RUNNING HEAD: Volitional Intergroup Imagery

Freely-Chosen Positive Imagined Contact Causes Improved Outgroup Emotions and Encourages Increased Contact Seeking Immediately and at Follow Up

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Word count: 8631

PENULTIMA for the following article accepted for publication in December 2022.

Husnu, S. Paolini, S., & Berrigan, A. (2022). Freely chosen positive intergroup imagery causes improved outngroup emotions and encourages increased contact seeking immediately and at follow up. *Group Processes and Intergroup Relations.*

Abstract

In two ethnic contexts, we focus on volitional imagined contact as a potential method to increase individuals' readiness to voluntarily initiate intergroup contact and engage in responses with implications for reconciliation. In Study 1, we used a quasi-experimental design to determine the causal role of volitional (vs. non-volitional) valenced imagined contact with a refugee on downstream processes. Irrespective of volition, positive visualizations led to more positive outgroup emotions, action tendencies and contact seeking, however manipulated volition amplified the differential impact of valenced contact on outgroup emotions: Negative contact was more detrimental when freely chosen, than forced, whereas positive contact was equally beneficial irrespective of volition. Study 2 investigated factors driving individuals' choices for positive (vs. negative) imagined contact in conflict-laden Cyprus and assessed immediate and longer-term consequences of such choices for interethnic contact seeking. In both studies, participants chose to engage in imagined contact of a valence that aligned with their prior contact histories consistent with an evaluative fit mechanism. Volitional valenced imagery predicted participants' active and self-initiated contact seeking immediately and after a 2-week period. Hence, volitional intergroup imagery as a 'mental contact script' prepares individuals for actual intergroup contact and behaviors with implications for intergroup reconciliation and cohesion.

Word count: 200

Keywords: Intergroup contact, Intergroup Imagery, Mental Visualization, Volition, Contact valence, Cyprus

Freely-Chosen Positive Imagined Contact Causes Improved Outgroup Emotions and Encourages Increased Contact Seeking Immediately and at Follow Up

Intergroup contact is an effective way to reduce prejudice between groups whether they are groups of differing race, ethnicity, sexual orientation or health status (Allport, 1954; Pettigrew & Tropp, 2006). As intergroup settings vary in the degree to which they are ethnically heterogeneous or homogeneous, they will inevitably offer variable opportunities for different ethnic groups to be exposed to each other (Kotzur & Wagner, 2021) and seize those opportunities for contact (Harwood, 2021). This means that levels of individuals' volition to realize intergroup contact might also vary significantly from context to context (Dixon & Durrheim, 2003; Paolini, Wright, et al., 2016).

In this paper we focus on *volitional valenced imagery* or imagined contact (Husnu & Paolini, 2018) as a possible method to facilitate individuals' readiness to voluntarily initiate actual intergroup contact and instigate a variety of downstream psychological processes with implications for positive intergroup dynamics. In Study 1, we used a quasi-experimental design to determine the causal role of volitional (vs. non-volitional) valenced imagined contact in affecting group-level responses. In Study 2, we further assessed factors that drive individuals' deliberate choices for valenced (positive vs. negative) interethnic imagery and checked for the immediate and longer-term consequences of such choices for future contact seeking behaviors.

Volitional Contact Seeking

Volition broadly refers to the ability to initiate actions based on internal initiative, motivation and decision, as opposed to external circumstances (Haggard & Lau, 2013). When applied to contact, volition refers to individuals *self-selecting* or *actively opting-in/opting-out* of

contact based on their motivations—or what they want. An opportunity for self-growth and development might for instance encourage individuals to actively choose contact (Paolini, Wright, et al., 2016), whereas feelings of anxiety or uncertainty might lead them to deliberately avoid contact (Dixon et al., 2019). In many circumstances, decisions about whether to engage in contact are made freely, whereas other situations impose, 'force', or mandate contact on individuals (e.g., workplaces, classrooms, prisons; Bekhuis et al., 2013).

Existing evidence on the impact of volition in contact is largely indirect. In naturalistic settings, whether one engages in contact voluntarily or not ultimately should depend on a complex and dynamic interplay between environmental conditions with affordances for self-selection (i.e., being *able* to opt-in and -out of contact) and individual characteristics that fuel a desire or not for self-selecting in- and out- of contact (i.e., being *willing* to opt-in/out of contact). Without knowledge of how volition impacts contact processes and group-level responses, it is difficult to properly understand contact dynamics in real-world situations across settings and actively manage them with good policy and interventions.

Primary evidence by Hodson (2008), for example, revealed that environmentally constrained (imposed or forced) interethnic contact in a prison context reduced prejudice, especially in individuals high in social dominance orientation (Pratto et al., 1994); these are the individuals likely to chronically avoid contact in less restrictive settings (outside prison). Specifically, high SDO, white prison inmates with high levels of in-group bias benefitted more from environmentally imposed positive contact with black inmates when compared to their low SDO counterparts. These results suggest that the voluntary chronic avoidance of contact expected by high SDO individuals in natural, free-choice settings (vs. prison) might typically prevent these individuals' attitudes and prejudiced beliefs from being disconfirmed and changed

by contact. Hence volition in contact may be influenced not only by contextual variables but individual factors (such as personal attributes like SDO) or an interplay of both factors (Harwood, 2021; Paolini et al., 2018; Schäfer et al., 2021).

Ancillary analyses within an expansive meta-analysis of the positive contact literature by Pettigrew and Tropp (2006) are also indicative of volition moderating the contact-prejudice link. These analyses show that studies where contact was mandated, returned significantly larger decreases in prejudice than studies where participants had some or full choice to engage. Interestingly, Pettigrew and Tropp discounted the value of these ancillary results on the ground that these differences in effect size as a function of contact volition disappeared when controlling for variations in research design quality. In their synthesis, forced contact studies were more often true (fully-randomized) experiments, while free choice contact was generally tested with quasi-experiments, surveys, or field studies. Instead, we posit that the disappearance of the moderating effect of contact volition in Pettigrew and Tropp's ancillary analyses when controlling for research design quality to account for meaningful variations in contact volition by design, in fact proves that some of the differences in contact-prejudice effect sizes are indeed indicative of variations in volition.

More direct evidence regarding the implication of contact volition comes from recent work by Bagci et al. (2021). They found that self-reports of volitional contact were associated with positive intergroup outcomes. Specifically, participants' past experiences of volitional contact (as opposed to contact reported as situational or 'contingent') were linked with more positive intergroup attitudes and behavioral approach tendencies. These relationships were mediated by greater intimacy with the outgroup and contact positivity. While Bagci et al. research has the merit of directly investigating the group-level correlates of variations in contact

volition, once again the design is a correlational one in which volition was not experimentally varied. We use an experimental design in Study 1 to attempt a first directional test of contact volition.

Valence of Contact

Only recently has the importance of valence of contact become a topic of study after a long period in which the field was dominated by positive intergroup contact research (Paolini et al., 2010). Positive contact is experienced more frequently than negative contact in a number of different settings with varying degrees of intergroup friction (Graf et al., 2014; Schäfer et al., 2021). While it is no surprise that positive contact is found to relate to prejudice reductions and negative contact to prejudice exacerbation, emerging evidence has now shown that negative intergroup contact might enhance prejudice more than positive intergroup contact decreases it (Barlow et al., 2012; Graf & Paolini, 2017). Still, findings regarding a stronger impact of negative contact are rather mixed (for overviews, Paolini &McIntyre, 2019; Schäfer et al., 2021) and several factors may influence the interplay between positive and negative contact, including histories of contact (Paolini et al., 2014; Kotzur & Wagner, 2021), valenced expectations (Schäfer, Simsek et al., 2021), level of intimacy (Fuochi et al., 2020) and intensity of the contact experience (Schäfer, Kros, et al., 2021). Drawing on this research, in Study 1 we combine volition and valence of contact in our design to better understand the interaction of these modes of contact and their downstream consequences for intergroup relations.

Current Research

To date, a limitation of many experimental paradigms within the broad intergroup contact framework is that exposure to outgroup members is often scripted (Paolini & McIntyre, 2019) or

poor in ecological validity (MacInnis & Page-Gould, 2015) with information which may not reflect realistic and dynamic experiences of contact with outgroup members. These research trends have been criticized by Paluck and colleagues (2009, 2021) who have more broadly questioned the effectiveness of contact-based interventions in prejudice reduction, mainly on the ground of insufficiently rigorous methodology, ecological validity, and paucity of findings of long-term impact.

Controlled research on the role of volition in intergroup contact should therefore use paradigms that are experimental but allow the immersion in more authentic contact experiences. With these considerations in mind, in this research we drew on earlier research by Husnu and Paolini (2018) who devised a modified imagined contact task as a practical way to investigate individuals' volitional contact. They considered the impact of freely-chosen interethnic imagery on outgroup attitudes of opposing ethnic groups in conflict-ridden Cyprus. Turkish Cypriots with a history of intergroup war exposure visualized a contact experience with an outgroup member (Greek Cypriots), leaving the valence and content of the interaction to the participant's discretion. Alternatively, participants engaged in either a positive or negative intergroup visualization based on standard instructions for (mandated) imagined contact. Those in the *freely-chosen* valence unspecified contact condition visualized positive contact and reported positive intergroup outcomes similar to those instructed to visualize a positive interaction, indicating that free choice in visualization content might lead to positive visualizations and positive outcomes, even in conflict settings. Husnu and Paolini also found clear valence congruence effects, whereby participants with a history of positive contact were more likely to choose to visualize a positive contact scenario. Conversely, although statistically lower in number, some participants chose to engage in negative intergroup imagery. Despite being

arguably more unpleasant, these participants were more inclined toward congruency with their past negative experiences and opted for the negative scenario. Decisions for choice of imagery are therefore in part influenced by the valence of previous contact experiences, even if it is negative (see Denrell, 2005 for this idea applied to direct contact). This might be used to validate negative intergroup attitudes or to engage in confrontational contact (i.e., approach contact with aggressive intents; Skitka, 2010). Again, the correlational nature of the design prevented Husnu and Paolini from drawing any firm causal inference (see also Stathi et al., 2020).

Overview of Studies

We aimed to further our understanding of the antecedents and consequences of volitional valenced contact imagery. In Study 1, we attempted to experimentally manipulate experiences of forced vs. freely chosen imagined contact, orthogonally to the positive vs. negative valence of the visualization, to assess the influences of volition on the downstream consequences of valenced imagery contact. As we could not fully control for the impact of individual characteristics in the freely chosen condition (for parallel methodological challenges in similar quasi-experimental paradigms of self-referential processes, e.g., Baumann & Kuhl, 2003; Kazén et al., 2003; Kuhl & Kazén, 1994; Quirin et al., 2009), we controlled for past contact analytically to ensure that prior experiences of contact did not pollute the effects of volition and contact valence on our outcomes. By using a quasi-experimental design, we hoped to address the weaknesses of earlier studies, and thus make strides in isolating the causal effect of volition on prejudice following valenced imagined contact.

We follow this up in Study 2 by focusing on the volitional segment of Study 1's design. We assessed what valence and type of salient past contact shape subsequent contact choices when individuals are given the opportunity to opt between positive and negative valenced

imagined contact scenarios. Importantly, we also aimed to ascertain whether volitional valenced imagery of ingroup-outgroup contact impact on participants' active contact seeking (Page-Gould, 2012) immediately and after a time delay, to check on long term consequences (Paluck & Green, 2019; Paluck et al., 2020).

Across both studies we measured a spectrum of variables relevant to broad intergroup relations, spanning across attitudinal dimensions of outgroup evaluations and emotions, to action tendencies, and eventually contact-seeking. By doing so we hoped to measure the full arc of processes associated with attitudinal and behavioral readiness for a reconciliatory-orientation.

Study 1

Research to date regarding volitional contact has not used experimental manipulations and have been correlational (Bagci et al., 2021; Husnu & Paolini, 2018; Stathi et al., 2020). In this study we therefore wanted to attempt a direct and incisive experimental manipulation of volition to assess its effects on outgroup-level responses. Therefore, we systematically varied participants' ability to actively choose (vs. inability to choose) the valence of intergroup contact imagery with an ethnic outgroup member—a Syrian refugee—while simultaneously varying the valence of the interaction as positive (vs. negative), to determine the effects of forced or freely-chosen valenced contact.

Method

Participants and Design

Participants were recruited from the (online) general community (N = 318; 136 females, 180 males; 2 rather not say; M = 30.01 years, SD =10.57) using the online crowd-sourcing platform Prolific Academic. Majority of participants were born in the US, Mexico or Canada

(45.9%) followed by European countries such as the UK, Spain and Italy (40.5%). Participants reporting a refugee background (personal or of family) were invited to exit the survey to ensure the data captured *inter*group processes.

Participants were randomly allocated between free-choice and forced conditions. Those in the free-choice condition could *choose* between either a positive *or* a negative imagined contact experience with a Syrian refugee. Those in the forced condition were *instructed to* engage in either a positive *or* a negative imagined contact experience with a Syrian refugee. This led to a 2 volition (free vs. forced choice) x 2 imagined contact valence (positive vs. negative) between-subjects factorial design. Due to limited spontaneous uptake of the negative contact imagery among freely-chosen participants, the *n* was quite variable (freely chosen/positive, *n* = 125; *n* = 35 freely chosen/negative; forced/positive, *n* = 77; forced negative, *n* = 81[1]; see Prevalence section below).

Procedure and Materials

The online questionnaire included the following scales, which unless stated otherwise were anchored from 1 to 7:

Social demographics. Participants' gender, age, language spoken at home, birthplace, and refugee background (own and family) were assessed.

Mental visualization task and manipulation. Participants were randomly allocated between three conditions (freely-chosen; forced: positive; forced: negative). All participants were told they

[1] In line with Husnu and Paolini (2018) we expected free negative imagery to be chosen less often. We therefore recruited participants in two stages to boost this cell-size; however participants consistently preferred a positive visualization when free to choose, leaving numbers per cell ranging between 35 and 125. Despite this, Levene's test yielded non-significance for all variables apart from negative action tendencies, suggesting equal variances.

would imagine and describe either a positive or negative experience with a refugee. Those in the *free choice conditions* were given the option to choose between a positive or negative visualization like in Husnu and Paolini (2018), while those in the *forced conditions* were told that the researcher would decide whether they undertook a positive or negative visualization.

Manipulation checks. To verify the effectiveness of the experimental manipulations:

Contact valence check. Participants rated their feelings during the visualization task (Husnu & Paolini, 2018; 7 items, relaxed, distressing (R)*;* α =.74).

Perceived volition check. Four items assessed perceived volition (Bagci et al., 2021; How much did you find the imagined experience to be…voluntary, under my control, spontaneous, natural; α =.64).

Attitudinal Measures:

Awareness of intergroup differences during imagined contact was established through four *category salience* items (Islam & Hewstone, 1993) (e.g., 'How much did your interaction partner seem typical of a Syrian refugee?'; α =.72). Participants then indicated general feelings and attitudes towards Syrian refugees using a feelings thermometer (Esses et al., 1993) and general attitudes on 5 bipolar scale items (e.g., friendly-hostile; cold-warm was removed due to lowered reliability, α =.92; Wright et al., 1997). The Prejudice Attitudes Survey (Stephan et al., 1998) measured both evaluative and emotional reactions, with two indices: *Positive* (7 items; affection, warmth, trust… α =.92) and *negative outgroup emotions* (6 items; rejection, disdain, hostility… α =.90).

Behavioral Readiness Measures:

Positive and negative action tendencies towards refugees were assessed through desire to perform a range of positive (e.g. 4 items; help, find out more, α =.80) and negative actions (e.g., 3 items; hurt physically or emotionally, α =.85; Mackie et al., 2000).

Reconciliatory Behavior Measure:

Contact -seeking was assessed with a single item ("the extent to which you would like to seek more contact with refugees").

To ensure recall of *past contact* did not interfere with manipulations and outcomes, participants rated the frequency of positive past contact with refugees (single item Barlow et al., 2012).

Finally, a pleasant outdoor visualization task was included to ensure all participants finished on a positive note.

Results and Discussion

Manipulation Checks

Contact valence check. We ran a 2 valence (positive vs. negative) x 2 volition (forced vs. free choice) on perceived contact valence in order to assess whether positive contact participants reported a more positive contact experience (regardless of volition). As expected, we found a significant main effect of valence, F (1, 314) =304.90, $p < .001$, $\eta^2 = .49$, whereby contact was rated more positively in the positive valenced condition (M =4.56, SD =.68) than the negative valenced condition (M = 2.87, SD =.91). The volition factor was not significant ($F < 1$, p =.69) and more importantly the main effect of contact valence was not qualified by the interaction, $F < 1$, p =.82. Hence, there was higher positivity in the positive valenced condition compared to the negative valenced condition in both freely chosen and forced conditions (both ps <.001). These findings show the effectiveness of our manipulation of valence.

Perceived Volition. One-way ANOVA detected a difference in perceived volition, F (1, 316) = 6.90, p = .009, η^2 = .021. Free-choice participants rated their experience as involving significantly more volition (M = 4.66, SD =1.14) than those in the forced condition (M = 4.30, SD =1.30). Hence our manipulations had been effective.

Effects on Group Level Responses

We conducted a 2 valence (positive vs. negative) x 2 volition (forced vs. free choice) MANCOVA on category salience, feelings thermometer, outgroup evaluations, positive/negative emotions, action tendencies and contact seeking behaviors as the dependent variables, while controlling for past positive contact. Findings revealed a significant multivariate effect for valence, F (8, 294) = 5.94, p < .001, η_p^2 = .14, marginally for volition, F (8, 294) = 1.91, p = .058, η_p^2 = .05, but none for the interaction effect, F (8, 294) = 1.25, p = .276, η_p^2 = .03.

Table 1 reports the univariate effects, while controlling for prior contact. Manipulated valence had a wide-spread effect on our group-level variables: The positive visualization task led to more positive feelings, outgroup evaluations, positive outgroup emotions, action tendencies and contact seeking.

----------Insert Table 1 ----------

A main effect of volition on category salience was found: Freely-chosen contact imagery was associated with higher awareness of intergroup differences than forced contact imagery and therefore might have greater generalization potential than involuntary contact imagery.

There was a marginally significant valence x volition interaction along positive outgroup emotions (see Figure 1). We followed up this interaction both ways. When splitting the design along the volition factor, the impact of contact valence was significant among both freely chosen as well as forced participants; however the effect of contact valence was almost three times

bigger in the freely chosen than forced conditions ($F(1, 301) = 9.79$, $p = .002$, $\eta_p^2 = .031$ *versus* $F(1, 301) = 24.42$, $p < .001$, $\eta_p^2 = .08$, respectively). Hence, freely choosing the intergroup imagery amplified the differential impact of valenced contact on outgroup emotions. Post hoc analyses carried out splitting the design along contact valence showed that when the visualization was positive, there was no significant difference in the reported positive outgroup emotions based on volition; positive emotions towards the outgroup were uniformly high ($F(1, 301) = .001$, $p = .98$, $\eta_p^2 = .00$). However, when the visualization was negative, positive outgroup emotions were lower and significantly lower in the freely chosen intergroup imagery compared to the forced condition ($F(1, 301) = 4.74$, $p = .03$, $\eta_p^2 = .016$). Hence, volition amplified the detrimental effects of negative contact on outgroup emotions, but had no sizeable impact on individuals' responses to the positive contact imagery.

This last finding suggests that volition and valence interacted to shape group level responses such as positive emotions associated with the outgroup. The pattern shows that freedom to engage in valenced contact imagery amplified the effects of contact valence, and its impact on group-level responses, especially when contact is negative. This effect however was limited to this outcome variable. Unexpectedly, the other group level responses were only impacted by valence. However, it is worth appreciating that these effects held across significant variations in participants' national background and associated variations in national community and legislative responses to the Syrian crisis.

---------- Insert Figure 1 here----------

Prevalence and Determinants of Freely Chosen Valenced Imagined Contact

This segment of the analyses focused on participants who could freely choose the valence of their contact visualization. The participants who opted for positive visualizations were almost

four times the number (n =125, 39.3%) of those who opted for negative contact (n = 35[2], 11%), indicating a preference for positive contact experiences with outgroup members in ways consistent with Husnu and Paolini (2018).

To determine what influenced the preference for positive vs. negative contact imagery among these participants, point biserial correlations were conducted between valence of visualization chosen (0 = *negative* vs. 1 = *positive*) and the measure of prior contact.[3] A significant correlation emerged between imagery contact valence and the frequency of past positive contact (r =.24, N =158, p =.002). Extending Husnu and Paolini (2018), this correlational finding shows that people choose contact valence that aligns with the valence of their past contact experiences. This speaks further to the inertia set by past contact on both the present and future course of events in intergroup settings.

Study 2

After obtaining experimental evidence of the role of volitional valenced intergroup imagery, the purpose of the second study was to determine the temporal processes that precede and follow contact imagery choices. Building on Husnu and Paolini and Study 1, we aimed to delve deeper into the factors guiding participants' valenced volitional contact choices and further assess the long-term effects on contact-seeking behaviors. Paluck et al. (2020) recently criticized prejudice reduction interventions for the lack of tests of enduring, long-term changes in behavior.

[2] A power analysis based on the work of Husnu and Paolini (2018) using the Gpower computer program (Faul & Erdfelder, 1998) indicated that a total sample of 240 participants (60 per cell) would be needed to detect large effects (d =.87) with 90% power. The number obtained for the freely-chosen negative condition (n = 35) were below this.

[3] We also found similar findings with other indices of past contact informed by exploratory factor analysis not included here for parsimony. Choosing a positive scenario was correlated with reported pleasant voluntary past contact and negative choice with unpleasant involuntary past contact.

Despite growing evidence to the effectiveness of imagined contact as an indirect contact technique in reducing prejudice, there are few studies looking into whether the benefits of the technique endure over time (Miles & Crisp, 2014; Husnu & Crisp, 2010). One recent study by Ioannou (2019), for example, found that positive imagined contact led to more positive intergroup relations immediately after contact, however when re-assessed a week later the positive effects remained only for outgroup attitudes and intergroup anxiety.

Several factors might play a role in individuals' volitional valenced contact choices and their readiness for deliberate contact-seeking behaviors. There is growing evidence that a history of positive contact experiences can be protective in threat-inducing contact with outgroup members and buffer from potential negative outcomes (e.g., Blascovich et al. 2001; Mac-Innis & Page-Gould, 2015; Page-Gould, 2012; Paolini et al., 2014). The more positive (vs. negative) experiences with outgroup members one has, the more social skills individuals may acquire to appraise contact situations as non-anxiety provoking and view them as familiar as contact with ingroup members (Mac-Innis & Page-Gould, 2015; Paolini, Harris et al., 2016). Hence, we expected past contact experiences to incline individuals to explore (even in their imagery) familiar contact experiences in ways in which their general views and expectations are met—i.e., showing evaluative fit (Husnu & Paolini, 2018). A history of negative experiences with the outgroup, might further predispose individuals toward choosing a negative scenario, since decisions about future interactions are usually determined by available information about the outgroup and experiences with the outgroup (Denrell, 2005). This might particularly be the case in conflict settings where opportunity for positive experiences are lower (Husnu & Crisp, 2010).

Building on our earlier findings and this argument, we wanted to investigate participants' most salient contact experiences with the outgroup with the aim of identifying the processes that

precede imagined contact choices. We reasoned that, by asking participants to recall a personal salient contact experience with an outgroup *prior* to asking participants to visualize and make a choice on valence of contact imagery would allow us to see whether the chosen valence confirm (vs. disconfirm) participants' preexisting expectations about a typical interaction with the outgroup, hence resulting in a positive (vs. negative) escalation of intergroup relations where valence congruence occurs and expectations are met.

More recently research by Sturmer and Benbow (2017) have advanced a functional perspective of individual motives that, besides explaining contact seeking, might be implicated in its psychological precursors like freely chosen and possibly even spontaneous intergroup imagery. They advanced six distinct motivations for intercultural contact exploration (social development, knowledge and understanding, professional advancement, value expression, group-image concerns, and personal-image concerns); which should encourage people to seek out contact with those perceived as culturally different. Similarly, Paolini, and colleagues (Paolini, Wright, et al., 2016; Dys-Steenbergen et al., 2016) have applied the self-expansion model by Aron and Aron (1986) to show that self-expansion motives and expectations can promote interest in contact with outgroups as well as lead to higher quality interactions. We therefore investigated whether intergroup exploration motives might also play a critical role in predicting participants' choice of a positive contact visualization scenario.

To maximize ecological validity and get us close to settings requiring reconciliatory orientations, the study was conducted in the inter-ethnically divided island of Cyprus and assessed volition of Turkish Cypriots with regards to contact with Greek Cypriots. Despite a growing number of research conducted in high conflict settings (e.g., see Bagci et al., 2019; Husnu & Crisp, 2015; Firat & Ataca, 2020), criticism remains that imagined contact

interventions have not been sufficiently tested in real world settings or intergroup contexts of conflict where opportunity for contact is low. We therefore believe that Cyprus would be the ideal context to test these assertions and enhance the validity of the inferences drawn. We hypothesized that volitional valenced imagery would be associated with more reconciliatory responses immediately and at follow-up. We also expected participants to choose contact valence that would align with their past salient contact experiences. Lastly, we investigated the mediational role that participants' choice to visualize positive (vs. negative) contact had between past contact measures and post-visualization outcomes.

Method

Participants and Design

Participants were 258 Turkish Cypriots (117 female, 139 male and 2 gender unspecified; *M = 42*.06 years, *SD* = 18.68). The deleterious effects of intergroup conflict go beyond direct involvement and can reverberate indirectly through transmission of narratives of the conflict to the next generation (Bar-Tal et al., 2017). Hence, to assess experience of the 1974 war in Cyprus, participants were asked whether they had *direct* (i.e., personal experience), and *indirect* involvement (i.e., experience of a relative, being displaced or loosing someone close) in the war. There was strong evidence for a high impact of the conflict on the recruited respondents: Over 94% of the overall sample reported at least some direct or indirect involvement in the conflict. Specifically, 32.6% reported direct involvement (as soldier, prisoner of war, etc.) and 59.4% indirect involvement (father/grandfather kidnapped, neighboring village bombed, etc.); 17.8% reported displacement from their own homes and 23.3% reported losing a family member in the war.

Participants were randomly assigned to two conditions at a 2:1 ratio: volitional imagined contact (n = 189) vs. no contact visualization control condition (n = 69) and completed a paper questionnaire. Those in the volitional contact condition were instructed to choose between a positive or negative (order counterbalanced) visualization with a Greek Cypriot. Those in the control condition simply visualized an outdoor scene (Crisp & Turner, 2010).

Procedure and Materials

The questionnaire included the following scales, which unless stated otherwise were anchored from 1 to 7:

Previsualization attitudes and exploration motivations. Participants completed the same feelings thermometer from study 1 (Esses et al., 1993). They then completed an adapted version of the intercultural exploration motivations scale (Stürmer & Benbow, 2017). It included 6 sub-scales with 2 items per scale (social development, r =.68, p <.001; knowledge and understanding, r =.77, p <.001; professional advancement, r =.65, p < .001; value expression, r = .43, p <.001; group-image concerns, r = .63, p<.001; personal-image concerns, r = .60, p <.001) (total scale alpha= .94); the N for these correlations varied between 251 and 257.

Past Contact. Participants completed a set of reliable past contact measures adapted to the Cypriot context. For direct contact experiences, participants indicated *quantity of positive past contact* (‘in everyday life, how frequently do you have positive interactions with Greek Cypriots?), and *negative contact* (Barlow et al., 2012; ‘in everyday life, how frequently do you have negative interactions with Greek Cypriots?’) as well as overall *past contact quality* on 7-point bipolar scales (Islam & Hewstone, 1993; 5 items; e.g., natural-forced; α = .80 after removing 1 item: superficial-deep). Recent and past, positive/negative storytelling about the

outgroup followed (Cameron et al., 2006; 2 items each; e.g., 'do/did any of your family members tell you negative and upsetting stories/pleasant stories of solidarity about Greek Cypriots that occurred during the war/recently?' 0 = *none/never*, 1 = *1*, 2 = *2-5*, 3 = *5-10*, 4 = *over 10/very*; negative, r = .39, and positive, r =.56). Participants also reported exposure to media sources ('To what extent are you exposed to positive/negative media coverage (including social media, newspapers, TV, etc.) about Greek Cypriots?'; 1 = *never*, 5 = *all the time*). Finally, *extended contact* was assessed (Paolini et al., 2004; 'How many of your Turkish Cypriot friends have positive/negative contact with Greek Cypriots?'; 0 = *none*, 1 = *1*, 2 = *2-5*, 3 = *5-10*, 4 = *over 10*).

Salient contact experience. Participants were asked to recall a salient contact experience with a Greek Cypriot they had either experienced directly vs. vicarious experiences of family members, friends, or authority figures (e.g., religious authorities, teachers, etc.). They were given space to write in as much detail as they wanted the recalled contact experience and rate it from negative (1) to neutral (4) and positive (7). They were also asked how they believed the Greek Cypriot person involved in the visualization would rate the experience using the same rating scale. To ensure completing these contact measures did not interfere with the focal imagined contact task, participants next completed a filler visualization task of their daily commute to work or university.

Mental visualization task and manipulations. Participants chose to imagine one of two contact scenarios: A positive and enjoyable *or* negative and unenjoyable interaction with a Greek Cypriot stranger. They ticked one of two decision options as: 'positive' or 'negative'; they also stated the extent to which they preferred to choose the scenario on a continuous rating scale of 1 (*not at all*) to 6 (*very much*). They then reported in an open-ended question format how they expected to feel after imagining the chosen scenario. Further participants wrote, in as much detail

as they wanted, the scenario imagined.

Contact valence check. Participants expressed their feelings during the visualization exercise (Islam & Hewstone, 1993; 7-items; e.g., enjoyable, relaxed) towards a reliable *perceived contact valence* index (α =.93).

Attitudinal Measures:

Differently to Study 1, we measured post imagery *outgroup evaluations* by asking participants to rate how they felt toward Greek Cypriots (α = 91; Wright et al., 1997) and *outgroup trust* (e.g. 'I can trust people I know from the Greek Cypriot community not to hurt people from my community' adapted from Tam, et al., 2009, 4 items, one removed due to lowered reliability, α = .87).

Behavioral Readiness Measures:

Once again, *positive* (α = .83) and *negative action tendencies towards the outgroup* (α = .68; Mackie et al. 2000) were measured.

Reconciliatory Behavior Measures:

Contact-seeking behaviors. To see whether choice would influence participants' self-reported desire for contact seeking, participants rated their desire for seeking contact with Greek Cypriots. Finally, participants were thanked and debriefed.

Follow-up contact seeking. To assess whether participating in voluntary valenced visualization had led to an increase in subsequent contact seeking behaviors, 2 weeks after data collection, participants were re-contacted via telephone. Participants were asked questions including 'How often have you felt a desire to seek more contact with Greek Cypriots?'(4 items, α = .74).

Results and Discussion

Predictors of valenced choice

Intercultural exploration motivations. In order to assess whether exploration motivations predicted a choice of positive (vs. negative) imagery we conducted a number of point biserial correlations (excluding participants in the control condition).We found all motivation subscales were moderately correlated with choice of positively valenced scenario, such that high social development, r =.54, p <.001; knowledge and understanding, r =.46, p <.001; professional advancement, r = .35, p <.001; value expression, r =.35, p <.001; group-image concerns, r =.50, p <.001; personal-image concerns, r = .41, p <.001) as well as the total scale, r =.50, p <.001 (*N*s for the correlations varied between 186 and 189) correlated significantly with choice of a positive valenced scenario.

Salient contact experience. Out of 250 participants who reported their salient contact experiences, 54.3% (n = 140) made reference to their own experiences followed by 38.8% mentioning family and friends' experiences (n = 100) and lastly 3.9% made reference to authority figures (n = 9). Due to the smaller number, we collated family, friends and authority figures as 'vicarious salient contact experience'. Participants who later went on to choose a positive scenario tended to recall their own contact experiences more (N = 63) than vicarious ones (N = 39) and those choosing a negative scenario recalled salient experiences equally from their own direct experience as well as vicariously (*Ndirect*= 45; *Nvicarious*= 41). These differences were not statistically significant, χ^2 (1, N = 188) = 1.70, p =.19. The type of salient experience (direct vs. vicarious) also did not influence any of the group level measures.

With regards to valence of the salient contact experience, participants' ratings of their own perception (M = 3.39, SD = 2.40) and that of the visualized Greek Cypriot (M =3.39,

SD=2.27) was almost exactly the same. A one-sample t-test showed that the valence was significantly higher than the scale midpoint (the value of 3.5) for both self-perception and the outgroup perspective, suggesting more positivity in perception of the contact experience. Zero order correlation also found a significant moderate relationship between the two (r (253) =.56, p <.001). Due to the lack of difference between ratings of self and that of a presumed Greek Cypriot, as well as the significant correlation, the two measures were combined to create an aggregate positive salient contact experience rating.

To assess whether positivity in the salient contact experience was related to pre-choice measures as well as choice of valenced scenario (as negative or positive for those in the volitional conditions), a correlational analysis was conducted. Those who reported more positivity in their salient experiences showed more positive pre-manipulation outgroup feelings using the thermometer scale, higher intercultural exploration motivations, more positive contact with Greek, higher quality contact, more positive war /recent stories, less negative war /recent stories, positive teacher stories, positive media exposure and more positive extended contact (see Table 2). Additionally, those higher on positive salient contact experiences were also more likely to choose a positive imagined contact scenario. Therefore, these results show evidence of valence congruence effects in which a background of positive and less negative direct and vicarious contact experiences provided the context in which positive contact experiences were retrieved and forthcoming valenced imagined contact chosen.[4]

Valence Congruence Effects. To determine whether participants chose a positive (vs. negative) scenario to confirm pre-existing valenced expectations we looked at correlations between past

[4] Parallel to Husnu and Paolini (2018) we found significant effects of mood congruence and prior contact as significant predictors of scenario chosen and influences on outcome measures. More details can be obtained by contacting the first author.

contact indices (positive, negative and extended contact, positive vs. negative media exposure, war & recent stories told by family or teachers, etc.) and scenario chosen. It was found that positive contact experiences in general correlated with choosing the positive contact scenario (see Table 2).

----------Insert Table 2 here ----------

Valenced scenario chosen

Participants showed a significant preference to choose the positive (102 times, 54%) more than the negative intergroup scenario (87 times, 46%), χ^2 (1, N = 189) = 189.0, $p < .001$. Asked to state the extent to which they wanted to choose either scenario, participants reported being significantly more satisfied in their own choice of scenario: For positive scenario, preference for the positive scenario choice (M = 4.14, SD =2.06) was higher than negative scenario choice (M = 2.39, SD=1.54), t (177) = -6.43, p <.001 and for negative choice, negative scenario choice (M = 3.88, SD = 1.69) was higher than positive scenario (M = 2.93, SD = 2.19), t (179) = 3.23, p =.001.

Contact valence checks. One-way ANOVA showed a robust difference between the two scenarios, F (1, 183) =129.82, $p < .001$, $\eta^2 = .42$. Participants who chose to engage in a positive scenario rated the experience more positively (M = 6.28, SD = .15) than those who visualized a negative scenario (M = 3.74, SD = .17).

Downstream consequences of choice

MANCOVA assessed the effects of scenario chosen (control vs. negative vs. positive) on the dependent measures of outgroup evaluations, outgroup trust, positive and negative action tendencies and contact seeking while controlling for prior positive contact. Scenario chosen had

a significant multivariate effect, F (10, 490) = 8.65, $p < .001$, $\eta^2 = .15$ as did contact F (5, 245) = 5.32, $p < .001$, $\eta^2 = .10$. Furthermore, scenario had a significant univariate effect on each dependent measure while still controlling for prior contact: More positive outgroup evaluations, higher trust, more contact seeking and positive action tendencies were reported by those who had chosen the positive intergroup scenario compared to the negative intergroup scenario. For outgroup evaluations and trust, however there were no significant differences between positive and control conditions. Conversely, negative action tendencies were the highest in those choosing the negative scenario, followed by the control condition and lastly the positive scenario (see Table 3).

Follow up contact seeking behaviors. ANCOVA was conducted to see whether participants' contact-seeking behaviors increased after engaging in the voluntary visualization. A significant effect was obtained, F (2, 149) = 2.99, $p = .05$, $\eta^2 = .04$ as well as contact, F (1, 149) = 27.49, $p < .001$, $\eta^2 = .16$. Post hoc comparisons showed that those who had chosen a positive scenario were more likely to seek out contact with the outgroup at follow-up compared to those who had chosen the negative scenario ($p = .016$). No significant difference in contact seeking behavior was obtained between the negative scenario and control condition. This suggests that choosing a positive scenario (vs. a negative one) during the main study was associated with displaying more contact seeking two weeks later.

---------- Insert Table 4 ----------

Mediation analyses. We ran bootstrapping analysis to test whether choice for positive contact imagery mediated the relationship between salient contact experiences and the follow up measure of contact seeking behaviors by using the SPSS PROCESS macro MODEL 4 (Hayes, 2013). As seen in Figure 1, bootstrapping analysis found that positive salient contact experiences

were predictive of follow up contact seeking behaviors, $b = .23$, $t = 3.19$, $p = .0019$. Positive salient contact experiences also predicted preference for a positive scenario choice ($b = .28$, $t = 3.10$, $p = .0025$), which in turn predicted follow up behaviors ($b = .17$, $t = 2.21$, $p = .03$). Preference for and engagement in a positive intergroup scenario was found to be a significant mediator of the salient contact experiences–follow up contact seeking behaviors link, 95% CI [.0878, .3762]. The model was significant, F (1, 101) = 9.60, $p = .0025$, explaining approx. 9% of the variance.

---------- Insert Figure 2 ----------

General Discussion

Intergroup contact, while not a panacea for all troubled intergroup relations, offers significant opportunity for reduced tension and improved intergroup attitudes, not just for the contact partners, but to whole outgroups (Pettigrew & Tropp, 2006; Harwood et al., 2011). Recent advancements in theory and methodology have enabled contact researchers to assess the effects of direct and indirect contact on group-level outcomes at both the individual- (e.g., intergroup friendship; Davies et al., 2011) and societal- level (e.g., contact within a school classroom or neighborhood; Christ et al., 2014) lending more evidence to the applicability of contact by educators (Murrar & Brauer, 2018; Neto et al., 2016) and policy makers alike (Bergmann, 2016). Despite these encouraging results, Paluck et al. (2021) in reviewing contact interventions between 2007 and 2019 argued that many interventions utilizing contact have been limited in terms of methodology, effect and duration. Taking these concerns into consideration

we devised a quasi-experimental design in Study 1 and assessed delayed effects in Study 2 in an ecologically valid, high impact conflict ridden context.

Study 1's quasi-experimental design enabled us to ascertain direction of causality regarding contact volition effects. As expected and in line with previous findings, we found that positive intergroup visualizations led to more positive downstream consequences in terms of outgroup feelings and evaluations, positive outgroup emotions, action tendencies and contact seeking (Crisp & Turner, 2009; Husnu & Paolini, 2018). Free choice of valenced intergroup imagery was also found to be associated with higher awareness of intergroup differences than forced valenced imagery, irrespective of imagery valence, and thus have greater generalization potential than involuntary contact. We speculate the reason for this might be due to depth of processing implicated in free choice and self-referential processes. Established evidence in the attitude literature indicates the existence of processing and attentional advantage of information actively sought and high in self-referential value (vs. passively / indirectly received and low in self-referential value; Fazio & Zanna, 1981; Pryor et al., 1977; Zanna et al., 1981). When people need to deliberate as to the type or 'mode' of contact (Harwood, 2021) this may lead to an enhanced and more elaborative processing which will lift awareness of category salience (Fiske & Neuberg, 1990; Hutter & Crisp, 2006). Irrespective of the exact mechanism, information and experiences high in self-referential value, like our freely chosen experiences, have been found to be more capable of shaping attitudes and behaviors (Fazio & Zanna, 1981; Zanna et al., 1981). Based on the extensive research in the field of attribution and group judgments (Ross & Nisbett, 1991; Wilder et al., 1996) during contact internal or person-based attributions (as opposed to external or situation-based attributions) for self and others' behaviors should be more common and have a greater influence on attitudes, therefore exerting a stronger basis for individual-to-

group generalization (Graf et al. 2014; Wilder, 1986). These findings for enhanced category salience under volitional contact imply that unstructured and unmonitored settings, which carry greater flexibility in terms of type of contact and opportunity to exert volition (Harwood, 2021), should be the settings where contact—of any valence—has greater impact on group-level processes and thus be potentially more consequential for future intergroup relations (Paolini et al., 2010).

We also found that volition and valence interacted to shape group level responses, such as positive emotions, and did so over and beyond the effect of past contact. This effect reflected manipulated volition amplifying the differential effects of valenced contact on group-level responses by affecting reactions to negative contact. When participants had freely chosen to engage in a negative intergroup imagery, positive emotions for the outgroup were significantly lower than when participants had been instructed to engage in such a negative visualization. Importantly, these findings were obtained even after controlling for past contact experiences, which we know predict freely chosen valenced contact (Husnu & Paolini, 2018). Hence, we can be confident that the effects of manipulated choice in this case was not driven or polluted by the influence of past experiences. These findings seemingly contradict those of Hodson (2008) and Pettigrew and Tropp (2006) who found forced volition to lead to higher reductions in prejudice. However, the discrepancy here might lie in the fact that in these study designs (negative) valence was not included and volition was not experimentally manipulated like we did here.

Our quasi-experimental design with inbuilt analytical control confirms that volition moderates valenced contact effects in line with early correlational evidence (Bagci et al., 2021). The interaction of volition by valence detected on positive outgroup emotions is also consistent with sequential sampling models of impression formation. According to Denrell's (2005) model,

when people are able to actively opt-in/out of intergroup contact as they wish, they should be very sensitive to the valence of initial contact experiences and adjust their behavior accordingly. If contact is positive and are free to choose whether to engage with the outgroup, then people should seek to resample more experiences of the same kind (positive) with outgroup members. Conversely, when the experience is negative and they have some control over engaging in further contact or not, they will aim to resample much less contact or none at all to reduce the risk of experiencing further negative contact. Such "differential resampling" following positive vs. negative contact would lead to a larger repertoire of experiences and greater knowledge about the outgroup following positive contact and a reduced set of experiences following negative contact. This would be a perfect ground for the development of negative valence asymmetries, as reflecting internally complex and moderate judgments at the positive end and simpler and more extreme judgments at the negative end. While our paradigm engaged all participants in a single intergroup imagery, our analysis of predictors of the free-choice condition tells us that these participants in fact brought to the testing session their past valenced experience with the outgroup and used it as a guide to their novel resampling decision. When individuals can harness their past valenced contact experience to guide their self-selections of new contact experiences, that is where Denrell's model expects to detect larger differences in impact between positive and negative contact. This is particularly critical in conflict settings such as Cyprus, where valenced past experiences of contact (whether it be direct or indirect) can be especially predictive of contact approach vs. avoidance. This was further shown by the larger prevalence of negative imagery choices in Study 2 (a conflict context) than Study 1 (a more peaceful context in comparison). Future experimental tests of the interplay between volition and (episodic) contact valence should aim to control for past contact valence with a fully experimental design, for

example, manipulating degrees of subjective (self-) control within experiences of mandated contact like that we had in the forced condition (see e.g., Denton, 2018; see also Dardenne et al., 2000).

A novel contribution of the study was to assess salient contact experiences with outgroups to see its influence on imagery choices and thereafter. By asking participants to recall a personal salient contact experience with an outgroup *prior* to asking them to visualize and make a choice on valence of contact imagery allowed us to ascertain that chosen valence confirmed participants' preexisting expectations about a psychologically significant interaction with the outgroup, hence resulting in an escalation of intergroup relations where valence congruence occurred and positive (vs. negative) expectations were met.

We further found evidence that positive volitional valenced imagery impacted participants' active and self-initiated contact seeking immediately and after a time delay. The mediation analysis showed that the recall of salient past contact experiences predicted present contact choices, which in turn guided immediate and delayed contact seeking behaviors. We regard this as a promising preparatory response whereby volitional mental imagery serves as a 'mental contact script' (see Crisp & Turner, 2009; Husnu & Crisp, 2010) which once activated can help guide contact-seeking behavior, since it becomes a cognitively available source of information (Tversky & Kahneman, 1973; Anderson, 1983). These intergroup contact scripts once activated (via imagery) will encourage people to seek out contact and remove inhibitions associated with past negative contact experiences since imagining a target behavior reliably increases the likelihood that the behavior will be carried out (Caroll, 1978; Crisp & Turner, 2012). We therefore believe that increased contact-seeking behavior at follow-up for those visualizing a positive (vs. negative scenario) can be explained by the positive contact scripts created in the

first phase of the study, which were re-activated later. These are promising findings suggesting that even in conflict settings, the use of such imagery interventions can potentially lead to increased contact approach behaviors, even among individuals highly affected by the intergroup conflict, laying the ground for more prosperous future interactions. A single imagery intervention may not be sufficient to lead to contact-seeking, however the trend we observed for positive imagery might imply that repeated exposure of imagery interventions can lead to more accessible contact scripts which can lead to future contact seeking.

The current results on intercultural exploration motivations support an emerging body of work on the role of human motives in explaining why people choose and seek contact with others (Paolini, Wright, et al., 2016; Stürmer & Benbow, 2017; for an overview, Paolini et al., 2019). Our findings add to that knowledge by showing that a variety of pro-contact exploration motivations provide the basis for positive contact imagery processes which in turn encourage further contact down the line. Clearly the relative level of pro-contact, self-expansion motivations a person holds will influence their level of interest in pursuing meaningful social interactions with differing groups. A challenge however remains to further investigate which motives predict positive contact seeking, as opposed to negative/confrontational contact seeking (see Skitka, 2010) and the extent to which these motives can be nurtured toward seeing future contact as a possibility for exploration, knowledge and growth.

In terms of the limitations, in Study 1 the effects of manipulated volition were noticeably slimmer than those of contact valence. Although those in the free choice condition reported a higher sense of volition compared to the forced choice condition, they might have struggled to self-report their subtle feelings, they may not have felt enough volition in their selection of valenced scenario type, or if given the opportunity they might have opted for no-contact at all.

More sensitive manipulation checks that better differentiate between choice, lack thereof, and various degrees between, might serve better assessment of these effects in the future. Additionally, the quasi-experimental nature of the design of this study limits the extent to which we can draw firmer causal inferences. It is worth noticing that our paradigm very much resembles parallel attempts at manipulating self-selected activities in other areas of psychology (e.g., Baumann & Kuhl, 2003; Kazén et al., 2003; Kuhl & Kazén, 1994; Quirin et al., 2009). Yet, in our work we were able to control analytically for the influence of a main contributor to individual differences in people's natural preferences for valenced intergroup imagery (prior positive contact). This increases our confidence that, despite the lack of total control, our manipulation captured environmental dimensions of intergroup volitions (being *able to* self-select) independently from personal dimensions (being *willing to* self-select). From a philosophical and methodological point of view controlling free will is an impossible or at minimum a challenging task and relying on measurements of perceived volition might be the best we can do in most circumstances. Assessing true volition would most likely only be possible outside of the laboratory and in the field. That said, when compared to previous attempts at assessing the implication of volition in intergroup contact we believe this design goes a long way in terms of rigorously assessing antecedents and consequences of volitional processes. It would also be an interesting future endeavor to test a 'no-contact volition' scenario whereby participants can fully opt-out of any form contact. We believe that there will be different mechanisms involved in the factors that lead to fully opting out of contact (see Paolini et al., 2019 for theoretical considerations; see Kim & Harwood, 2019 for data on the effects of 'spontaneous imagined contact' following different types of contact) and will help build on our knowledge for contact avoidance.

Cumulatively, these results suggest a clear benefit of contact preparedness for future reconciliatory behaviors. Despite recent concerns to the applicability and significance of contact interventions in general, we believe the current findings show clear and indisputable evidence to the value of contact, initiated in imagery, activated in cognition, and followed up in real life.

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Table 1. Main Effects and Interaction of Volition and Valence for Group Level Response Indices, Study 1

		Volition							
		Forced Choice		Free Choice					
		Contact Valence							
		Positive N=77	Negative N=81	Positive N=125	Negative N=35	*F*(1,301) p, η^2	Valence effect	Volition effect	Interaction
Category Salience	M	4.33	4.17	4.51	4.80	F	.80	**5.80**	1.83
	(SD)	(1.33)	(1.36)	(1.42)	(1.19)	p, η^2	.37, .00	**.017, .001**	.18, .006
Feelings thermometer	M	72.38	54.56	74.85	50.89	F	**38.87**	.18	.58
	(SD)	(22.59)	(26.78)	(21.06)	(24.78)	p, η^2	**.000, .114**	.67, .001	.45, .002
Outgroup Evaluations	M	5.17	4.42	5.23	4.16	F	**20.19**	.55	.59
	(SD)	(1.25)	(1.26)	(1.32)	(1.29)	p, η^2	**.000, .063**	.46, .002	.44, .002
Positive Outgroup Emotions	M	5.00	4.34	5.06	3.86	F	**32.62**	3.14	***3.042***
	(SD)	(1.03)	(1.13)	(1.06)	(1.27)	p, η^2	**.000, .098**	.08, .010	***.08, .010***
Negative Outgroup Emotions	M	2.31	2.84	2.12	3.00	F	**11.81**	.005	.76
	(SD)	(1.29)	(1.29)	(1.19)	(1.46)	p, η^2	**.001, .038**	.95, .00	.38, .003
Positive Action Tendencies	M	3.63	3.17	3.65	3.17	F	**7.72**	.068	.005
	(SD)	(.85)	(1.04)	(1.02)	(1.04)	p, η^2	**.006, .025**	.79, .00	.94, .00
Negative Action Tendencies	M	2.13	2.60	1.97	2.90	F	**10.69**	.22	1.71
	(SD)	(1.17)	(1.44)	(1.18)	(1.42)	p, η^2	**.001, .034**	.64, .001	.19, .006
Contact Seeking Behaviors	M	3.61	2.96	3.82	2.91	F	**7.35**	.10	.18
	(SD)	(1.52)	(1.60)	(1.67)	(1.56)	p, η^2	**.007, .024**	.75, .000	.67, .001

Note. Significant results are in bold, marginally significant are in italicized bold.

Table 2. Correlations between pre-choice measures, choice of valenced scenario and salient contact experience ratings, Study 2

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
1. Salient Contact Experience	-																	
2. Scenario chosen	.39**	-																
3. Thermometer	.45**	.57**	-															
4. Intercultural Motivations	.46**	.50**	.69**	-														
5. Positive contact	.35**	.33**	.55**	.44**	-													
6. Negative contact	-.017	-.048	-.09	-.07	.13*	-												
7. Quality of contact	.45**	.51**	.53**	.64**	.34**	-.09	-											
8. Pos war stories	.23**	.13	.25**	.30**	.34**	.07	.23**	-										
9. Pos recent stories	.35**	.23**	.30**	.43**	.25**	-.04	.37**	.56**	-									
10. Neg war stories	-.12†	-.092	-.12†	-.20**	-.012	.09	-.20**	-.05	-.09	-								
11. Neg recent stories	-.20**	-.029	-.08	-.23**	.029	.26**	-.21**	.02	-.09	.39**	-							
12. Positive media	.24**	.14	.29*	.37**	.27**	.021	.22**	.27**	.39**	-.12†	.004	-						
13. Negative media	-.11	-.001	.21**	.09	.18**	.16**	.004	.13*	-.013	.24**	.27**	.16*	-					
14. Pos teacher stories	.19**	.05	.16*	.20**	.33**	.22**	.22**	.31**	.28**	-.12*	.04	.35**	.03	-				
15. Neg teacher stories	-.004	-.07	-.09	-.11	.064	-.03	.02	.05	.02	.35**	.19**	-.11	.15*	.07	-			
16. Pos ext. contact	.29**	.24*	.44*	.41**	.42**	-.02	.31**	.35**	.22*	-.003	-.09	.28**	.14*	.15*	-.03	-		
17. Neg ext. contact	-.11	-.17*	-.15*	-.11	-.020	.23**	-.14*	.03	-.05	.06	.13*	.08	.11	.08	-.10	.19**	-	
18. Contact seeking at follow up	.43**	.35**	.60**	.60**	.47**	-.008	.62**	.32**	.37**	-.14	-.07	.34**	.09	.25**	-.09	.39**	-.08	-

Note: **Correlations are significant at .001; *correlations significant at .05; coded as 1= choice of negative contact and 2= choice of positive contact; pos= positive, neg=negative; ext= extended; N= 154 for contact seeking at follow up

Table 3. Mean and Standard Errors for dependent variables after controlling for past contact, Study 2.

	Negative Chosen *N*=87	Control Condition *N*=69	Positive Chosen *N*=102	$F(2,249)$, η^2
Outgroup Evaluations	2.90^{a} (.16)	4.31^{b} (.18)	4.65^{b} (.15)	32.20, .21
Outgroup Trust	2.33^{a} (.19)	3.27^{b} (.21)	3.65^{b} (.18)	12.56, .09
Contact Seeking	2.47^{a} (.21)	3.44^{b} (.23)	4.27^{c} (.20)	19.63, .14
Positive Action Tendencies	2.54^{a} (.18)	3.63^{b} (.19)	4.41^{c} (.16)	28.58, .19
Negative Action Tendencies	3.17^{a} (.14)	2.39^{b} (.15)	1.96^{c} (.13)	17.79, .13
	N=51	*N*=45	*N*=58	
Follow-up- contact seeking	2.78^{a} (.20)	3.08^{ab} (.21)	3.47^{b} (.19)	2.99, .04

Notes: All variables ranged from 1-7. Standard deviations are shown in parentheses.

^{a,b,c} Means with different superscripts are significantly different.

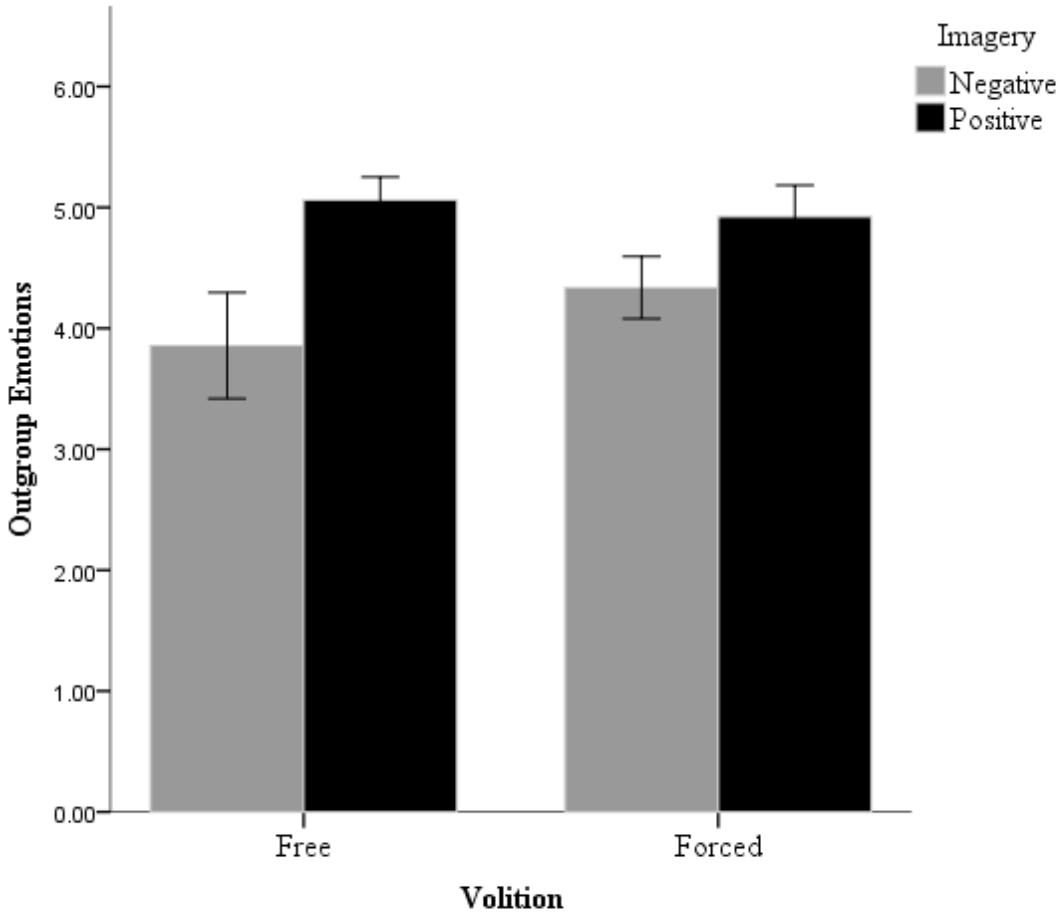
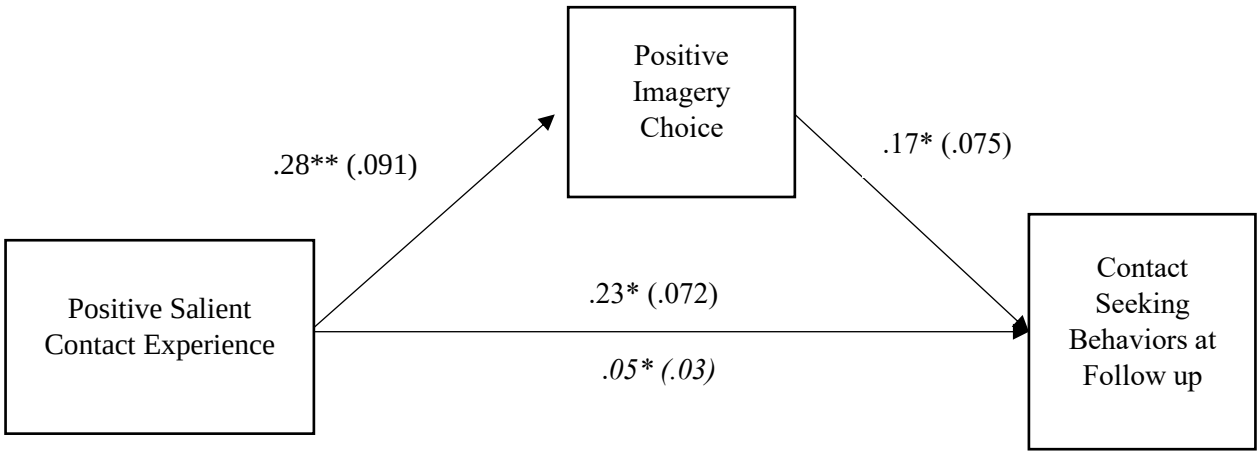


Figure 1. Interaction between volition and valence of visualization on outgroup emotions, Study 1 (error bars represent 95% confidence intervals)



Notes. Unstandardized coefficients were reported (with standard errors in brackets). *$p < .05$, **$p < .01$. Indirect effect in italics; total effect: $b = .28$, $t = 3.95$, $p < .01$.

Figure 2. The mediational path from Positive Salient Contact Experience to contact seeking behavior at follow up, through chosen valenced contact, in Study 2