confidence in existing opinions as a mediator of hawks’ and dove’s opinion change in response to terror attacks. Unfortunately, the Peace Index polls do not include assessment of respondents’ confidence in their expressed views, hence we cannot support nor refute the hypothesized mediating role of confidence with our present data, and this is a major limitation of our study. It remains for future research to explore whether confidence can indeed explain the opinion changes observed in our study, or whether other mechanisms were at play.

CONCLUSION

Our findings confirm that terror attacks are important events that influence Israeli-Jewish public opinion regarding peace. However, the findings also suggest that it is too simplistic to assume that terror attacks are such powerful events that they always affect the opinions of all individuals in a similar way. Instead, the findings demonstrate that the effect of terror on opinions regarding peace is complex and varies according to individual ideological orientations as well as contextual factors. This conclusion is consistent with the “interactionist” approach in psychology, which suggested that individuals’ reactions to situational cues are a function of both the nature of the cues and individual characteristics that shape the construal of the cues (Magnusson & Törestad, 1992; Mischel & Shoda, 1995; Ross & Nisbett, 1991).

Moreover, the findings showing that nature of the effect of terror depended on the transitional context in which the attack occurred suggest that in realistic social environments, as opposed to the controlled laboratory conditions in which social psychological research is usually conducted, changes to the immediate situation do not occur in isolation. Instead, immediate situational changes interact with the broader social context, so that when the transitional context changes, the meaning of specific events and individuals’ reactions to them may also change. This principle may apply to threatening events other than terror attacks as well. Although the effect of threat on opinions related to intergroup relations has been widely studied (e.g., Duckitt & Fisher, 2003; Stephan & Renfro, 2002; Stephan & Stephan, 2000; Watts, 1996), scholars have rarely considered the broader context in which threatening events occur. The present findings suggest that systematic exploration of different environmental conditions under which threatening events can take place may lead to insights regarding the effects of such events that are not observable when they are treated as if they occur in isolation. Such an approach may have greater relevance for realistic threatening situations, where environmental conditions from multiple levels interact with each other, and may considerably advance the field of social psychology (Bar-Tal, 2004, 2006).

Previous research has emphasized the adverse implications of terrorism for the relationships between groups in conflict (Bar-Tal & Labin, 2001; Canetti-Nisim et al., in press; Echebarria-Echabe & Fernandez-Guede, 2007; Hobfoll et al., 2006; Huddy et al., 2002; Skitka et al., 2004). In contrast, our findings demonstrate that the opinions of some individual under some conditions might be immune to terrorism (i.e., not change in response to terrorism), whereas different individuals under different conditions might even increase their support for constructive conflict resolution following terrorism. Although the environmental conditions explored in the present study were naturally occurring, the findings raise the possibility of developing future interventions or policy initiatives that will systematically vary the environmental conditions in order to facilitate constructive rather than destructive developments in intergroup relations in response to terrorism or other threatening events. Our findings also suggest that such interventions or policy changes must take individual differences into account, since different individuals might respond to similar environmental changes in different ways. Clearly, however, our study is only a preliminary step in this direction, and much additional research is required in order to specify what procedures such interventions or policies might involve and to test their effectiveness.

In sum, a thorough understanding of the effects of terrorism and other threatening events on public opinion must take into consideration that different individuals may react to similar events in different ways, and that the specific effect of threatening events on public opinion may be shaped by other moderating contextual factors from different levels. Future research into the effects of threats on opinions pertaining to intergroup relations and into policy initiatives intended to
improve intergroup relations must include exploration of both dispositional and situational factors from various levels that may shape the nature, direction, and extent of responses to threatening events.

ACKNOWLEDGEMENTS

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REFERENCES


