

**Mining the Motives for Peace:  
Investigating Distinct Mind Types for Promoting Peace in Israel-Palestine**

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**Abstract:** Today, we know too little about peace. This is due to the fact that we tend to study war, terrorism, violence, aggression and conflict, and peace only in the context of these processes. Few scientists study peace directly. When motives for peace are studied they often suffer from normative and self-report biases that limit their predictive value. We employed an alternative method, *Rule Development Experimentation* (RDE), for identifying fundamental differences in the motivational mind-sets of people for promoting peace. A series of three pairs of iterative studies employing RDE conducted in Israel and the Palestinian territories are presented. Results indicate two basic motivational mind types for peace that are mirror-opposites of each other and, importantly, are equally shared by both Israelis and Palestinians.

Key words: peace, conflict, motivation, methodology.

Decades of systematic research have taught us a great deal about conflict, violence and war, which ironically has left us with a limited understanding of peace. Peace scholars too often operate on the assumption that a thorough understanding of destructive conflict will, by default, provide insight into conditions and processes that foster peace. This supposition is erroneous. Although the lessening of destructive conflict is clearly a necessary condition for peace, there is no reason to believe it is sufficient to gain and sustain peace. Nevertheless, the thousands research studies conducted in this area since the end of the Cold War (see Blumberg, Hare, & Costin, 2007; Christie, Tint, Wagner, and Winter, 2008) have been predominantly concerned with the prevention or mitigation of destructive processes such as nuclear annihilation, enemy images, discrimination, denial of basic human needs, terrorism and torture. In other words, the field has been primarily *prevention-focused* (see Higgins, 1997); investigating the prevention of problems associated with conflict and violence much more than *promotion-focused* on the conditions associated with sustainable peace (Coleman, 2012). Even the construct of *positive peace*, first put forth by Johan Galtung (1964) to distinguish it from *negative peace* or attempts to eliminate overt forms of violence, is principally concerned with addressing the root causes of many destructive conflicts: injustice and oppression (Christie, et. al., 2008; Grewal, 2003).

Another challenge to understanding the motives for promoting peace is *how* they tend to be measured. Over the past few decades, social scientists have become increasingly aware of the limitations of using explicit self-report survey measures to assess motives, attitudes and opinions (Blascovich, Ernst, Tomaka, Kelsey, 1993; Devine, 2001; Greenwald & Banaji, 1995; Nosek, Greenwald, & Banaji, 2005), particularly with regard to socially sensitive issues (Sears & Henry, 2005; Sears & Kinder, 1971; Sears & McConahay, 1973). This is due to the challenges posed by both the desire of respondents to appear reasonable and thus answer survey questions in socially desirable ways, as well as their common lack of awareness of their own attitudes regarding the specific objects being evaluated.

This paper employs an alternative approach to identifying fundamental differences in the motivational mind-sets of people for promoting peace. A series of three pairs of iterative studies conducted in Israel and Palestine are presented, which applied a proven consumer-research methodology, Rule Development Experimentation, to eliciting motivational mindsets for promoting peace. The implications for research and practice on peace and conflict are discussed.

### **Where's the Peace?**

For decades, the field of peace and conflict studies has confounded the study of war, violence, aggression and conflict – and peacemaking and peacebuilding in the context of those processes – with the direct study of peaceful societies (Coleman, 2012, 2013; Coleman & Deutsch, 2012; Fry, 2007, 2009, 2013, 2015). For instance, consider the *Global Peace Index* (GPI), an attempt by the international community to measure the relative peacefulness of nations worldwide. The GPI was first launched in May 2007 collecting data annually, and its 23 indicators define its objective as “measuring the absence of violence or fear of violence”. In 2012, the developers of the GPI, recognizing the limitations of its conflict-prevention or negative peace view of peace, for the first time launched a *Positive Peace Index* (PPI), which purported to investigate attitudes, institutions and structures that, when strengthened, can improve a country's peacefulness.

The good news is that the PPI is oriented to societal resilience, including eight Pillars of Peace such as: (1) well-functioning government, (2) sound business environment, (3) equitable distribution of resources, (4) acceptance of the rights of others, (5) good relations with neighbours, (6) free flow of information, (7) high levels of education and (8) low levels of corruption. So the intention to measure positive states of peacefulness is evident. The bad news is that approximately 73 % of the PPI's items were assessed to measure the relative absence of destructive problems rather than the presence of conditions promoting peace (Coleman & Mazzaro, 2013). In fact, the approach employed to develop the PPI indices was done by correlating the original GPI with 800 existing indices and then selecting and weighting those indices with the highest positive correlations with the GPI (GPI 2013). This repeats the original error of privileging prevention-oriented indices and conditions, and speaks to the considerable challenges to studying peace.

Of course, it is not that social scientists have not been concerned with peace; on the contrary. In fact, scholarship on the psychology of peace has been accumulating for decades with several thousand research studies having been conducted in this area since the end of the Cold War (Blumberg, Hare, & Costin, 2007; Christie, Tint, Wagner, and Winter, 2008). However, this research has been predominantly *prevention-focused* (see Higgins, 1997). In other words, the approach employed through these decades of research on peace has focused primarily on preventing or mitigating the *problems* associated with war and violence and not on the conditions or solutions associated with promoting peace. This work has been necessary and critically important. However, a basic assumption inherent to this approach is that if we can gain a sophisticated understanding of the problems associated with conflict, violence, oppression and war that we will better understand, and be better able to foster and sustain, peace.

However, other areas of research have come to recognize the limitations of studying problems independent of solutions (Fry, 2006; Gottman, et. al, 2002; Seligman & Csikszentmihalyi, 2000). Psychological research on positive and negative evaluative processes show that, at times, more positive processes (like cooperation) and negative processes (such as destructive conflict) function independently of one another, involving very different parameters, temporal scales, weights, and dynamics (Cacioppo & Berntson, 1994; Cacioppo, Gardner, & Berntson, 1997; Deutsch, 1973; Gottman, Swanson, & Swanson, 2002; Rudolph, Roesch, Greitemeyer, and Weiner, 2004). Research on motivation suggests that differences in *prevention-orientations* (when focused on preventing negative outcomes) versus *promotion-orientations* (when focused on achieving positive outcomes) have profound consequences for the types of information we seek, how we process it, the emotions we tend to experience, and how we go about accomplishing our goals (Higgins, 1997). These distinctions have led scholars who study anxiety-based conflict motives to call for more comprehensive models of human behavior that can account for the tensions and complementarities of both concerns for security as well as our desires for harmony (Greenberg, Solomon, & Pyszczynski, 1997).

We suggest that the time has come to move beyond the dominant prevention-orientation to the study of peace, toward a more complete view of the conditions and processes associated with sustainable peace. In order to do so, we must complement our prevailing prevention framing with a more promotive orientation and study peaceful motives, situations and societies directly. It is in this context that we launched a program of research to study motives for peace directly in the Israel-Palestine.

### **Rule Development Experimentation:**

#### **Addressing the Methodological Challenges of Measuring Motives for Peace**

Decades of consumer marketing research have exposed the deficiencies of using explicit self-report measures to assess motives, attitudes and opinions (Blascovich, Ernst, Tomaka, Kelsey, 1993; Devine, 2001; Greenwald & Banaji, 1995; Nosek, Greenwald, & Banaji, 2005), particularly with regard to socially sensitive issues (Nosek, Greenwald, & Banaji, 2005; Sears & Henry, 2005; Sears & Kinder, 1971; Sears & McConahay, 1973). This research has found that self-report measures, such as interviews and focus groups, are particularly susceptible to image

management and other forms of self-serving bias. Even more concerning is the critique that oftentimes respondents to self-report measures are in fact unaware of specifically what they like, what they want, or what motivates them (Moskowitz & Gofman, 2007). For instance, research in the food industry has shown repeatedly that consumers are often unaware of their own preferences for certain tastes in food and beverages unless they are able to systematically sample all the available options.

Similarly, we suggest that people are often mostly unaware of what would motivate them to work actively for peace. This is particularly true in areas of protracted conflict, where citizens have been raised and socialized in a context of outgroup enmity and war (see Aboud & Amato, 2000; Bar-Tal, 2007; Orr, Sagi, & Bar-On, 2000). Under such conditions, simply inquiring about people's motives through surveys or focus groups often fails to get beyond their "automatic mental programming" (what they have been conditioned to think and say) in order to identify what specifically would motivate them to act differently. This is particularly challenging when people have never before been asked to reflect carefully and systematically on such motives.

*Rule Development Experimentation* (RDE; see Moskowitz & Gofman, 2007; Gofman, Moskowitz, & Mets, 2009), which is grounded in the scientific principles of *stimulus response* (from experimental psychology), *conjoint analysis* (from experimental design of ideas and mathematical statistics) and *internet-based market testing* (from marketing research), was developed to circumvent automatic cognitive functioning and habitual programming and help to identify the clusters of motives or *mind types* which drive different behaviors. RDE has been employed for decades in consumer research and has reportedly revolutionized research and marketing in the food industry (see Saulo, Moskowitz & Rustia, 2013; <http://ed.ted.com/lessons/malcolm-gladwell-on-spaghetti-sauce>).

RDE begins by identifying a behavior of interest (e.g., working for peace), and then generating a set of six motivational categories with each category containing a group of six related concepts or ideas called *elements*. These categories and elements reflect constructs considered relevant to motivating or demotivating the behavior of interest. For example, in an RDE study on the mind types for ethical peer reviews in scientific publishing, several categories were identified including the ethics of authorship, story presentation, referees, and the managing editor (see Rappaport & Moskowitz, 2011). For each participant, the RDE program then randomly assembles 36 groups of 4 *elements* each, and 12 groups of 3 *elements* each. These 48 groups are called *vignettes*, with at most one element from each category appearing in any given *vignette*. Each individual element appears 5 times in total in the 48 *vignettes*. The respondent is then led through 48 separate screens with each screen containing one of the vignettes, and is asked to rate that particular vignette by responding to a question like: "Based on this screen alone, how ethical is this journal?" The respondent rates each screen on a scale of 1 – 9, with 1 being not at all ethical and 9 being completely ethical. Every respondent is presented with a unique permutation of the basic experimental design, so that across all the respondents no set of combinations is the same. The experimental design and the systematic permutation make it impossible for the respondent to 'game' the system, i.e. to provide politically correct answers.

After a respondent completes the survey, *ordinary least squares regression analysis* is conducted to determine which elements motivate and which elements de-motivate that particular respondent, and by how much. Specifically, the RDE software computes *utility values* for each of the 36 elements (with a positive value signifying a motivator and a negative value signifying a de-motivator) and a base constant, which indicates the respondent's initial propensity to strive for peace. The utility values of successive respondents are then averaged together with those of the previous responders, and the data begins to stabilize after 50 plus respondents. To date, RDE has been used successfully by many well-known companies and institutions to help frame its outreach and advertising so as to increase donations, sales, and so on (see Moskowitz & Gofman, 2007).

The real value of RDE, though, lies in its ability, through *cluster analysis*, to split the respondents into 2 or more mind-type segments based on the similarity of their answers. For example, it was RDE that discovered in 1982 the heretofore unknown fact that a sizeable segment (33%) of spaghetti sauce consumers preferred *chunky* pasta sauce to *plain* pasta sauce, resulting in the ultimate rescue of the *Prego Spaghetti Sauce Company* from almost certain bankruptcy and a gain of 600 million dollars for *Campbell Soups*, its parent company.<sup>1</sup> Decades of research on mind types through RDE have found that often a high motivator for one segment of a population is an equally high de-motivator for a different segment. Therefore, without knowing which segment a particular person belongs to, it is quite difficult to know what to say and what not to say to frame and motivate behavior effectively?

### **Mining Motivational Mind Types for Promoting Peace in Israel-Palestine**

In this program of research, we set out to employ Rule Development Experimentation to investigate the different motivational mind types behind Israelis and Palestinians willingness to work actively for peace in the region by addressing two related questions. First, we sought to identify the different clusters of mind types that best characterize Israelis and Palestinians' motives for peacebuilding within and between their communities. Second, we examined the extent to which Israelis and Palestinians, and subgroups within each, share similar mindsets across ethnic divides.

#### **Method**

For the purpose of identifying unique clusters of motives for making peace in both Israeli Jewish and Palestinian communities in the Middle East, we conducted three paired studies (with 176 participants per study totaling n=529) over three phases, 3 in Hebrew and 3 in Arabic. The studies in Israel and Palestine for each phase were paired and identical (although presented in Hebrew in Israel and in Arabic in Palestine) and data was collected for both simultaneously at 3 separate times over a 13-month period. The research design was iterative, as each pair of studies

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<sup>1</sup> The use of RDE has not only been limited to marketing issues – it has also been applied successfully to important societal problems such as what to say to different mind-type groups of high school students to dissuade them from bullying other students and what type of information to provide different groups of emergency-room cardiac patients to best ensure compliance with prescribed treatments (see Moskowitz & Gofman, 2007).

identified a subset of motivating and demotivating elements, which were then combined with new elements and retested in subsequent studies. All studies were based on a random representative sample of adults (age 18 and up) in both Israel and the Palestinian territories, and were conducted on-line and administered through computers.<sup>2</sup> Our studies were approved by the Institutional Review Board at our university and a written consent was obtained from all participants.

**Elements.** For each study, each participant was presented 48 short vignettes comprised of elements generated from the academic literature on peacemaking and peacebuilding. These elements were identified from a set of basic motives from past research on peacemaking (Bar-Tal, 2007; Coleman, 2000; Coleman, Hacking, Stover, Fisher-Yoshida, & Nowak, 2008; Deutsch, 1973; Zartman, 1989, 2000), and peacebuilding (Fry, 2007, Fry & Miklikowska, 2012). This literature was studied systematically and a comprehensive list of motives for and constraints against peace promotion were identified (see Table 1).

**Table 1. Motives for and constraints against promoting peace**

Outcomes	Motives	Constraints
<b>Peace Making</b>	Pain – Mutually hurting stalemate (can't win) Loss-framing – prevention focus Malleable group beliefs Self-focus and affirmation (vs. group-focus) Contradictory information - increased complexity Perspective –giving/taking (awareness/voice) Hope and opportunity Shared enemy-natural disaster Basic need satisfaction Cold cognition (cognitive reappraisal) Normative pressure Sublimation of aggression Reduction of injustice Constructive modeling Religious support & constructive modeling	Aspirations for victory Conflict belief ethos (psychological-emotional constraints) Fixed-group beliefs Structural and strategic constraints Group sanctioning of hostile norms (tightness) No information – closed processing Fear, revenge, rage, enmity – hot cognition & language Threat – negativity effect – terror management Zero-sum goals and identities Intragroup polarization Increasing violence, injustice Incompetent leadership & corruption Distorted, biased memories Political and media hyperbole Religious condemnation & destructing modeling
<b>Peace Building</b>	Positive interdependence Self-transcendent values Optimal rate of just change Tolerance of difference Vision of a shared future Trust in someone (international community, UN) Peace dividends Increasing hope and positivity Sufficient safety Shared identity/ broadened moral scope Long-term thinking & action Forgiveness & willingness to reconcile Cognitive, identity and structural complexity	Negative interdependence Collective-focused values Too slow/too fast rate of just change Modeling of intolerance Impossible shared future Pervasive distrust Corruption Increases in injustice/violence/threat Zero-sum polarizing identities Structural /leadership incompetency & corruption Short-term thinking and action Increasing negativity ratio Shrinking, fracturing identities

<sup>2</sup> The Israeli sample were sent a link through email and completed the surveys on their own computers in their homes, the Palestinian respondents completed the surveys on computers set-up in store fronts in the Palestinian Territories.

Religious support	Religious condemnations
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These motives and constraints were subsequently translated into motivational themes and statements, and then categorized into six categories and translated into six elements per category for each phase of the research (see Table 2 for an illustration).

**Table 2. Categories and Elements from Phase 3 Studies**

<b><u>Category A: Positive Interdependence</u></b>
Community exchanges between Israeli and Palestinian youth help our situation
People everywhere are developing a stronger sense that they are all members of one global community
Once a peace agreement is reached, the UN, US, Arab League, NGOs and the International Community will work together to help maintain a lasting peace
The internet and social media provide ideal places for young Palestinians and Israelis to communicate and share their interests
Lasting peace and justice in Israel-Palestine can be accomplished by Israelis and Palestinians working together
There are currently many areas of economic, technological, cultural and educational cooperation between Israelis and Palestinians
<b><u>Category B: Freedom from Constraints</u></b>
Freedom from violence and oppression are individual human rights
I don't believe everything I am told by our leaders about the history of the conflict and occupation
Parents would be increasingly able to raise their children in a safe, secure home and community
I am eager for a more safe, just and peaceful life
Palestinians and Israelis can coexist
A solution to the conflict is possible
<b><u>Category C: Ideal Outcomes</u></b>
Lasting peace here will stand as a beacon of hope for all societies suffering from violent conflict
Lasting peace will lead to vast improvements in the education of our children
Lasting peace will enhance everyone's health and well-being
Lasting peace will bring great economic prosperity to the region
Lasting peace will ensure a better future for my children and grandchildren
Businesses that encourage entrepreneurship by our youth will improve our economic conditions in the future
<b><u>Category D: Safety</u></b>
Force alone is enough to ensure the safety and security of our people
The high number of Palestinians and Israelis killed or injured in the conflict has to end

Our children would grow and prosper under a safe and just solution to the conflict
Personal safety for all Palestinians and Israelis is the best way to eliminate security threats to our people
The political and military leaders in both Israel and Palestine ought to be held accountable for horrible violent atrocities
I don't want my future sons and daughters to die for any cause
<b><u>Category E: Overcoming Constraints</u></b>
Instead of blaming each other, it is critical to start finding realistic solutions to today's problems
Young Israelis and Palestinians are angry and mobilizing to demand justice and peace, risking further unrest and instability
The UN, US, Arab League, NGOs, and the International Community are beginning to learn how to promote peace more effectively
The Israeli-Palestinian conflict should be addressed separately from other conflicts in the region
The conflict, terror and occupation needs to end
More and more Israelis and Palestinians are endorsing the right for self-determination of the other community
<b><u>Category F: Negative Consequences</u></b>
The political competitiveness and infighting of our own community's leaders makes the conflict, terror, and occupation worse
Lost revenues and opportunity costs due to the conflict in the Middle East are mounting and currently range in the trillions of dollars
The violence from the conflict is poisoning our children and has to be stopped
My personal physical mental and economic health is being adversely affected by the conflict and occupation, and will decrease my longevity
The conflict and occupation absorb most of the energies of the political leadership who are then unable to fulfill their duties to govern effectively
The more militant and extreme members of my own community make matters worse

The participants were asked to respond to each vignette as a whole. Below is an example vignette screen:



שלום יציב יאפשר לי לחיות חיים מלאים ומספקים הרבה יותר

ברגע שיושג הסכם שלום, האו"ם, ארה"ב, הליגה הערבית, ארגונים לא ממשלתיים והקהילה הבינלאומית ישתפו פעולה על מנת לשמר את השלום לאורך זמן

אני לא מאמין לכל דבר שאומרים המנהיגים שלנו לגבי ההיסטוריה של הסכסוך והכיבוש

שיתוף פעולה קהילתי מתמשך בין צעירים ישראלים ופלסטינים משפר את מצבנו

Lasting peace will allow me to live a much more fulfilling life  
Once a peace agreement is reached, the UN, US, Arab League, NGOs and the International Community will work together to help maintain a lasting peace  
I don't believe everything I am told by our leaders about the history of the conflict and occupation  
Ongoing community exchanges between Israeli and Palestinian youth help our situation

Does this scenario increase the likelihood that you would support initiatives to improve relations in the region in order to achieve lasting peace?

9 8 7 6 5 4 3 2 1

האם הקטע המתואר מעלה את הסבירות שתתמוך/י ביוזמות שמטרתן שיפור היחסים באזור על מנת להשיג למען שלום מתמשך?

<-- סבירות נמוכה מאד... סבירות גבוהה מאד -->

<-- Highly Likely... Highly Unlikely -->

**Figure 1: Hebrew online screen sample, presenting a vignette followed by a rating question. Originally appeared in Hebrew, English captions were added for illustration.**

For each study, participants evaluated a unique set of 48 combinations of elements presented as vignettes by responding to each vignette on a 9-point scale based on this statement: *Does this scenario increase the likelihood that you would support initiatives to improve relations in the region in order to achieve lasting peace?* Each of the three-paired studies comprised a unique set of 36 elements, with the elements divided into six categories, each including six elements. Every vignette involved at most one element from any category. Since the vignettes had a maximum of four elements, the vignettes were incomplete, preventing multi-collinearity and allowing the estimation of absolute coefficients or utility values for each respondent for each study.

The three-paired studies were conducted in an iterative fashion across three phases with two matched pairs of studies per phase. Phase 1 was designed to identify and categorize elements that resonated with both Israelis and Palestinians. The first pair of studies investigated the elements driving the feeling that peace should be promoted. Phase 2 further explored those elements from Phase 1 that scored as highly motivating. The low scoring elements were discarded, the high scoring elements kept, and new elements were developed which elaborated

further on the concepts from the highest scoring elements to create the full complement of six categories, each with six elements. In Phase 3 we again kept and further refined the highest performing elements.

Respondents rated each vignette on a 9-point anchored scale. For analysis, however, we wanted to look at the response as either ‘agree’ that the vignette described a motivating scenario or ‘disagree,’ i.e., that the vignette did not describe a motivating scenario. Following research conventions in political polling and consumer research, we transformed the ratings into a binary scale, so that ratings of 1-6 were transformed to 0 (indicating that the vignette did not describe an efficacious scenario), and ratings 7-9 were transformed to 100 (indicating that the vignette did describe an efficacious scenario).

Ordinary least squares regression analyses conducted on the individual data from each respondent and using the binary responses as the dependent variable, generated equations showing the marginal or part-worth contribution of each element to motivating efforts toward promoting peace. The individual-level models comprised an additive constant (conditional probability of the respondent rating the vignette 7-9 in the absence of elements, an estimated, theoretical baseline), and the part-worth contribution of each of the 36 elements (additive conditional probability that the respondent would rate the vignette 7-9, over and above the basic value from the additive constant, if the element were added to the vignette.)

The individual-level parameters were then summed together for totals, or for key subgroups, to get a consensus value (e.g., for Palestinians versus for Israelis). A clustering program divided the coefficients into two-four clusters of segments. The appropriate number of segments was chosen on the basis of parsimony (as few clusters or segments as possible) and interpretability (each cluster had to tell a meaningful story).

Tables 3 and 4 show the average utility values of respondents from Phase 3, the third set of iterative studies.

**Table 3. Promoting Peace Segment 1 of 2 (54% of total population surveyed)**

<p><b>Does this scenario increase the likelihood that you would support initiatives to improve relations in the region in order to achieve lasting peace?</b></p> <p><b>&lt;-- Highly Unlikely      ...      Highly Likely --&gt;</b></p> <p><b>1    2    3    4    5    6    7    8    9</b></p>	<p><b>Total Sample</b></p>	<p><b>Seg 1 of 2</b></p>
<p><b>BASE SIZE:</b></p>	<p>150</p>	<p>81</p>
<p><b>CONSTANT:</b></p>	<p>42</p>	<p>42</p>
<p>Palestinians and Israelis can coexist</p>	<p>5</p>	<p>10</p>
<p>A solution to the conflict is possible</p>	<p>4</p>	<p>10</p>
<p>Parents would be increasingly able to raise their children in a safe, secure home and community</p>	<p>4</p>	<p>10</p>
<p>I am eager for a more safe, just and peaceful life</p>	<p>5</p>	<p>9</p>
<p>Lasting peace will lead to vast improvements in the education of our children</p>	<p>2</p>	<p>7</p>

Freedom from violence and oppression are individual human rights	0	7
The high number of Palestinians and Israelis killed or injured in the conflict has to end	2	-9
Our children would grow and prosper under a safe and just solution to the conflict	0	-9
Force alone is not enough to ensure the safety and security of our people	-1	-9
Lost revenues and opportunity costs due to conflict in the Middle East are mounting and currently range in the trillions of dollars	-5	-11
I don't want my future sons and daughters to die for any cause	-7	-13

**Table 4. Promoting Peace Segment 2 of 2 (46% of total population surveyed)**

Does this scenario increase the likelihood that you would support initiatives to improve relations in the region in order to achieve lasting peace?	Total Sample	Seg 2 of 2
<-- Highly Unlikely 1    2    3    4    5    6    7    8    9 ...    Highly Likely - ->		
BASE SIZE:	150	69
CONSTANT:	42	43
The high number of Palestinians and Israelis killed or injured in the conflict has to end	2	15
The political and military leaders in both Israel and Palestine are responsible for horrible violent atrocities	3	14
Our children would grow and prosper under a safe and just solution to the conflict	0	10
Force alone is not enough to ensure the safety and security of our people	-1	10
Personal safety for all Arabs and Israelis is the best way to eliminate security threats to our people	4	8
More and more Israelis and Palestinians are starting to recognize the right for self-determination of the other community	2	7
Lasting peace will ensure a better future for my children and grandchildren	-2	-7
Businesses that encourage entrepreneurship by our youth will improve our economic conditions in the future	-2	-7
Freedom from violence and oppression are individual human rights	0	-8
Lasting peace will bring great economic prosperity to the region	-2	-8
The UN, US, Arab League, NGOs and the International Community are beginning to learn how to work together more effectively for peace	-4	-8

### Results

The combined results from this successive set of studies allowed us to eventually identify the particular elements that were most motivating/de-motivating for the sample population, and

for identified subgroups of the population. The last phase of studies revealed two distinct motivational mind-types for promoting peace. They included:

***Peace Mind Type #1: Peace and Coexistence are Possible and Beneficial.*** Our research found that 54% of the joint-population of Israel/Palestine surveyed was motivated up and above the baseline constant (of 42/100) by a generally positive and hopeful mind type regarding the future of peace. In other words, they were motivated by the belief that peace and coexistence between Israelis and Palestinians are possible, and by the potential of achieving positive outcomes (better education for children, more safety and security, freedom from violence and oppression) from realizing peace. However, this group was also particularly *demotivated* or even repulsed by the mention of painful losses in their communities (injuries, deaths and lost revenues and opportunities), particularly in relation to their children. These elements had strong negative ratings for this group.

***Peace Mind Type #2: Preventing Painful Losses through Responsibility.*** On the other hand, our research also revealed that 46% of the population sampled was motivated beyond the constant to make peace by the terrible costs of pain and suffering, the great need for safety and security, and by the recognition that leaders on both sides share responsibility for violent atrocities committed. This group seems primarily motivated to work for peace in an attempt to prevent further death, suffering, violence and insecurity. However, this group was also strongly demotivated by the mention of a promising future (better future for children, economic opportunity and prosperity, international cooperation). In other words, the positive potential for peace was repellent to this group.

These findings suggest that **the two basic minds types that motivate people to work for peace in Israel/Palestine are in fact mirror opposites of one another.** This means that those motives that might mobilize roughly half of the population to work actively for peace may in fact derail or demotivate the other half. This finding could have profound implications for the effective mobilization of the citizens of Israel/Palestine toward the establishment of a movement and infrastructure for sustaining peace.

The results also indicate that **the two mind types identified for promoting peace transcend Palestinian and Israeli ethnic, national and political affiliation.** Despite what we might expect, we found that Israelis and Palestinians do not differ significantly in what motivates them to agree to work for peace. Peace Mind Type #1, or the more “peace is possible” segment (54% of all participants), consisted of 46% Israelis and 54% Palestinians. Participants in this segment also varied in their political affiliation: 14% indicated they were “rightists”, 23% as “centrist” and 10% as “leftists”, with the remainder indicating that they do not belong to any particular party or chose not to respond to the question. Peace Mindset #2, or the more “preventing loss” segment (46% of all participants), consisted of 53% Israelis and 47 % Palestinians. Participants in this segment also varied in their political views: 20% self-identified as “rightists”, 22% as “centrist” and 9% as “leftists”, with the remainder indicating that they do not belong to any particular party or chose not to respond to the question.

Finally, the findings across all three paired studies also demonstrate that **changing conditions on the ground significantly influence the basic willingness to work for peace**. The base constants for each study, which indicate the respondents' initial propensity to strive for peace before any other motivational elements are introduced, were low-to-moderate (between 30 and 59 out of 100 across the studies), but appeared to change dramatically between studies in response to events on the ground (elections, violence, building of new settlements, etc.). This is logical, given that the data for our studies was collected over more than a year (March 2012 to April 2013). **However, introducing certain messages, which represent pain or opportunity, nevertheless significantly increased or decreased this willingness**. Although the constants varied over time, the character of the two mind types (preventing painful losses or achieving positive outcomes) for promoting peace seemed more stable.

## Discussion and Conclusion

Sustainable peace has been an elusive and distant dream in Israel/Palestine, as in many other areas of the world, for too many decades. Our research suggests that one reason might be a fundamental misunderstanding of the nature of peace and, in particular, of the specific bottom-up motives that could drive individual members of opposing communities to work actively for peace. The studies presented here suggest that large groups of Israelis and Palestinians share similar interests and concerns regarding peace. Furthermore, they suggest that there is no one way to frame or message policies and activities to mobilize peace-building, as the messages that motivate half the population are very likely to repel the other half. RDE can therefore be immensely helpful in understanding the different mind types driving peace in a manner that could allow for more effective mobilization of work for peace in local communities.

The findings from our studies on the bipolar nature of mind types for peace are new to the peacebuilding literature but consistent with other motivational and framing models. For example a similar distinction has been identified in self-regulation research with the difference between promotion and prevention modes in regulatory focus (Higgins, 1997, 1998). In the *promotion* mode of self-regulation, people are especially motivated by experiences that enhance positive outcomes (e.g., attaining money or resources, gaining power or enhancing self-esteem). In the *prevention* mode, people are especially sensitive to experiences that increase their risks and negative outcomes. This research has identified chronic differences in individuals' propensities to view and approach the world in either promotion or prevention terms (see Higgins, Friedman, Harlow, Idson, Ayduk, & Taylor, 2001). Similarly, prospect theory (Kahneman & Tversky, 1979; Tversky & Kahneman, 1986, 1992), a model from behavioral economics, describes how people make decisions based on the potential value of losses and gains rather than final outcomes, and how we tend to use loss versus gain heuristics to make choices. Accordingly, the same decision or state of affairs can be valued to the extent that it promotes one's wellbeing and/or to the extent that it prevents an erosion of one's current level of wellbeing or reduces the intensity of negative outcomes.

Although the current research is consistent with the distinctions offered by regulatory focus theory and prospect theory, the novel, bottom-up elicitive approach of RDE adds value to

our specific understanding of promotive (gain) and preventative (loss) mind types for peace in Israel-Palestine. For example, the basic belief that peace and coexistence is possible in Israel-Palestine seems pivotal to this specific mind type (see also Halperin, Gross & Dweck, 2014). Thus. The current studies provide us with a more nuanced sense of the content and language that may be beneficial for framing and motivating work for peace.

Subsequent research should investigate the predictive validity of the two mindsets for mobilizing peacebuilding activities. In particular, future studies should examine the effects of fit: when people's mind types are consistent the framing of information (advertising, website content, essays, and other forms of motivational messaging) presented to them regarding peace work. Such research could improve engagement and utilization of community-based peacebuilding service providers exponentially and in time help to establish a more robust infrastructure for sustaining peace in the Middle East.

## **References**

About F. E., & Amato, M. (2001). Developmental and socialization influences on intergroup bias. In R. Brown & S. Gaertner (Eds.), Blackwell handbook of social psychology: Intergroup processes (pp. 65-88). Malden, MA: Blackwell

Bar-Tal, D. (2007). Societal-psychological foundations of intractable conflicts. *American behavioral Scientist*, 50, 1430-1453.

Blascovich, J., Ernst, J. M., Tomaka, J., Kelsey, R. M., et al. (1993). Attitude accessibility as a moderator of autonomic reactivity during decision making. *Journal of Personality & Social Psychology*. Vol 64 (2), 165-176.

Blumberg, H., Hare, A.P., Costin, A. (2006). Peace Psychology: A Comprehensive Overview. Cambridge Univ. Press, New York.

Cacioppo J.T. & Berntson G.G. (1994). Relationship between attitudes and evaluative space: A critical review, with emphasis on the separability of positive and negative substrates. *Psychological Bulletin*, 15:401-423.

Cacioppo, J. T., Gardner, W. L., & Berntson, G. G. (1997). Beyond bipolar conceptualizations and measures: The case of attitudes and evaluative space. *Personality and Social Psychology Review*, 1, 325.

Christie, D.J., Tint, B.S., Wagner, R.V., DuNann Winter, D. (2008). Peace psychology for a peaceful world. *American Psychologist* 63, 540-552.

Coleman, P. T. (2000). Intractable conflict. In M. Deutsch & P. T. Coleman (Eds.), *The handbook of conflict resolution: Theory and practice*, 428-450. San Francisco: Jossey-Bass.

Coleman P.T., Fisher-Yoshida B., Stover M.A., Hacking A.G., Bartoli A. (2008). Reconstructing Ripeness II: Models and Methods for Fostering Constructive Stakeholder Engagement Across Protracted Divides, *Conflict Resolution Quarterly*, 26(1), 43-69.

Coleman, P. T. (2012). The Essence of Peace? Toward a Comprehensive *and* Parsimonious Model of Sustainable Peace. In Peter T. Coleman and Morton Deutsch (Eds.) *The Psychological Components of a Sustainable Peace*. Springer Books.

Coleman, P. T. (2013). Crises and opportunities: Six contemporary challenges for increasing probabilities for sustainable peace. Inaugural edition of the *International Journal of Conflict Engagement and Resolution*.

Coleman, P. T. and Mazzaro, K. (2013). The Missing peace in the GPI/PPI. Paper presented at the United Nations launch of the 2013 General Peace Index and Positive Peace Index at the U.N. in New York City on June 12, 2013.

Deutsch, M. (1973). *The Resolution of Conflict: Constructive and Destructive Processes*. New Haven, CT: Yale University Press.

Devine, P.G. (2001), "Implicit Prejudice and Stereotyping: How Automatic Are They?", *Journal of Personality and Social Psychology* 81 (5): 757-759

Fry, D.P. (2006). The human potential for peace: An anthropological challenge to assumptions about war and violence. New York: Oxford University Press.

Fry D.P. (2007). *Beyond War: The Human Potential for Peace*, Oxford Univ. Press, New York, 21-32.

Fry, D.P., Miklikowska, M. (2012). Culture of peace. In *The Psychological Components of a Sustainable Peace*, Edited by Peter Coleman and Morton Deutsch. Springer, New York, 227-244.

Galtung, J. (1964). What is Peace Research? *Journal of Peace Research*, 1, 1-4

Galtung, J. (1985). Twenty-Five Years of Peace Research: Ten Challenges and Some Responses. *Journal Of Peace Research*, 22(2), 141-158.

Gofman, A., Moskowitz, H., and Mets, T. (2009). Integrating Science into Web Design: Consumer Driven Website Optimization. *The Journal of Consumer Marketing*, 26(4): 286-29

Gottman, J. M., Murray, J. D., Swanson, C., Tyson, R., & Swanson, K. R. (2002). *The mathematics of marriage: Dynamic nonlinear models*. Cambridge, MA: The MIT Press.

Greenberg, J., Solomon, S., Pyszczynski, T. (1997). Terror Management Theory of Self-Esteem and Cultural Worldviews: Empirical Assessments and Conceptual Refinements. *Advances in Experimental Social Psychology* 29, 61-139.

Greenwald, A. G., & Banaji, M. R. (1995). Implicit social cognition: Attitudes, self-esteem, and stereotypes. *Psychological Review*, 102, 4-27.

Grewal, B.S. (2003). Johan Galtung: Positive and Negative Peace. School of Social Science, Auckland University of Technology, 30 August 2003

Halperin, E., Gross, J & Dweck, C. (2014). Resolving intractable intergroup conflicts: The role of implicit theories about groups. in M. Deutsch, P. Coleman, & E. Marcus (Eds.) *The handbook of conflict resolution* (pp. 384-399). San Francisco, CA: Jossey-Bass.

Higgins, E.T. (1997). Beyond pleasure and pain. *American Psychologist* 52, 1280-1300.

Kahneman & Tversky, 1979

Lewin, K. (1946). Frontiers in Group Dynamics II: Channels of Group Life; Social Planning and Action Research. *Human Relations*, 1, 143-153.

Moskowitz H. & Gofman, A. (2007). *Selling Blue Elephants: How to Make Great Products That People Want Before They Even Know They Want Them*. Wharton School Publishing.

Nosek, B. A., Greenwald, A. G., & Banaji, M. R. (2005). Understanding and using the Implicit Association Test: II. Method variables and construct validity. *Personality and Social Psychology Bulletin*, 31, 166–180.

Orr, E. Sagi, S., & Bar-On, D. (2000). Social representations in use: Israeli and Palestinian high school students' collective coping and defense. *Papers on Social Representations*, 9, 2.1-2.20.

Rudolph, U., Roesch, S. C., Greitemeyer, T., & Weiner, B. (2004). A meta-analytic review of help giving and aggression from an attributional perspective: Contributions to a general theory of motivation. *Cognition & Emotion*, 18, 815–848.

Sears, D.O., & Henry, P.J. (2005). Over thirty years later: A contemporary look at symbolic racism. *Advances in Experimental Social Psychology*, 37, 95-150.

Sears, D.O., & McConahay, J.B. (1973). The politics of violence: The new urban Blacks and the Watts riot. Boston. Houghton-Mifflin.

Sears & Kinder. 1971. Racial tensions and voting in Los Angeles. *Los Angeles: Viability and prospects for metropolitan leadership*. New York, NY: Praeger.

Seligman, M.E.P., Csikszentmihalyi, M. (2000). Positive psychology: An introduction. *American Psychologist*, 55, 5-14.

Tversk & Kahneman, 1986, 1992



Zartman, I. W.(1985). *Ripe for Resolution*, New York, Oxford University Press

Zartman, I. W.(2000). Ripeness: The Hurting Stalemate and Beyond, in Stern, P. and Druckman, D., eds., *International Conflict Resolution after the Cold War*, Washington, National Academy Press, 225-250.

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