**Political Targeting of Psychological Intergroup Interventions Promoting Social Equality**

In the ever-evolving landscape of intergroup conflict reconciliation, the spotlight often overlooks a critical dimension: the intricate interplay between psychological interventions and individuals with diverse political ideologies. The current work introduces an innovative framework that targets individuals from varying ideological backgrounds with highly effective interventions for promoting support for social equality, all while deploying them in real-world settings. In the first phase of our research, we conducted an intervention tournament among 2,241 Jewish Israelis, which revealed that while Conservatives' support of social equality was highest after exposure to a corrective meta-perception intervention, Centrists averaged the strongest support of social equality after exposure to a social-norms intervention, and Liberals exhibited the strongest support of social equality after exposure to a Malleability intervention. The second phase of our study, a field experiment employing A/B testing in social media, extended and replicated these findings by assessing the effectiveness of social media intervention campaigns tailored to each political group. Our results not only validated our preregistered hypotheses but also underscored the potential of combining foundational principles from social psychology with contemporary marketing tools to enhance the efficacy and real-world relevance of socio-psychological interventions.

**Introduction**

In February of 2023, a seismic shift occurred in Israel's political landscape, as an ultra-conservative government assumed power and swiftly set in motion a series of sweeping legislative changes aimed at curbing the authority and independence of the country's judicial system. This bold move ignited a fierce firestorm of civil protest that rippled across the nation, drawing hundreds of thousands of impassioned liberal demonstrators to the streets, united in their resolute opposition to the government's reform agenda.

The protest was accompanied by a synchronized nationwide campaign spearheaded by organized civil society groups, which sounded the alarm about the perceived threat to democracy posed by these governmental reforms. However, a curious phenomenon emerged in the wake of this mobilization: while this message resonated powerfully with liberals and galvanized them to take a stand, it often fell on deaf ears and even elicited backlash among conservative audiences.[[1]](#footnote-1)

Delving deeper into this intriguing dynamic, our research team conducted a series of focus groups and social discourse analyses during April 2023[[2]](#footnote-2). What we uncovered was a fundamental disconnect in the way liberals and conservatives conceptualized democracy. Liberals predominantly viewed it as a safeguard for human rights and social equality, whereas conservatives emphasized its role in majority rule. To them, the argument for "democracy" often came across as hypocritical, as the newly elected government had secured its mandate through the popular vote, thus challenging its decisions seemed, to them, an affront to democratic principles.

This illuminating example underscores the critical importance of tailoring distinct messages to individuals with differing political ideologies. It highlights how one's political affiliation is intricately tied to underlying socio-psychological characteristics and motivations that shape the way they process information and perceive their social reality (Van Dijk, 1998).

In the following sections, we present a new framework rooted in empirical research, designed to match and target individuals from different ideological groups with precisely tailored psychological intergroup interventions. We commence with a brief overview, drawing comparisons between the conventional intergroup intervention approach and the principles of targeted communication. We then delve into the potential moderating effects of political identification on intergroup interventions focused on promoting social equality.

Subsequently, we introduce our proposed theoretical principles and hypotheses that guide the selection of psychological intergroup interventions tailored to members of distinct political groups. Finally, we present the findings from two experimental studies that rigorously test these hypotheses and shed light on the path toward more effective intergroup interventions in the pursuit of social equality.

**Psychological Intergroup Interventions vs Targeted Persuasive Communication**

In recent years, a notable transformation has unfolded within the realm of social psychology, mirroring trends observed in other branches of psychological sciences (Walton, 2014; Walton & Wilson, 2018). Social psychologists, traditionally focused on descriptive research, have increasingly embraced an interventionist paradigm. This paradigm shift has seen them venture into the realm of evidence-based interventions aimed at fostering constructive relations among social groups embroiled in conflict (Halperin et al., 2023). These psychological intergroup interventions have a multifaceted agenda: from mitigating intergroup violence and hostility (Nir et al., 2023) to promoting intergroup reconciliation (Hameiri et al., 2014; Paluck, 2016) and bolstering support for social equality (Shuman et al., 2022).

However, two significant limitations have emerged within this burgeoning field. Firstly, while considerable progress has been made, the majority of research (though not all: Bruneau & Saxe, 2012; Hameiri et al., 2019; Tappin et al., 2023) and public campaigns (Abrams, 2010) in the domain of intergroup interventions continue to apply uniform interventions across diverse target populations, disregarding critical individual variations in psychological needs, motivations, and orientations. These variations have the potential to interact significantly with the effectiveness of intervention messages (Bruneau & Saxe, 2012; Hameiri et al., 2019; Tappin et al., 2023). Secondly, the translation of empirical findings from controlled experimental settings into real-world public mass media campaigns has often proven challenging (Shrout, 2018). The dynamics of format, medium, and context in real-life scenarios are frequently underestimated, leading to mixed or counterproductive outcomes (Litman et al., 2023; Kemper & Kennedy 2021; Beelmann & Lutterbach, 2020; Abrams, 2010; Paluck & Green, 2009).

In contrast, modern persuasive communication strategies have honed the art of matching different individuals with precisely tailored messages, serving as a cornerstone in fields ranging from medicine (Collins & Varmus, 2015; Hamburg & Collins, 2010) to commercial (Matz et al., 2017) and political marketing (Bannon, 2004). An astounding 78% of social media campaigns in the first half of 2023 were consumer-targeted, underscoring the efficacy and optimization potential of targeted marketing (Gitnux Analytics, 2023; Bernritter, 2021; Matz et al., 2017).

For instance, Meta, the parent company of Facebook, Instagram, and WhatsApp, provides marketers with a suite of analytical tools for assessing the effectiveness of different appeals before campaign launch, utilizing A/B testing criteria such as target audience, messaging, and more. Creative A/B testing involves exposing the same audience to different messages or visualizations, identical in all aspects except for the ad image and text. Meta then identifies the "winning" campaign based on predefined outcomes like clicks, leads, or sales (Gemenis, 2023; Guess et al., 2023).

While targeting studies in the communication field predominantly rely on the self-congruity principle to suggest that congruent ads (i.e., ads that contain text that coincides with someone’s self-concept) are more effective, these studies often lack robust theoretical or methodological frameworks, instead relying on intuition (Hong & Zinkhan, 1995; Xue & Phelps, 2013). This approach, both in academic and real-life marketing, tends to overlook psychological mechanisms and limits the generalizability of insights across campaigns (Jacobs-Harukawa, 2022; Braun & Schwartz, 2023).

Moreover, when it comes to interventions aimed at reshaping long-standing attitudes, social beliefs, and political behavior, the landscape may harbor more intricate psychological mechanisms and motivations compared to product and service marketing. The scarcity of evidence for personality-congruent targeting in political advertising further underscores the need for a systematic theoretical framework in the realm of targeted psychological intergroup interventions. Such a framework is pivotal for optimizing and implementing these interventions effectively in real-life contexts.

**Political Targeting of Psychological Intergroup Interventions**

Political identification transcends mere ideology, encompassing a rich tapestry of personality traits, psychological motivations, and needs that mold one's ideological leanings (Jost et al., 2009). This identification wields significant influence over information processing in conflict-laden scenarios, not only due to the content of the ideology itself (Altemeyer, 1996; Schwartz, 1992) but also because of its motivating properties (Jost et al., 2009).

Consequently, it is reasonable to posit that the efficacy of psychological intergroup interventions addressing politically charged issues hinges on one's political identification. These interventions draw their potency from distinct psychological motivations, which can vary or even clash among individuals from different political camps. In contrast to narrower personality traits or social orientations, political identification captures a broad array of socio-psychological characteristics, particularly relevant in shaping intergroup attitudes (McClosky & Zaller, 1984). From an implementation standpoint, targeting individuals across the political spectrum proves highly feasible in practical settings, unlike the challenge of mass targeting based on intricate psychological traits, particularly on social media platforms.

A pertinent example of ideology-based messaging lies in moral reframing studies, consistently illustrating that reshaping a position to align with an individual's moral values can be an effective tool in political communication and persuasion (Feinberg & Willer, 2019). These findings suggests that a moral frame that appeals to some individuals (e.g., liberals) could even offend others (e.g., conservatives), if the two groups ascribe to different moral foundations (Ditto & Koleva, 2011; Koleva et al., 2012).

However, moral reframing interventions primarily aim to persuade individuals to embrace an opposing viewpoint, potentially yielding limited results in bolstering support for an already-held position, such as increasing environmentalism among liberals. Additionally, as the authors often state, the effectiveness of moral framing hinges on how closely the underlying morality aligns with the target's convictions, which may be bound to contexts where moral convictions are especially relevant (Feinberg & Willer, 2013, 2015).

Empirical investigations into political targeting, predominantly within the communication field, have yielded inconsistent findings in regards to its effectiveness (Jacobs-Harukawa, 2022; Endres, 2020; Hersh et al., 2013). To address this ambiguity, Tappin and colleagues (2023) conducted a groundbreaking empirical examination of political microtargeting, highly pertinent to our present study. Their research involved collecting a plethora of specific messages derived from previous surveys and employing machine learning to determine the most effective messages for distinct socio-demographic groups (e.g., age, gender, political affiliation). Subsequently, they compared the effectiveness of their microtargeting approach to alternative messaging strategies aimed at garnering support for the US Citizens Act, finding that the microtargeting strategy produced a relatively larger persuasive impact.

While this pioneering work bears significance, it comes with limitations. The study adopted an exploratory approach, relying on message matching and targeting based on previous survey data and automated algorithms, devoid of a comprehensive socio-psychological framework or specific hypotheses regarding intervention-moderating variables. Moreover, the research was conducted outside the real-world context of social media campaigns, relying on traditional surveys with experimental designs, which may not accurately represent the intricacies of social media's integral role in message dissemination.

Our current endeavor does not seek to transplant targeted marketing into the conflict resolution field or merely transpose conventional socio-psychological interventions into social media campaigns. Rather, it aspires to amalgamate the strengths of both domains into a cohesive framework that harnesses political targeting to optimize the efficacy of social equality interventions in practical settings.

**Theoretical Framework and Guiding Principles**

To the best of our knowledge, the current work embarks on the first comprehensive effort to provide a theoretical framework for the development and real-world implementation of politically targeted intergroup interventions—a framework that can potentially extend beyond its initial scope. Our primary objective is to enhance the alignment between individual-level factors and the selected intervention type, all grounded in a well-defined psychological concept of motivational congruency and baseline attitudes.

*Congruency and Content.* The intervention must harmonize with the psychological needs and validate the motivating factors specific to each political group (Tapin et al., 2023; Austenfeld, 2006). In terms of attitudes and content, we propose that the intervention's effectiveness hinges on the degree of deviation between the information it conveys and the preexisting perceptions and attitudes held by individuals (Teodorczuk, 2020; Howorka, 2000). For instance, interventions aimed at amplifying perceptions of outgroup heterogeneity through new information will have limited impact on those who already perceive their outgroup as heterogeneous.

*Intervention Selection.* The process of selecting interventions draws from a pool of established interventions known to positively influence the desired outcome variable and/or operate on the defined psychological mechanism of each group (Chambless, 2001). When comparing competing interventions, each should be linked to a distinct and clearly defined psychological mechanism, allowing for precise alignment with the needs and motivations of each profile (Halperin & Schori‐Eyal, 2020). Moreover, we advocate for maintaining uniformity in presentation to isolate the message and mechanism from potential confounding variables.

*Implementation Driven Approach.* To ensure practical applicability and real-world effectiveness, the intervention selection and operationalization should closely resemble the medium and context in which they will be employed. For instance, interventions designed for outdoor campaigns should be operationalized as graphic advertisements. Finally, we recommend that any social equality interventions relying on mass communication culminate with a field replication stage, ensuring that their efficacy transcends the controlled experimental setting and stands robust in practical, real-world scenarios.

**Rational and Hypotheses**

Our primary aim is to optimize the alignment between individual-level factors and the chosen intervention, all grounded in a well-defined psychological concept centered around motivational congruency and baseline evaluations. To achieve this, we embarked on a meticulous analysis of the psychological needs and social cognitions of individuals belonging to Israel's three major political groups: Conservatives, Centrists, and Liberals. Our approach involved matching each group with the most pertinent social equality intervention from a pool of established psychological intergroup interventions, guided by our theoretical principles.While our intervention selection was primarily guided by theoretical criteria that were established to promote the desired outcome, align with ideology-based motivations and baseline attitudes, and be effectively operationalized as video clips, it's important to note that these criteria do not encompass every possible intervention. Instead, they serve as a foundational starting point to showcase the potential of our suggested framework, which can readily be applied to a wide range of additional interventions.

***Conservatives: Correcting Meta-Perceptions Intervention***

Conservative individuals exhibit distinct traits characterized by a strong desire for order, certainty, and structure (Jost et al., 2003; Schimel et al., 1999). Their heightened sensitivity to threats, as highlighted by Wright and Baril (2013) and Jost and Amodio (2012), stems from a motivation to resolve ambiguity and address perceived threats. This sensitivity often leads conservatives to attribute exaggerated hostility to social outgroups (Moore-Berg et al., 2020; Rouhana et al., 1997). Given this proclivity, conservatives should be particularly responsive to interventions designed to mitigate uncertainty and threat sensitivity by challenging their misconceptions about outgroups (Nir et al., 2023). Consequently, decreasing one's uncertainty regarding the attitudes and intentions of his rival group, may be especially beneficial for conservatives. Hence, we suggest that an intervention presenting accurate information about the attitudes of their outgroup (i.e., correcting intergroup meta-perceptions) will be most effective at increasing conservatives' support for social equality. To test this hypothesis, we developed a two-minute video exposing Jewish Israelis to recent findings demonstrating that a significant majority of Arab Israelis favor integration into Israeli society and endorse Jewish-Arab coexistence[[3]](#footnote-3).

H1: Conservative Israeli Jews exposed to the corrective meta-perception intervention will demonstrate the most significant increase in support for social equality compared to the control group. This effect is expected to surpass the increases observed among conservatives exposed to the social norms or meta-perception intervention.

***Centrists: Social Norms Intervention***

Centrists, as proposed by Robert Samuels in "The Psychology of Political Ideology" (2022), possess unique psychological characteristics that distinguish them from conservatives and liberals. They tend to avoid confrontation, exhibit sensitivity to social cues, and experience discomfort when confronted with attitudes that deviate from the mainstream view (Samuels, 2022). Centrists place great importance on social consensus, as evidenced by Girvan & Snyder's (2010) research on functional independents. Thus, we posit that an effective strategy for reducing prejudice among centrists involves appealing to their sensitivity to consensus. In terms of content, the intervention should emphasize the normative acceptance of social equality within the Israeli Jewish community, thereby positioning it as a mainstream and widely accepted stance. Building on the well-established potency of social norms interventions in promoting positive intergroup outcomes (Erceg et al., 2018; Perkins et al., 2011; Ata et al., 2009), we developed a "Normative" intervention, featuring a two-minute clip showcasing recent findings indicating a growing trend of support for social equality and Jewish-Arab coexistence among Jewish Israelis.

H2: Centrists will exhibit the most substantial boost in support for social equality after exposure to the social norms intervention. This increase is projected to outshine the changes seen in Centrists exposed to other interventions.

***Liberals: Human Malleability Intervention***

Liberals tend to exhibit higher openness to change, stronger universalism, and a perception of social groups as more malleable compared to conservatives and centrists (McCrae, 1996; Caprara et al., 1999; Jost et al., 2003a, 2003b; Ozer & Benet-Martinez, 2006; Carney et al., 2008; Rentfrow et al., 2009; Gerber et al., 2010; Jost, 2017). Thus, liberals are naturally inclined towards interventions that emphasize human and social change (Janoff-Bulman et al., 2009). However, despite Liberals' motivation to perceive social groups as malleable, the stagnated nature of a chronic intergroup conflict may undermine their ability to do so (Leite, Â, 2023). In light of this, the intervention's content should reaffirm the plausibility and inevitability of human malleability in a broader, non-context-specific manner. Given the effectiveness of malleability interventions in promoting conciliatory intergroup attitudes during conflicts (Halperin et al., 2011), we developed a "mixed malleability intervention." This two-minute historical review underscores the adaptable nature of humans, as individuals, groups, and civilizations, without explicitly addressing intergroup relations or specific social groups (Jews and Arab citizens of Israel).

H3: Liberlas will exhibit the most substantial increase in support for social equality after exposure to the mixed malleability intervention. This increase is projected to outshine the changes seen in Liberals exposed to other interventions.

Our postulations, grounded in theoretical principles, lay the foundation for our empirical investigation into the effectiveness of these targeted intergroup interventions, which we discuss in detail in the subsequent sections.

**Research Design**

To put our hypotheses to the test, we executed two distinct experimental studies: a controlled intervention tournament and a corresponding social media field experiment. These investigations were conducted within the intricate context of relations between Jews and Arabs in Israel, a nation characterized by a majority of Jewish citizens (approximately 80%) and a minority of Arab citizens (around 20%) in 2023. Tensions and disputes persist between these ethnic groups due to internal issues such as discrimination, inequality, and uneven resource allocation for Arab citizens. The ongoing historical conflict with neighboring Palestinians, whom most Arab citizens of Israel identify with, further complicates these already fragile relations. These tensions have frequently erupted into violent clashes, with a notable escalation in May 2021.

Our study primarily focuses on the advantaged group, Israeli Jews, for several key reasons. Firstly, the advantaged group typically wields more societal power and resources, making them crucial agents in de-escalating conflicts. Secondly, they bear a relatively greater responsibility for perpetuating these conflicts. Lastly, interventions targeting the disadvantaged often have distinct goals, oriented more toward promoting social change than reducing prejudice (Dixon et al., 2012).

**Preliminary Study.**Approximately a year before the intervention tournament (March 2022), we conducted a baseline study among the participants who would later partake in the intervention tournament. This initial study measured participants' political affiliations and provided a baseline assessment of their support for social equality before any exposure to interventions. In addition, we engaged a group of experimental social scientists to evaluate each intervention (October 2022). They were exposed to each of the clips without prior knowledge of its underlying intervention, with the task of identifying the psychological mechanisms embedded in each intervention, and how distinct the interventions are from one another - ensuring the internal validity of the intervention clips (i.e., whether each clip indeed entails the intended intervention mechanism). While these preliminary steps were not included in the pre-registration of our current work, we succinctly present their outcomes in Appendix 1 (Baseline Study) and Appendix 2 (Pilot Study).

**Study 1: Intervention Tournament**

The Intervention Tournament took place from May 12th to May 14th, 2023. Due to an extended gap between the baseline measurement and the experimental study, the final number of participants was slightly smaller than initially indicated in the pre-registration. The study comprised 2,241 Jewish Israeli citizens (45% female; average age = 46.6, standard deviation of age = 16.3). These participants were recruited through the reputable Israeli panel company, iPanel, and had previously completed the baseline questionnaire. The baseline data was collected in two waves, first in March 2022 and then in March 2023, as detailed in Appendix 1. All participants who completed the online questionnaire via Qualtrics were included in the subsequent analyses.

**Procedure.** Participants, upon consenting to participate, were asked to specify their political affiliation. Subsequently, they were randomly assigned to one of five conditions[[4]](#footnote-4) using a randomized block design. This allocation was based on their political affiliation as either Liberals, Centrists, or Conservatives, ensuring a sufficient representation of each political group in each condition. Three of these conditions involved the presentation of a two-minute video clip featuring the experimental interventions: correcting meta-perceptions (N=497), social norms (N=472), and malleability (N=454). The remaining condition served as the control group (N=818), comprising either an empty control group (N=385) or a neutral control group (N=433)[[5]](#footnote-5).

Contrary to most studies employing an intervention tournament design (Bruneau & Saxe, 2012) the video clips used in the current study were developed and tailored to express a specific psychological intergroup intervention. Consistent with our theoretical principles aimed at ruling out alternative explanations to experimental results, all interventions in this study had a similar duration (ranging from 100 to 120 seconds), utilized the same narrator, and featured similar background music. After exposure to the video clip (or immediately for participants in the empty control condition), participants were asked to rate their level of support for or opposition to social equality between Jews and Arabs in Israel.

***Measures***

**Political Affiliation.** Participants provided demographic information, which is detailed in Appendix 3. Additionally, they indicated their political affiliation on a scale ranging from 1 (Extreme Right) to 7 (Extreme Left), with intermediate positions including Right (2), Soft-Right (3), Center (4), Soft-Left (5), and Left (6). This scale aligns with the common measure of political affiliation in Israel, reflecting voting patterns. For the purpose of analysis, we categorized participants into three groups: Conservatives (N=1,028)[[6]](#footnote-6) for scores 1-3, Centrists (N=633) for a score of 4, and Liberals (N=580) for scores 5-7 (See Appendix 2a for the distribution of participants across conditions based on their political affiliation).

Arabs citizens should have the same salary and employment opportunities that Jews have

**Support of Social Equality.** Participants expressed their level of opposition/support on a scale from 1 (Strongly Oppose/Disagree) to 7 (Strongly Support/Agree) for ten statements, as presented in Appendix 2b. These statements addressed social equality, with five focusing on general attitudes toward social equality between Jews and Arabs ("Arabs citizens should have the same salary and employment opportunities that Jews have"), and the remaining five assessing willingness to take action to promote social equality ("I am ready to act (for example, share a post, sign a petition, etc.) to reduce inequality in the distribution of budgets in government offices"). The 10-item social equality scale exhibited excellent internal reliability, with a Cronbach alpha of 0.93 (Mean Score = 4.7, Standard Deviation Score = 1.22). A complete list of items on the social equality scale can be found in Appendix 3.b. It is worth noting that there were no significant differences between conditions in baseline support for social equality, as measured in the preliminary study (F(3, 2238) = 1.52, p = .21)[[7]](#footnote-7).

**Results**

Our analyses strategy consisted of two main steps. Firstly, to determine whether the effectiveness of our psychological intergroup interventions was influenced by participants' political affiliation, we conducted a univariate analysis on support for social equality. This analysis included political affiliation, condition, and their interactions as explanatory variables while controlling for participants' baseline support for social equality (as measured in the preliminary study). Subsequently, to assess the specific effects of each condition on individual political groups, we compared the means of social equality across the four conditions using separate one-way ANOVA tests for each of the three political groups.

The univariate analysis yielded several significant findings. There was a significant main effect of condition (F(3, 2238) = 12.3, p < .001) and political affiliation (F(2, 2239) = 106.7, p < .001) on support for social equality. Additionally, a significant interaction effect emerged between political ideology and condition concerning support for social equality (F(6, 2235) = 4.6, p < .001), which remained significant even after accounting for participants' baseline support for social equality. Detailed results are provided in Table 1.

Figure 1 illustrates the standardized estimated marginal means (Zscore) of the social equality scale, along with their corresponding 95% confidence intervals. These results are categorized by condition, political affiliation, and are adjusted for baseline support of social equality. Notably, Conservatives displayed the highest scores in the meta-perception condition, Centrists exhibited the highest scores in the social norms condition, and Liberals recorded the highest scores in the malleability condition.

Figure 1. *Estimated marginal standardized means of social equality factored by condition allocation and political identification. Error bars: 95% CI. Covariates appearing in the model are evaluated at the following values: Baseline Social Equality Zscore = 0*. *Error bars: 95% CI.*

The univariate analysis confirmed that political affiliation indeed moderated the effectiveness of social equality interventions. However, it did not elucidate the specific impact of each intervention on the different political groups. To address this, we conducted one-way ANOVA analyses, followed by Post Hoc Scheffe tests, with condition as the factor variable and support for social equality as the dependent variable, separately for each of the three political groups.

The ANOVA revealed significant differences in support for social equality among each of the three political groups (F*Conservatives* (3, 1032) = 8, p < .001; F*Centrists* (3, 633) = 5.25, p < .001; F*Liberlas* (3, 578) = 4.65, p < .001). Post Hoc Scheffe tests further unveiled that, for most political groups, only one intervention significantly differed from the control group.

Specifically, among Liberals, exposure to the malleability condition led to significantly higher levels of social equality (Mean Difference = 0.3, Std. Error = 0.09, p < .01) compared to those in the control group. However, no significant differences were observed between the control group and Liberals exposed to either the meta-perception condition (p = .95) or the social norms condition (p = .36).

Similarly, Centrists who underwent the social norms intervention exhibited significantly greater support for social equality compared to the control group (Mean Difference = 0.4, Std. Error = 0.09, p < .001). However, there were no significant differences in support for social equality among Centrist participants exposed to the malleability (p = .98) or meta-perception (p = .2) conditions when compared to the control group.

Among Conservatives, those exposed to the meta-perception condition displayed significantly higher support for social equality (Mean Difference = 0.4, Std. Error = 0.08, p < .001) than Conservatives assigned to the control conditions. However, while Conservatives exposed to the malleability condition did not exhibit significantly different support for social equality (p = .47), there was a marginally significant increase in support of social equality among Conservatives exposed to the social norms condition (Mean Difference = 0.3, Std. Error = 0.09, p = .04).

Taken together, these results validate our main hypotheses, demonstrating that social equality interventions yield different effects among various political groups. Figure 2 visually presents the outcomes: 38% of Conservatives assigned to the meta-perception supported social equality (compared to 25% in the control group), Centrists assigned to the social norms condition exhibited the highest frequency of support for social equality (76%) compared to 58% in the control group, and the highest proportion of Liberal participants supporting social equality occurred after exposure to the malleability intervention (95%, compared to 87% in the control group).

תמונה שמכילה טקסט, תרשים, צילום מסך, קו

התיאור נוצר באופן אוטומטי

Figure 2. *Bars represent the frequency of support for social equality (means are reported in parentheses) per each intervention, and the significant intervention differences in SE means conducted separately for each political affiliation. \*p<.05, \*\*p<.01, \*\*\*p<.001.*

**Study 2: Social Media Campaign Interventions**

Building upon our intervention tournament results, we implemented a real-world field study using social media campaigns based on the three interventions tested earlier. We collaborated with the "Israelis Talk" Facebook page, a platform dedicated to fostering discussions among diverse segments of Israeli society and certified by Meta to run ads on social and political issues. We shared the intervention video clips with the page admins which in return granted us direct access to their ads manager, allowing us to examine the raw results of the intervention campaigns.

**Method**

To gauge the effectiveness of each intervention across different political groups, we utilized Facebook's targeting capabilities to create three distinct target audiences. These audiences were formed based on three criteria:

1. Lookalike Audiences: The Meta ads platform can generate a target audience which is similar to the followers of specific Facebook pages, in users' demographics and interests. In this case, we generated three target audiences based on similarities to users who follow pages associated with Conservative, Centrist, or Liberal politicians and parties.
2. Geographic Location: We analyzed the results of the 2022 national election[[8]](#footnote-8), and identified 150 neighborhoods and small municipalities where the vast majority of votes went to Conservative, Centrist, or Liberal parties (50 areas per each political camp). We added these geographic areas to each of the target audiences respectively. .
3. Exclusion Criteria: We excluded from each target audience users that were included in either of the remaining target audiences, to ensure that users could belong to only one target audience, allowing us to differentiate between Conservatives, Centrists, and Liberals. We excluded Arabic-speaking users to align with our decision to target the high-power group.

For example, the Liberal target audience consisted of users who liked (or are similar to users who liked) Facebook pages associated with Liberal parties and politicians and live in the 50 areas where Liberals gained the most votes - while excluding users who were included in the two remaining target audiences.

Meta ads platform can estimate the budget size necessary to reach a certain number of users (i.e., the amount of money necessary to expose a certain number of users to the ad). We calculated the campaign budgets based on the minimum ad reach of 30,000 unique users, with budgets distributed unevenly due to variations in the sizes of political groups in Israel (see Table 6 for detailed ad budget).

***Creative A/B Testing.*** For each of the three target audiences, we executed creative A/B testing campaigns, comparing different Facebook ads targeting the same audience but with distinct ad content. These ads ran for the same duration and budget, and they were placed in identical media placements. As per Meta's A/B testing requirements, all ads ran for an identical duration of time between Sep 5, 2023 – Sep 8, 2023. All ads included an identical call to action ("An Equal Israel is a Better Israel >> Click and make a Difference"), along with a message addressing the content of each intervention clip (for the Meta-Perception clip: "What do the Arab citizens really think about the Jewish citizens?"; for the Social Norms clip: "What do the Jewish citizens really think about the Arab citizens?"; For the malleability clip: "Groups and peoples change frequently, and this change occurs everywhere, everyday"). Figure 3 displays these ads in English.

תמונה שמכילה טקסט, אתר, דף אינטרנט, פרסום אונליין

התיאור נוצר באופן אוטומטי

Figure 3*. Screenshots of the Facebook desktop Intervention ads, translated to English.*

Users who clicked on the ad were directed to a website offering additional information about the importance of social equality and a short petition form. Upon the predefined completion date of September 8, 2023, Meta's ads manager provided a report detailing performance metrics for each ad within each target audience.

**Analyses Strategy.** We assessed the relative effectiveness of each intervention by analyzing two key conversion metrics:

a. Result Rate (RR): This metric quantifies the percentage of users exposed to the ad who clicked on the petition link, calculated as the number of results (clicks on the petition link) divided by the total ad reach (unique users exposed to the ad).

b. Cost Per Click (CPC): This metric calculates the average cost for a click on the petition signature post, determined by dividing the link clicks by the ad's expenditure.

**Results**

The three campaigns collectively reached over 69,000 unique Israelis, resulting in more than 26,000 engagements and 1,577 clicks on the petition signature link. Table 6 showcases the performance metrics for each ad across all campaigns. Notably, significant differences emerged in the performance of each ad within each target audience[[9]](#footnote-10). As the table shows, there were substantial differences in the performance of each ad, among each of the target audiences.

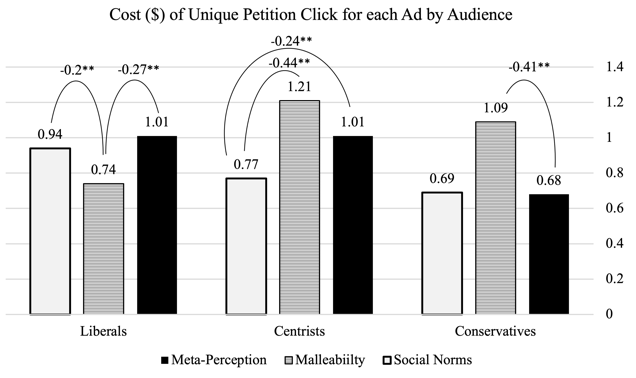
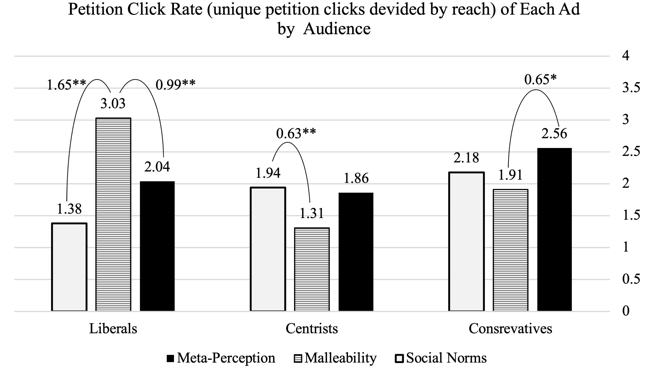
|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Campaign / Audience** | **Ad Set Name** | **Reach** | **Ad Engagement** | **Results (Clicks on the Petition link)** | **Result rate** | **Cost Per Petition Click** |
| Conservatives | Meta-Perception | 5432 | 2148 | 139 | 2.56 | 0.68 |
| Social Norm | 8171 | 2247 | 178 | 2.18 | 0.69 |
| Malleability | 6062 | 1974 | 116 | 1.91 | 1.09 |
| Centrists | Meta-Perception | 9594 | 3589 | 178 | 1.86 | 1.01 |
| Social Norm | 15464 | 4649 | 300 | 1.94 | 0.77 |
| Malleability | 13861 | 4251 | 182 | 1.31 | 1.21 |
| Liberals | Meta-Perception | 6316 | 2495 | 129 | 2.04 | 1.01 |
| Social Norm | 11336 | 2589 | 157 | 1.38 | 0.94 |
| Malleability | 6530 | 2704 | 198 | 3.03 | 0.74 |

Table 6. *Performance Metrices of the ad sets used in each campaign.*

Consistent with our hypothesis and the findings of Study 1, the meta-perception ad proved most effective among Conservatives, with a 2.6% click rate and the lowest CPC (0.68$). However, while the result rate was significantly higher for Conservatives exposed to the meta-perception ad compared to the malleability ad (z = 2.33, p < .05, power= 92%, with 95% significance level), and their CPC was significantly lower (MD=-0.41, t (11,492) = 238.71, SE=.002, p < .01, with 95% significance level); the differences in result rate (z = 1.41, ps = .07, power= 70%, with 95% significance level) and CPC (ps = .2) between the meta-perception and social-norms ads were not significant.

As for the Centrist audience, the social-norms ad yielded a significantly lower cost per petition click (0.77$), compared to both the malleability ad (MD = -0.44, t(29,323) = 375.29, SE=.002, p < .01, 95% CI = -0.442 to -0.437), as well as to the meta-perception ad (MD = -0.24, t(25,056) = 212.32, SE=.001, p < .01, 95% CI = -0.242 to -0.237). However, while the click rate was significantly higher for Centrists exposed to the social norms (1.9%) ad compared to those exposed to the malleability (1.3%) ad (z = 4.26, p < .001, power= 98%, with 95% significance level) – there were no significant differences in the click rate between centrist exposed to the social norms ad and those exposed to the meta-perception ad (z = 0.47, ps = .31).

Finally, Liberals exposed to the malleability ad exhibited the highest petition click rate (3%) and the lowest cost per petition click (0.74$) compared to the meta-perception ad (*Click rate:* z = 6.8, p < .05, power = 92%, with 95% significance level. *CPC:* MD = -0.27, t(12,844) = 173.23, SE=.001, p < .01, 95% CI = -0.273 to -0.266) as well as to the social-norms ad (*Click rate:* z = 3.57, p < .01, power = 99%, with 95% significance level . *CPC:* MD = -0.2, t(17,864) = 17.16, SE=.001, p < .01, 95% CI = -0.229 to -0.177).



***Figures 4-5.*** Petition click rate and cost per petition click of each ad – per each audience.

The field study results mostly reaffirm the findings of the intervention tournament, exposing that different types of psychological intergroup interventions may be especially effective in promoting social equality amongst members of different political camps – aligned with our suggested intervention-matching framework. However, both studies have found a similar discrepancy from our initial hypotheses. Although the meta-perception condition yielded the most effective results amongst Conservatives, it did not significantly differ from the social norms condition in neither of these two studies.

**General Discussion**

In contemporary persuasive communication, the practice of matching diverse individuals with various forms of persuasive messaging has become central (Collins & Varmus, 2015; Hamburg & Collins, 2010). However, when it comes to psychological intergroup interventions, the application of targeted messaging remains relatively limited (Bruneau & Saxe, 2012; Hameiri et al., 2019), and has mostly been examined via an exploratory approach, rather than being derived from a well-defined a-priori theoretical framework. This discrepancy is noteworthy since the essence of social psychology lies in unraveling the intricate interplay between individual psychological traits and social identities, attitudes, and behaviors (Alport, 1985). Despite recent conceptual progress (e.g., Halperin et al., 2023), intergroup interventions often employ uniform approaches across different target populations, overlooking crucial individual differences in psychological needs, motivations, and orientations. These variations can significantly impact the effectiveness of intervention messages, as they disregard the influence of personal characteristics, context, and communication mediums (Shrout, 2018).

Building upon recent efforts to enhance psychological intergroup interventions through political targeting based on moral congruency (Feinberg & Willer, 2019) and inductive explorations (Tappin et al., 2023), our study introduces a novel framework of targeted intergroup interventions. This framework optimizes the potency of such interventions by assigning the most effective intergroup interventions to individuals holding different types of political ideology, based on the congruency of the intervention with each political group's unique psychological motivations. Specifically, the current work aimed at recognizing the most effective psychological interventions that would yield greater support of social equality between Jews and Arab citizens of Israel, among Israeli Jews from competing ideological groups (i.e., Liberals, Centrists and Conservatives).

In Study 1, conducted as an Intervention Tournament (Hameiri & Moore-Berg, 2022), we uncovered an interaction effect of political affiliation on the effectiveness of psychological intergroup interventions. As anticipated, Jewish Israeli liberals showed the highest support for social equality after exposure to the general malleability condition, while centrists exhibited the highest support after the social-norms intervention. Interestingly, conservatives displayed the highest support for social equality between Jews and Arabs after exposure to the meta-perception intervention, although their support did not significantly differ from conservatives exposed to the social-norms intervention (thus only partially collaborating hypotheses).

Study 2 examined the replicability of the intervention tournament study by translating it into practical, real-world applications, with a particular focus on social media campaigns. Remarkably, liberals continued to exhibit the strongest support of social equality under the malleability intervention, centrists responded most effectively to the social-norms intervention, and conservatives to meta-perception intervention (but also to the social-equality intervention). These findings underscore the necessity of tailoring interventions to align with the core values and principles upheld by different political groups, based on a theoretical framework that optimizes the match between the intervention and its intended audience.

While previous targeting studies often relied on the self-congruity principle without well-defined theoretical or methodological frameworks (Tappin et al., 2023), or focused on overcoming barriers within specific groups and outcomes (Feinberg & Willer, 2013, 2015), our work is the first examination of targeted intergroup interventions hich stems from well-defined theoretical principles for targeting psychological intergroup interventions These principles are based on both a motivational and an attitudinal congruency between psychological needs and intervention mechanisms, which can be applied across various contexts and holds significant potential for enhancing its utilization beyond the context of the current work. Moreover, the current work offers a novel methodological venue of implementing targeted intergroup interventions in real-life circumstances.

Our research carries important practical implications for promoting social equality in polarized environments, where individuals from competing political groups are often motivated by different psychological needs and motivations. It demonstrates that customizing interventions to align with political ideologies can substantially enhance their impact, focusing not only on the types of intergroup interventions that may be most effective in fostering more constructive intergroup relations – but also, to whom. Despite focusing of the relations between Jewish and Arab citizens of Israel, implementing political targeting of intergroup interventions may be extremely relevant to a wide array of contexts, from promoting support of humanitarian aid and conciliatory attitudes between Israelis and Palestinians, to inhibiting political polarization and violence between competing ideological groups – and any other context where political ideology may moderate the effectiveness of intergroup interventions. Lastly, the current work offers a novel methodological venue of empirical implementation of targeted interventions in the field, via social media metrices.

However, the current work bears several limitations, which necessitate further examination. First, the generalizability of our findings may depend on specific contexts, and ongoing changes in political affiliations warrant continued investigation. Additionally, our study focused on changing a specific outcome (promoting social equality) within a specific intergroup context (Jewish and Arab citizens of Israel), targeting a specific psychological moderator (political affiliation). Extending the applicability of this framework to diverse contexts, outcomes, and targeting dimensions requires additional research. Moreover, replicating our findings in real-life contexts and platforms beyond Instagram and Facebook is essential.

Looking ahead, we propose exploring several key avenues. Investigating the longevity of interventions and potential moderating factors warrants in-depth examination. Strategies for sustaining behavioral changes over time should also be explored. Comparative studies conducted across diverse contexts hold the potential to reveal both universal principles and cultural nuances that shape intervention success.

In conclusion, our study represents a significant advancement in understanding how to promote social equality within divided societies. Tailored interventions offer hope for bridging divides, fostering meaningful dialogues, and advancing social equality. As we navigate the complex landscape of social change, we hope that these findings inspire the development of more targeted interventions, ultimately contributing to a more equitable world.

1. https://www.nytimes.com/2023/04/27/world/middleeast/israel-march-judiciary-right-wing.html [↑](#footnote-ref-1)
2. https://www.researchgate.net/publication/376515922\_FocusGroupsDemocracyLiberalsConsrevatives0323. DOI: [10.13140/RG.2.2.24020.99208](http://dx.doi.org/10.13140/RG.2.2.24020.99208) [↑](#footnote-ref-2)
3. The findings used in the clip were based on real survey data collected in the last two years amongst Arab Israelis (all materials, including translated videoclips, can be found in the supplementary material link). [↑](#footnote-ref-3)
4. The full questionnaire included several additional measures and conditions, unrelated to our current research focus. Hence, we only report the measures and conditions included on our pre-registration. [↑](#footnote-ref-4)
5. Since there were no significant differences in any of the outcome items between participants assigned to the empty control and those assigned to the neutral control, they were combined into one control condition (see supplementary materials for the full analyses of the results conducted separately for each control group). [↑](#footnote-ref-5)
6. As the vast majority of Jewish Israelis identify themselves as conservatives (60%), the sample had a larger number of Conservative respondents compared to Centrists and Liberals [↑](#footnote-ref-6)
7. The analyses of the baseline study are reported in Appendix A [↑](#footnote-ref-7)
8. https://votes25.bechirot.gov.il/ballotresults [↑](#footnote-ref-8)
9. For transparency and replication considerations, the original Facebook report which includes the ads creative, the audience targeting and the full performance metrices, is made available at https://fb.me/2HJjo8rQVIZgmbW [↑](#footnote-ref-10)