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Supporting Online Material for

Promoting the Peace Process by Changing Beliefs About Group Malleability

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Materials and Methods

Reference (14)

Study 1

Participants were a nationally representative sample of 500 Israeli Jews (246 men, 254 women), with a mean age of 45.5 years ($SD = 16.49$); 41% self-identified as rightists, 28.9% as centrists, and 18.3% as leftists (11.3% declined to answer). They were interviewed by telephone by a trained interviewer in their native language of Hebrew or Russian. Great care was taken to mask the goal of the study. The scales measuring the three main variables (i.e., beliefs about groups, attitudes toward Palestinians, and willingness to compromise) were embedded within a large questionnaire that included 100 items, most of which were not relevant to the current study (e.g., general values such as belief in conformity, conservatism, or authoritarianism). The order of the questions was counterbalanced by the computerized system of the survey institute and there were no order effects.

Beliefs about groups were measured with four items ($\alpha = .78$) (rated from 1 *strongly disagree* to 6 *strongly agree*), with no items mentioning the Palestinians: "As much as I hate to admit it, you can't teach an old dog new tricks--groups can't really change their basic characteristics," "Groups can do things differently, but the important parts of who they are can't really be changed," "Groups that are characterized by violent tendencies will never change their ways," and "Every group or nation has basic moral values and beliefs that can't be changed significantly." (Beliefs about individuals' capacity to change was also assessed) (14).

Attitudes toward Palestinians were assessed with three items ($\alpha = .79$) (rated from 1 *not at all* to 6 *very much*): "All Palestinians are evil by nature," "All that Palestinians really want is to annihilate Israel," and "Palestinians should never be trusted."

Willingness to compromise was assessed with three items measuring the level of support for three possible compromises that Israel might make in order to achieve peace ($\alpha = .68$) (rated 1 *not at all* to 6 *very much*): "Support for territorial compromises with the Palestinians based on the 1967 borders," "Support for shared

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sovereignty over the holy places in Jerusalem," and "Support for more active conciliatory initiatives on the Israeli side."

Study 2

Seventy-six native-born Jewish-Israeli undergraduate students at the Academic College of Emek-Yezreel (25 women, 51 men) participated. Many were serving in the Israeli defense forces, and 50% identified as rightists, 42.3% as centrists and 7.7% as leftists.

Great care was taken to mask the purpose of the study and the connection between the manipulation and the dependent variables (measures of attitudes toward the Palestinians and positions on peace compromises). First, participants were informed that they were participating in two separate studies: a reading comprehension study and a survey about Israeli society. Next, the first study (the manipulation of beliefs about groups) was made to appear self-contained and a series of comprehension questions followed the reading comprehension passage. Moreover, no mention of Palestinians was made in the reading passage. To further discourage any connection between the two studies, the questions in Study 2 were embedded within a questionnaire of 75 items, and the great majority of the items were irrelevant to the current study (tapping such general values as conformity or conservatism). The key dependent variable (support for compromises) appeared toward the end of the questionnaire, widely separated from the hypothesized mediating variable (attitudes toward Palestinians), which itself was well separated from the manipulation.¹ Most importantly, when participants were asked during the debriefing session about the goals of the two studies not one of them made any connection between the two parts of the study.

Manipulation of beliefs. Participants were randomly assigned to the "malleable" or "fixed" condition. They read a short *Psychology Today*-style scientific article (in Hebrew) describing groups that had committed violence

¹ The full questionnaire is available upon request from the first author.

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and reporting studies on aggression. These studies suggested that, over time, the groups had (malleable condition) or had not (fixed condition) changed. In the malleable condition the research suggested that violence resulted from extreme leadership or environmental influence, whereas in the fixed condition the research suggested that aggression was rooted in the nature and culture of the groups. Neither version referred to Palestinians or the Israeli-Palestinian conflict. No group differences were found in ratings of the articles' interest, credibility or persuasiveness. The full text of the malleable condition is presented below, with the differing text for the fixed condition in parentheses.

Reading Comprehension Task

Below is part of an article that was published recently in the most prestigious psychological journal in the United States, *American Psychologist*. After many years of uncertainty regarding the issue, the view presented in the article is considered to be the established opinion among psychologists worldwide. The study's results have far-reaching consequences for political and social processes and therefore have had great influence on researchers as well as political leaders. Please read the article summary carefully and answer the questions at the end of it.

A Group's Character is Not Fixed – Violent Groups Can Change Their Ways

(A Group's Character is Like an Anchor – It Never Changes)

In many cases we witness acts of terrorism and other immoral acts, carried out by different groups and nations. In many such cases we hope and believe that at some point these groups and nations will come around and change their ways in a positive direction. The results of a series of comprehensive studies that were recently published in the United States show that this expectation **has justification (has no justification)**. Over the past 20 years Professor Edward Jones and his colleagues at Harvard University have been studying trends and changes in the violent behavior of animals, human beings and groups. As far as is known, this is the most large-scale and detailed study that has been conducted in this field.

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The major finding in this study is that extreme and violent behavior of the overwhelming majority of subjects **changed dramatically (stayed fixed)** throughout the years and was **greatly (not)** influenced by changes in the political context or internal leadership changes. According to Professor Jones, "The study's results clearly show that extreme and violent behavior **is not a fixed characteristic of individuals or groups, but a behavioral pattern influenced by context and leadership (is a fixed characteristic, inherently entrenched within the nature of individuals or groups)**. For this reason, it **is to (cannot)** be expected that when extreme leadership is replaced with more moderate leaders, the extreme groups will change their behavior and will present more conciliatory and pro-compromise attitudes and behavior." The reason for this, according to the article's authors, is that in most cases in which groups behave fanatically and violently towards other nations, they do it as a result of **leaders' manipulations, and not because the group members' "evil" characteristics (characteristics deeply rooted within their nature and culture)**.

For example, one of the first studies, carried out on monkeys, showed that when violent monkeys were transferred to a friendlier environment and were separated from the extreme group leaders, the level of violence towards their caregivers and other monkeys **decreased dramatically (stayed constant)**. Studies conducted among humans found that groups perceived as extreme or violent towards other groups and nations **changed their behavior significantly (did not change their behavior at all)** when their leaders were replaced. In another study, Professor Jones and his colleagues tried to apply a powerful intervention program in 15 groups. The program's goal was to tone down the group members' attitudes and violence levels. Within the program's framework, the group members were presented with moderate messages that were opposite to those presented to them by the groups' extreme leaders. The study's results showed that this intervention program **led to a cessation of violence and curbing of extreme attitudes in a great majority of cases (did not lead to any change in attitudes and did not curb the extreme attitudes of the group members)**.

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The researchers back their findings with examples from conflicts that have taken place in the last decades between nations and groups. According to the researchers, both in the Northern Ireland conflict and in the complex and bloody conflict in Yugoslavia, the change in extreme leadership in one or both sides **decreased the violence levels of both sides almost completely (did not change the conflict's violence levels in the least)**. Professor Jones concluded that when trying to explain behavioral distinctions between groups and nations, it **would be a critical mistake to think of them in terms of each group's basic and fundamental characteristics (is advisable to think of them in terms of each group's basic and fundamental characteristics)**.

The manipulation was successful in altering beliefs about groups (same scale as in Study 1): participants in the malleable condition had significantly higher (more malleable) scores ($M = 3.92$, $SD = .74$) than those in the fixed condition ($M = 3.50$, $SD = .99$; $t(86) = 2.24$, $p < .05$; $d = .49$).

Attitudes toward Palestinians were measured with the items from Study 1.

Willingness to compromise was assessed with three items ($\alpha = .68$) (1 *not at all* to 6 *very much*): "Support for Israeli withdrawal to the 1967 borders and evacuation of settlements," "Support for shared sovereignty over the holy places in Jerusalem," and "Support for more serious consideration of new Palestinian ideas for the resolution of the conflict."

Study 3

Fifty-nine Palestinian citizens of Israel (32 male, 27 female) participated, ranging in age from 18 to 71 years ($M = 30.17$, $SD = 10.44$). Twenty-nine defined themselves as Muslims, 15 as Christians, and 15 did not self-identify. Data were collected through the internet by an experienced panel survey company (the Midgam Project), and participants received \$6.

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All materials were translated into Arabic and back-translated into Hebrew and English, and materials were adjusted to make them appropriate to the views of this sample, the issues confronting them, and the compromises they would have to make to improve intergroup relations within Israel (see below). The general procedure was identical to that of Study 2. In particular, the questionnaire had many filler items before the hypothesized mediator and between the hypothesized mediator and the outcome variable.

The manipulation was successful in altering beliefs about groups (same scale as in Study 1): participants in the malleable condition had significantly higher (more malleable) scores ($M = 3.89$, $SD = .83$) than those in the fixed condition ($M = 3.12$, $SD = .85$; $t(86) = 3.52$, $p < .05$; $d = .92$).

Changes in the manipulation article. The text of the manipulation in Studies 3 and 4 was identical to the text of Study 2 with one exception. The modification was designed to make the text more relevant to the Palestinians who, as the weaker side of the conflict, have suffered from oppression and discrimination. Thus, whenever the text in Study 2 mentioned "extreme and violent behavior/groups," it was replaced by "oppressive, racist and violent behavior/groups." Importantly, as in the previous studies, the text did not mention the concrete oppression of or discrimination against Palestinians, but simply referred to these actions in very general terms, and did not mention the Israelis or the Israeli-Palestinian conflict.

Attitudes toward Israeli-Jews were assessed with five items ($\alpha = .82$) (rated from 1 *not at all* to 6 *very much*): "To what extent would you say that Jews are essentially 'evil'?" "Israeli Jews are not trustworthy," "Israeli Jews are racist and Arab haters," "Israeli Jews are arrogant," and "To what extent is it true that Israelis treat Arabs/Palestinian citizens of Israel unfairly and immorally?"

Willingness to compromise was assessed with four items ($\alpha = .56$) (1 *not at all* to 6 *very much*): "What is your opinion of a settlement in which the Israeli government ensured equality of rights for Arab/Palestinian citizens in exchange for mandatory participation in the civil service run within the Arab/Palestinian Israeli

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community?” “What is your opinion about a settlement between the Israeli government and the Arab/Palestinian community that would establish Israel as a primarily Jewish state, with cultural autonomy for the Arab/Palestinian citizens of Israel?” “What is your opinion of a settlement in which the Arab/Palestinian citizens of Israel renounced any claim to property from 1948, in exchange for monetary compensation equivalent to the property's worth today?” and “Do you think that, in the event that Israel ceases settlement building, the Arab/Palestinian citizens of Israel should make significant steps such as pledging collective loyalty to the State of Israel?”

Study 4

Fifty-three Palestinians (28 female, 25 male), ranging in age between 20 and 55 years ($M = 34.72$, $SD = 9.06$), participated. They lived in Ramallah, the administrative capital of the Palestinian National Authority, located in the West Bank. In terms of political affiliation, 30.2% of the subjects identified themselves as Fatah supporters, 13.3% as Hamas supporters, 9.5% as supporters of smaller organizations, and the rest (47%) as unaffiliated.

Data were collected by a professional Palestinian research center (the JMCC) located in Ramallah. The interviewers started the process with a short reading comprehension task, in order to select only those subjects who could readily understand the text and the questions.

As before, all questionnaires were translated into Arabic and back-translated to Hebrew and English, and the material was adjusted to reflect the Palestinian perspective on Israeli Jews (see below). All procedures, as well as the text of the manipulation articles, were identical to Study 3. The manipulation was successful in altering beliefs about groups (same scale as in Study 1): participants in the malleable condition had significantly higher (more malleable) scores ($M = 3.58$, $SD = 1.12$) than those in the fixed condition ($M = 2.83$, $SD = .92$; $t(51) = 2.65$, $p < .05$; $d = .73$).

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Attitudes toward Israeli Jews were assessed with three items ($\alpha = .89$) (rated from 1 *not at all* to 6 *very much*): "The aggressive and immoral behavior of Israeli-Jews towards Palestinians can be changed," "Israeli-Jews will not make any efforts to promote peaceful relations with the Palestinians," and "Given the current trends in the Israeli society, Palestinians can achieve their goals through negotiations with Israel and not necessarily through violence."

Willingness to compromise was assessed with four items ($\alpha = .92$) (1 *not at all* to 6 *very much*): "What is your opinion about peace settlement in which Israel would withdraw to 1967 borders with various territorial swaps?" "What is your opinion about signing a peace agreement with Israel based on a two-state formula while establishing joint sovereignty over the Temple Mount?" "What is your opinion of a peace agreement with Israel that would include Israel's acceptance of responsibility over the refugee issue, but actual permission for only 5,000 Palestinian refugees to return to their homes?" and "After a peace settlement is achieved between Israel and the Palestinians, what is your opinion of the possibility of establishing economic and social relations between the nations?"

Willingness to meet with Jewish Israelis was assessed by asking Palestinians (1 *not at all* to 6 *very much*) "If you had the opportunity, to what extent would you be willing to meet with Israelis and hear their point of view on the conflict?"

Reference

14. S. Levy, S. Stroessner, C. Dweck. *J. Pers. Soc. Psychol*, **74**, 1421 (1998).