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RUNNING HEAD: Imagined interactions increases organizational identification

**Take it to the Top:**

**Imagined Interactions with Leaders Elevates Organizational Identification**

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### **Abstract**

Organizational identification is an important predictor of workplace behavior. The more strongly an individual identifies with their employing organization, the more motivated they will be to behave in ways that promote its success. In this paper we develop a new approach to fostering organizational identification based on principles of mental simulation. Across seven experiments we demonstrate that imagining positive contact with an organizational leader increases identification with the organization they represent. Experiments 1A, 1B, 2A, 2B, 3A and 3B replicated the basic effect against progressively varied control conditions, utilizing both scenario and field experiments. Experiment 4 demonstrated that as a consequence of heightened organizational identification following the imagined contact task, participants reported greater intentions to engage in organizational citizenship behaviors. We conclude by discussing the potential application of this technique as a simple and effective way for organizations to foster employees' motivation and performance.

**Keywords:** ORGANIZATIONAL IDENTIFICATION, SOCIAL IDENTITY, LEADERSHIP, MENTAL SIMULATION.

## **Take it to the Top:**

### **Imagined Interactions with Leaders Elevates Organizational Identification**

Organizational identification describes the perception of oneness with or belongingness to, one's employing organization. This construct is an important predictor of workplace behavior. The more strongly an individual identifies with their organization, the more likely they are to behave in ways that help it to be successful. While the benefits of organizational identification are now well established, most of this research has been correlational in nature. There is little research focusing on how to actually *foster* organizational identification. In this paper we develop a new technique based on established principles of mental simulation. Mental simulation has previously been used to help people achieve greater performance in sport, better health and exercise outcomes, improved academic achievement, and even to reduce prejudice towards ethnic minority groups. Here, we introduce a new application of these techniques to the organizational domain. We show that simulating positive interactions with organizational leaders can successfully improve identification with the organization they represent.

### **Organizational Identification**

The groups we belong to form an important part of our self-definition. According to social identity theory (Tajfel, 1978; Tajfel & Turner, 1979; 1986) people define themselves not only in terms of their idiosyncratic traits (e.g. I am athletic), but also in terms of their group memberships (I am British). This group-based definition of the self forms an individual's *social identity*. It refers to "that part of an individual's self-concept which derives from his knowledge of his membership of a social group (or groups) together with the value and emotional significance attached

to that membership” (Tajfel, 1978, p. 63). While the social identity approach was originally developed to understand prejudice and intergroup conflict, more recently it has provided a novel approach to understanding behavior in organizational contexts. To varying degrees, organizations are important groups with which individuals can identify. *Organizational identification* describes the extent to which being a member of an organizational group contributes to an individual’s self-definition (Ashforth & Mael, 1989). The more a person identifies with the organization, the more he or she applies the attributes and characteristics of the group to the self, and the more outcomes of the group are experienced as outcomes for the self (Turner, Hogg, Oakes, Reicher, & Wetherell, 1987).

The link between the self and the group (in this case, organizations) is important because, through social identification, the group’s standing reflects on the self (Hogg & Abrams, 1988). Because people desire a positive self-image, they will be motivated to behave in ways that promote or maintain the status of the group. Research demonstrates that the more strongly an employee identifies with their organization the more likely they are to behave in ways that will help the group to succeed (for meta-analytic results see, Lee, Park & Koo, 2015; Riketta, 2005). Principle amongst these outcomes are: increased willingness to engage in organizational citizenship behaviors (van Dick, Grojean, Christ, & Wieseke, 2006) increased compliance with organizational rules (Tyler & Blader, 2001), and increased loyalty to the organization (lower turnover intentions, Abrams, Ando, & Hinkle, 1998; van Knippenberg, 2000).

Traditional social exchange theories hold that peoples’ behavior in groups is shaped by judgments about past, current and future material rewards derived from group membership (Kelley & Thibaut, 1978; Thibaut & Kelley, 1959). However,

more recently, research suggests that social identification may actually be a stronger driver of cooperative workplace behaviors than material rewards (Tyler, 2010; Tyler & Blader, 2000; 2001). According to the social identity approach, the key function served by a group is not the provision of desired resources, but to provide members with information that aids in their efforts to develop and maintain a positive self-concept. People cooperate with organizations in pursuit of feeling good about themselves *as people*, not only for material rewards (Tyler & Blader, 2000). The results of several comparative studies now suggest that cooperation with organizations is predicted by material rewards to some extent, but these resource-based influences are small in magnitude compared to the influence of identity-based judgments (Tyler, 1999; Tyler & Blader, 2000, 2001). Facilitating desired behaviors by organizational members involves more than just giving them a raise, or a company car then, but requires an examination of factors that shape organizational identification (Tyler, 2010).

### **The Social Identity Approach to Leadership**

According to the social identity theory of leadership, leaders represent an embodiment of the group identity. The leader can be considered the prototype, or the most stereotypical member of the group. The leader is the best exemplar of the group's characteristics and thus best represents the group, and in a sense, *is* the group (Hogg & Abrams, 1988). This prototypicality is central to their ability to lead. Leaders are said to derive influence from the implicit perception that she or he represents the values and norms of the group and thus can be trusted to have the group's best interest at heart (Hogg, 2001; Hogg & van Knippenberg, 2003; van Knippenberg & Hogg, 2003).

Given their position as a group exemplar, leadership practices may also have an important influence on how followers identify with the group; and in organizations, this means organization identification (Lord & Brown, 2003; van Knippenberg & Hogg, 2003; van Knippenberg, van Knippenberg, De Cremer, & Hogg, 2004). Research on identity management strategies notes that leaders need not only ‘be one of us’ but also ‘embed a sense of us’ (Haslam, Reicher & Platow, 2011; Steffens et al., 2014). By developing and directing a shared sense of ‘us’ leaders are able to mobilize individuals’ otherwise idiosyncratic motivations and harness the power of their coordinated energies. This idea can be traced back to classic theories of charismatic and transformational leadership. It was argued that leadership cannot be reduced to the actions of a single individual, but instead represents a process through which the leader shifts the way followers envision themselves, and in doing so, encourages them to work on behalf of the group (Bass 1985; Burns, 1978; Shamir, House, & Arthur 1993). Several empirical investigations now demonstrate that leadership behavior can influence identification among followers. (e.g. De Cremer & van Knippenberg, 2002, 2005; Huang, 2013; Kark, Shamir, & Chen, 2003; Schuh et al., 2012; Walumbwa, Avolio & Zhu, 2008).

The ability for leaders to engender social identification amongst members is also demonstrated by work on procedural justice. Models of procedural justice suggest that leaders can gain acceptance and encourage people to identify with the organization they represent when they exercise their authority in ways that followers experience as fair (as elucidated in the group value model, Lind & Tyler, 1988; the relational model of authority, Tyler & Lind, 1992; and the group engagement model, Tyler & Blader, 2000, 2003). These theoretical models are supported by empirical observations of a positive association between leaders’ procedural fairness and

members' organizational identification (e.g. Blader & Tyler, 2009; De Cremer, Tyler, & den Ouden, 2005; De Cremer & van Knippenberg, 2002; Tyler & Blader, 2000). A particularly influential aspect of procedural justice (sometimes treated as its own construct Bies & Moag, 1986; Tyler & Bies, 1990) relates to the quality of social interaction with organizational authorities (De Cremer & Tyler, 2005; Tyler & Blader, 2003). So-called 'Interactional Justice' focuses not on the quality of decision-making *per se* but the quality of interpersonal treatment, and whether they are treated politely and with dignity. Positive social interaction with the group's representative authority is said to communicate to the individual that they are valued group member and, as such, can use the group as a reference point to define themselves. Conversely, poor interpersonal treatment signals marginality and exclusion from the group, inhibiting the process of merging the group into the self (Tyler, DeGoeij, & Smith, 1996). In the present research, we test the efficacy of mental simulation (of a positive interaction with organizational leaders) as a simple cognitive tool to elevate organizational identification.

### **Simulating Social Interactions**

Mental simulation is defined as the imitative demonstration of an event or series of events (Taylor & Schneider, 1989; Escalas, 2004). It is a core component of human cognition. Neuroimaging studies have shown that similar neural mechanisms are activated performing, perceiving and imagining behavior, and simulations employ the same neurological mechanisms involved in memory, emotion, mimicry and motor control (Decety & Grèzes, 2006; Kosslyn, Ganis, & Thompson, 2001; Wilson & Knoblich, 2005). When applied to social situations, mentally simulating a particular social context has been shown to increase the accessibility and expression of the relevant attitudinal and behavioral response similar to those experienced in the



context itself (Blair, Ma & Lenton, 2001; Garcia, Weaver, Moskowitz & Darley, 2002).

Behavioral scientists have harnessed this power of mental simulation in a variety of ways (for review see Crisp, Birtel, & Meleady, 2011). Mental simulation is a widely used strategy in marketing to facilitate purchase intentions by encouraging consumers to imagine themselves in positive scenarios involving the advertised products (e.g. Escalas & Luce, 2003; 2004). Health psychologists have employed mental imagery to foster the achievement of health-related goals (e.g. Anderson, 1983; Greitemeyer & Würz, 2006). Clinicians have incorporated mental simulation into relapse prevent techniques (Marlatt & Gordon, 1985). Mental simulation has been used in education to improve students' exam performance (e.g. Pham & Taylor, 1999), and the use of imagery techniques to improve performance and motivation in sports settings is also supported by a large body of research (e.g. Feltz & Landers, 1983).

Of particular relevance to this research is the literature on *imagined intergroup contact*. Intergroup contact, or interaction with a member(s) of another cultural group, represents one of the most widely used social-psychological interventions for reducing prejudice. Since Allport's original publication in 1954, over 500 studies have provided evidence of a robust negative association between contact and prejudice (Pettigrew & Tropp, 2006). More recently, research has demonstrated that the benefits of contact can be established indirectly through mental simulation (Crisp & Turner, 2009; 2012). Imagined contact comprises of "the mental simulation of a social interaction with a member or members of an outgroup category" (Crisp & Turner, 2009, p. 324). Over 70 studies have now documented the beneficial effects of

imagined contact on a range of measures related to the reduction of prejudice (for meta-analysis see Miles & Crisp, 2014).

According to Allport's original contact hypothesis, positive interaction is expected to improve attitudes not only towards the specific outgroup member(s) with who the contact occurred, but also towards the outgroup as a whole. This member-to-group generalization effect has been robustly supported in the literature. It is stronger the more the contacted individual is regarded as typical or representative of the group, since under these conditions the associative link between the individual and the group is strongest (Brown & Hewstone, 2005; Hewstone & Brown, 1986). The same is also true of imagined intergroup contact. Mentally simulated contact with a single outgroup member successfully improves feelings towards the outgroup in general especially when the prototypicality of the imagined outgroup member is high (Stathi, Crisp, & Hogg, 2011), and when their social identity is salient (Pagotto, Visintin, De Iorio, & Voci, 2012; Stathi et al. 2011). In this research, we introduce a new application of these principles, focusing on imagined interactions with organizational leaders as means to enhance identification with the organizational group.

### **The Present Research**

Organizational identification plays a central role in promoting effective and viable groups. In this paper we develop a new approach to increasing organizational identification via an adapted imagined contact technique. As discussed above, research in the procedural justice domain demonstrates that positive interactions with organizational leaders can increase employees' levels of organizational identification. Meanwhile, research in the imagined contact literature demonstrates that the very concept of contact, mentally articulated in the form of an imagined interaction, can

unlock many of the same benefits as the direct experience. Integration of these literatures suggests that imagining oneself engaging in a positive interaction with an organizational leader may represent a simple and effective means of increasing organizational identification. In this research we applied imagined contact techniques to the organizational domain for the first time to test this core hypothesis.

*Hypothesis 1: Positive imagined contact with organizational leaders will increase individuals' organizational identification.*

We also predicted a mechanism through which imagined contact will increase organizational identification. Intergroup contact effects are driven by a generalization process in which positive feelings towards the interaction partner propagate through to the group as a whole. We predicted that the effect of imagined contact on organizational identification would be explained by a similar pattern of effects whereby imagined contact with an organizational leader improve feelings towards that individual which then generalize to the group they represent. Experiment 1A, 1B, 2A and 2B tested this mediational model in both scenario experiments (Experiment 1A & 1B) and in real organizational contexts (Experiment 2A & 2B).

*Hypothesis 2: The effect of imagined contact with organizational leaders on organizational identification will be mediated by improved attitudes towards the leader.*

In Experiment 3A and 3B we then sought to confirm that is it imagined contact with the *leader* specifically that will be maximally effective in terms of increasing organizational identification. Individual-to-group generalization effects are stronger the more typical the interaction partner is of the group as whole. Leaders are generally perceived to embody and represent the key characteristics of the group; as

such they are the most (proto)typical members of organizations. Accordingly, Experiment 3A and 3B sought to confirm that imagined contact with organizational leaders would have a stronger effect on group level identification than imagined contact with a co-worker, and that this effect would be explained by the leader's higher group prototypically.

*Hypothesis 3: Imagined contact with organizational leaders will have a stronger impact on organizational identification than imagined contact with an organizational coworker.*

Finally, in Experiment 4 we extended the model by considering the consequences of organizational identification. We measured participants' willingness to engage in organizational citizenship behaviors following imagined contact with organizational leaders. We predicted and tested a serial mediational model in which the effect of imagined contact on willingness to engage in organizational citizenship behaviors would be explained by improved attitudes towards the leader and increased organizational identification in turn.

*Hypothesis 4: As a result of increased organizational identification following imagined contact, individuals will express a greater willingness to engage in organizational citizenship behaviors.*

### **Experiment 1A and 1B**

In Experiment 1, we sought initial evidence that imagined contact techniques could be applied to increase organizational identification. This hypothesis was tested with an experimental vignette methodology. This is a common methodological approach in the organizational psychology literature, and has been widely employed

to investigate leadership and social identification processes (see Aguinis & Bradley, 2014). All participants read an organizational vignette describing a fictitious company and were asked to imagine they worked for this company for the purpose of the study. It was expected that participants who subsequently imagined engaging in a positive interaction with the CEO of the company would report increased organizational identification relative to those who completed a control simulation. It was further predicted that the effect of imagined contact on organizational identification would be explained by improvements in attitudes towards the leader.

## **Experiment 1A**

### **Participants**

Participants were recruited through Amazon's Mechanical Turk (MTurk). It has been suggested that the use of student samples who have limited experience of organizational settings may be problematic for studies employing organizational vignettes (Aguinis & Bradley, 2014). This use of this online platform allowed us to collect data from a non-student sample in the wider community. A total of 150 participants were recruited. Participants were all residents of the USA. The sample consisted of 77 males and 73 females, aged between 18 and 72 ( $M = 33.66$ ,  $SD = 10.89$ ). Participants received \$1 in exchange for their participation.

**Procedure** To begin the experiment all participants read an organizational vignette. In order to encourage their immersion in the task, participants were told that the experiment was investigating the vividness of mental imagery (Aguinis & Bradley, 2014). They were asked to read the scenario as if they were actually experiencing the situation themselves. The scenario read that participants were employees of a marketing agency that we called 'Flash Media'. The company was

said to operate across multiple offices, and have a large portfolio of work for a broad range of clients. An image of a company branding accompanied the text (full instructions are provided as an appendix).

After reading this information which set the stage for the experiment, participants were randomly assigned to complete either the imagined contact or a control simulation in a between-subjects design. The imagined contact script was adapted from those used in the intergroup relations literature (Turner & Crisp, 2010). Participants were instructed:

*“We would like you to imagine yourself meeting the CEO (Chief Executive Officer) of Flash Media. Imagine the interaction is relaxed, positive and comfortable”.*

Participants in the control condition completed a standard control simulation from the imagined contact domain, designed to be of approximately equal cognitive load to the experimental simulation (Turner, Crisp & Lambert, 2007). They were instructed:

*“We would now like you to take a minute to imagine you are walking in the outdoors. Try to imagine aspects of the scene about you (e.g. it is a beach, are there trees, what’s on the horizon?)”.*

In both conditions participants were given one minute to complete the simulation and then wrote several lines to describe what they had imagined to reinforce the imagery.

Participants then completed the dependent measures. Organizational identification was measured with Randsley de Moura, Abrams, Retter, Guannarsdottir and Ando’s (2009) scale, where items were created based on the original work of Abrams et al. (1998). Participants rated their agreement with seven items, each on a

five point likert scale (1 = *Strongly disagree*, 5 = *Strongly agree*). Sample items included, “I feel strong ties to this company”, “I feel proud to be a member of this company”. A higher score indicated higher organizational identification ( $\alpha = .89$ ).

Evaluation of the CEO was measured with the General Evaluation Scale (Wright, Aron, McLaughlin-Vope, & Ropp, 1997). Thinking about their role at Flash Media, participants were asked to indicate their feelings towards the company’s CEO on six, seven point semantic differential scales (*warm-cold\**, *negative-positive*, *friendly-hostile\**, *suspicious-trusting*, *respect-contempt\**, *admiration-disgust\**). Items marked with an asterisk were reverse scored, such that a higher score always indicated more positive evaluation of the CEO ( $\alpha = .90$ ).

It has been recommended that researchers using commercial online recruitment platforms employ screening measures to prevent inattentive participants from introducing error to their studies (Meade & Craig, 2012). To this aim participants also completed an attention screen required them to answer ‘none of the above’ to a lure question and to type in the accompanying textbook ‘I read the instructions’ (adapted from Oppenheimer, Meyvis & Davidenko, 2009). Failure to do so constituted a failure in the attention screen. To conclude the experiment participants provided demographic information, and were thanked and debriefed.

## **Results and Discussion**

A small number of participants failed the attention screen so their data was excluded from the analysis. Examination of the written responses also identified some participants who had completed the imagery task incorrectly (e.g. some participants imagined *being* the CEO rather than meeting the CEO). These participants were also

excluded from the analysis. The final sample size was 140, which included 70 males and 70 females, aged between 18 and 72 ( $M = 34.07$ ,  $SD = 11.03$ ).

Independent samples  $t$ -tests were conducted to examine the effect of imagined contact on the two dependent variables. The first  $t$ -test confirmed that participants in the imagined contact condition reported significantly higher organizational identification ( $M = 4.16$ ,  $SD = 0.61$ ) relative to the control ( $M = 3.88$ ,  $SD = 0.76$ ),  $t(138) = 2.44$ ,  $p = .02$ ,  $d = .41$ , 95% CI [.08, .75]. The second  $t$ -test confirmed that participants in the imagined contact condition also reported significantly greater evaluation of the CEO ( $M = 5.93$ ,  $SD = 0.90$ ), compared to the control ( $M = 5.33$ ,  $SD = 0.95$ ),  $t(138) = 3.82$ ,  $p < .001$ ,  $d = .65$ , 95% CI [.31, .99].

A mediational analysis was then conducted to examine whether the effect of imagined contact on organizational identification was explained by improvements in evaluation of the leader. Hayes (2013) PROCESS macro for SPSS (Model 4) was used to conduct the analysis. Based on bootstrapping with 5,000 resamples, the mean estimate for the indirect effect was .34 ( $SE = .10$ ) with a 95% confidence interval of .16 to .55. As zero did not fall within the confidence interval, the results indicate significant mediation. Full path estimates are displayed in Figure 1.

[Insert Figure 1 about here]

The results of Experiment 1 provide initial evidence that an imagined contact technique can be used as a means of increasing organizational identification. All participants were asked to imagine they worked for a marketing company for the purpose of the study. Half the participants were then directed to imagine themselves engaging in a positive interaction with the leader of this company. Results demonstrated that these participants subsequently identified more strongly with the



organization relative to those in the control condition. As expected, this effect on group identification was explained by improved evaluation of the leader.

One critique of Experiment 1A could be that, at least in part, the results are attributable to the salience of the organizational setting primed by the imagined contact task, rather than the contact with the organizational leader *per se*. In Experiment 1B we therefore added a further control condition in which participants imagined themselves in an organizational setting. Confirming that participants in the imagined contact condition displayed higher levels of organizational identification compared to those who imagine an outdoor scene *and* those who imagine an organizational scene would rule out this alternative context priming explanation.

## **Experiment 1B**

### **Participants**

Participants were recruited through a British online recruitment tool, Prolific Academic. A total of 200 participants were recruited. Participants were all from the UK and the sample included 84 males and 116 females, aged between 18 and 80 ( $M = 35.06$ ,  $SD = 12.69$ ). Participants received £1 in exchange for their participation.

### **Procedure**

Participants read the same organization vignette as in Experiment 1A before being randomly assigned to either the imagined contact condition, or one of two control conditions; outdoor scene or organizational scene. The instructions for the imagined contact and outdoor scene control condition were identical to those in used in Experiment 1A. In the organizational scene control simulation instructions were modelled on the outdoor scene simulation script. Specifically participants were asked:

*“We would like you to imagine you are in the office at Flash Media. Try to imagine aspects of the scene about you (e.g. are you sitting at a desk, what’s on the desk, what else can you see in the room?).”*

In all conditions participants were given one minute to complete the simulation and then wrote a few lines to describe what they had imagined. The dependent measures, organizational identification ( $\alpha = .93$ ) and evaluation of the CEO ( $\alpha = .91$ ), were identical to those used in Experiment 1A. Participants also completed the same attention check screen.

## **Results and Discussion**

A small number of participants who failed the attention check, or completed the imagery task incorrectly, were excluded from the analysis as in Experiment 1A. The final sample size was 180, which included 74 males and 106 females, aged between 18 and 80 ( $M = 35.77$ ,  $SD = 12.96$ ).

A univariate ANOVA revealed a significant omnibus effect of condition on organizational identification,  $F(2, 177) = 2.91$ ,  $p = .06$ ,  $\eta_p^2 = .03$  (see Figure 2). Pairwise comparisons revealed that organizational identification was significantly higher in the imagined contact condition ( $M = 4.09$ ,  $SD = 0.62$ ), compared to the outdoor scene control condition ( $M = 3.74$ ,  $SD = 0.89$ )  $M_{diff} = .35$ , 95% CI [.06, .64]  $p = .02$ . Organizational identification was also marginally higher in the imagined contact condition compared to the organizational scene control ( $M = 3.82$ ,  $SD = .93$ ),  $M_{diff} = .27$ , 95% CI [-0.03, .56],  $p = .08$ . Importantly, there was also no difference in organizational identification between the outdoor scene and organizational scene conditions  $p = .58$ .

[insert Figure 2 about here]

A further univariate ANOVA revealed a similar effect of condition on evaluation of the CEO ( $F(2, 177) = 12.98, p < .001, \eta_p^2 = .13$ ). Pairwise comparisons revealed that evaluation of the CEO was significantly higher in the imagined contact condition ( $M = 5.89, SD = 0.81$ ), compared to the outdoor scene condition ( $M = 5.12, SD = 0.99$ )  $M_{diff} = .78, 95\% CI [.44, 1.11], p < .001$ , and the organizational scene condition ( $M = 5.18, SD = .94$ ),  $M_{diff} = .71, 95\% CI [.37, 1.04], p < .001$ . Again, there was no difference in the evaluation of the CEO between the outdoor scene and organizational scene conditions,  $p = .69$ .

A mediational analysis was then conducted to examine whether the effect of imagined contact on organizational identification could be accounted for by improvements in evaluation of the leader. Hayes (2013) MEDIATE macro for SPSS was used to conduct the analysis. Because the independent level had three levels, indicator coding was used to create two dummy variables. The imagined contact condition was treated as a reference group. The first dummy variable examined the effect of the imagined contact compared to the outdoor scene control (D1), and the second compared the effect of imagined contact relative to the organization scene control (D2). A bootstrapped analysis based on 5,000 resamples revealed a significant indirect effect of evaluation of the leader in both cases (D1: indirect effect = .46,  $SE = .12, 95\% CI [.25, .71]$ , D2: indirect effect = .42,  $SE = .11, 95\% CI [.22, .65]$ ). Full path estimates are displayed in Figure 3.

[insert Figure 3 about here]

Together, the results of Experiment 1A and 1B demonstrate that mentally simulating a positive interaction with an organizational leader can successfully elevate

organizational identification. The imagined contact effect was found to persist both when compared to a standard control simulation from the imagined contact domain where participants imagined an outdoor scene, *and* a new control condition where participants imagined an organizational environment. These results confirm that the effects of imagined contact with leaders on organizational identification does not simply involve priming an organizational mindset.

In both studies, the effect of imagined contact on organizational identification was fully mediated by evaluation of the leader. Much like we observe in the intergroup contact literature then (Brown & Hewstone, 2005), after a (simulated) positive interaction with a group exemplar, individuals appeared to generalize their positive feelings towards the individual to the group as a whole. When applied to the organizational domain, we find that imagined contact with organizational leaders improves attitudes towards the leader, which then translates into heightened identification with the organization they represent.

### **Experiment 2A and 2B**

Experiment 1 provided initial evidence that the mental simulation of a positive interaction with an organizational leader can be used as an effective tool to enhance organizational identification. This effect was mediated by improved evaluation of the leader. Experiment 2 sought to replicate these results within a real organizational context. Two field studies were conducted, one within a retail company (Experiment 2A), and one within an insurance company (Experiment 2B).

## **Experiment 2A**

### **Participants**

Employees were recruited from a retail department store in Norfolk, UK. The store is part of a chain of nine shops within the East of England. Approximately 80 people are employed within this branch. A researcher visited the store on three occasions across a two-week period and invited employees to take part in the study. If employees consented, the experiment was completed individually in quiet break room. A total of 59 participants were recruited. This included 33 males and 26 females, aged between 17 and 63 ( $M = 30.37$ ,  $SD = 11.30$ ). All participants were British. The sample showed a good amount of variance in terms of the highest level of education completed (5.1% university, 3.4% higher professional education, 35.6% college/sixth form, 13.6% vocational training, 42.3% high school). Participants had worked for the company for an average of 4.12 years.

### **Procedure**

Participants were informed that the purpose of the study was to examine organizational experiences and attitudes. The experiment began with the simulation manipulations. Participants were randomly assigned to either the imagined contact or control condition. The imagined contact instructions were adapted from Experiment 1A and 1B. Participants were instructed:

*“We would like you to imagine yourself meeting the CEO of the organization you work for. Imagine the interaction is positive relaxed and comfortable”.*

Having ruled out a priming effect in Experiment 1B, we reverted back to the outdoor scene control condition Experiment 2A. We also used an alternative measure of organizational identification in this experiment. Organizational identification was measured with an adapted Inclusion of the Other in Self scale (IoS, Aron, Aron & Smollan, 1992, see also Tropp & Wright, 2001). Aron and colleagues demonstrate the way people experience closeness to others can be successfully assessed by means of a series of overlapping circles. The more a person incorporates another person (or group) into their self-concept, the more likely they are to consider their relationship with the other as overlapping. Bergami and Bogozzi (2000) subsequently adapted this instrument to provide a measure organizational identification. Participants were presented with seven pairs of increasingly overlapping circles, one representing the self, and the other their employing organization. They indicated which pair of circles best describes their relationship with their employing organization, the greater the overlap between the circles, the higher the organizational identification (1 = *no overlap*, 7 = *highest degree of overlap*).

The measure of evaluation of the leader was identical to that of Experiments 1A and 1B and showed good internal reliability ( $\alpha = .91$ ). At the end of the experiment participants completed demographic information and were thanked and debriefed. It was explained that all responses were anonymous and that the employing organization would not have access to any of the questionnaires.

## **Results and Discussion**

Examination of the written responses confirmed that all participants completed the imagery task in line with instructions, so no exclusions were made. Independent samples *t*-tests were again conducted to examine the effect of the imagined contact

intervention on employees' organizational identification and their evaluation of the CEO. The results demonstrated that participants in the imagined contact condition reported significantly higher levels of organizational identification ( $M = 3.42$ ,  $SD = 1.39$ ), relative to the control ( $M = 2.25$ ,  $SD = 1.43$ ),  $t(57) = 3.19$ ,  $p = .002$ ,  $d = .83$  95% CI [.29, 1.36]. Participants in the imagined contact condition also reported significantly greater evaluation of the CEO ( $M = 5.26$ ,  $SD = 1.17$ ), compared to the control ( $M = 3.84$ ,  $SD = 1.17$ ),  $t(57) = 4.64$ ,  $p < .001$ ,  $d = 1.21$  95% CI [.65, 1.76]. Of note, if length of participants' employment at the company was included as a covariate the effect of imagined contact remained significant on both organizational identification,  $F(1, 56) = 10.30$ ,  $p = .01$ ,  $\eta_p^2 = .16$ , and evaluation of the CEO,  $F(1, 56) = 22.41$ ,  $p < .001$ ,  $\eta_p^2 = .29$ .

[Insert Figure 4 about here]

In line with Experiment 1, a mediational analysis was then conducted to examine whether the effect of imagined contact on organizational identification was driven by improved evaluations of the leader. A bootstrapped procedure (Hayes, 2013, Model 4) using 5,000 resamples confirmed the significance of the indirect effect, with a mean estimate of .89 ( $SE = .27$ ) and a 95% confidence interval of .43 to 1.50. Full path estimates are displayed in Figure 4.

The results of Experiment 2A successfully replicate the results of Experiment 1 within a real organizational context. They provide initial evidence of the efficacy of imagined contact as a tool to increase organizational identification within the workplace. Further support in a real organizational context was sought in Experiment 2B.

## **Experiment 2B**

### **Participants**

In Experiment 2B, employees working at a large insurance firm were recruited. The firm operates in over 100 countries, employing over 25,000 people in total. The office we contacted was based in London which employs approximately 3,000 people. We were given access to a randomly determined subsample of employees. These individuals were sent an email inviting them to take part in the study from a central contact within the organization. Participants were informed that the purpose of the study was to examine organizational experiences and attitudes, and were assured that their data would only be used for research purposes. The email contained a link to the study, which could be completed online. We received a total 91 respondents. This included 49 males and 41 females (one participant did not report their gender), aged between 21 and 60 ( $M = 39.48$ ,  $SD = 9.51$ ). The majority of the respondents were British (80.2%). The sample showed a good spread in terms of job level (66.0% senior, 13.2% junior, 1.1% trainee, 13.2% 'other') and highest level of education completed (61.5% university, 20% college/sixth form, 11.0% higher professional education, 4.4% high school and 2.2% other). Participants had worked for the company for an average of 7.46 years.

### **Procedure**

To begin the experiment participants were randomly assigned to either the imagined contact or control condition. The imagined contact script was identical to that of Experiment 2A, except that the target of imagined contact became the *global* CEO in Experiment 2B, reflecting the fact that the firm comprises a variety of senior positions across the global markets they are based; however, it is the global CEO that



sits at the top of the organization as the public face of the company. We varied the control condition in Experiment 2B. Participants completed another commonly used simulation from the imagined contact domain in which they are asked to imagine meeting an unspecified stranger (e.g. Stathi & Crisp, 2008), which allowed us to control for any generalized positive affect arising from social interactions per se. Participants in the control condition were instructed: “*We would like you to take a minute to imagine yourself meeting a stranger for the first time. Imagined the interaction is positive, relaxed and comfortable*”.

The same measure of evaluation of the CEO was used, as in Experiment 2A, and we reverted back to multi-item scale of the organizational identification used in Experiment 1 (Randsley de Moura et al., 2009). Both measures showed good internal reliability ( $\alpha = .90$  &  $\alpha = .70$  respectively).

## **Results and Discussion**

Examination of the written responses confirmed that all participants completed the imagery task in line with instructions, so no exclusions were made. Independent samples *t*-tests demonstrated that participants in the imagined contact condition reported marginally significant greater organization identification ( $M = 3.88$ ,  $SD = 0.75$ ), compared to the control, ( $M = 3.62$ ,  $SD = 0.67$ ),  $t(89) = 1.76$ ,  $p = .08$ ,  $d = .37$ , 95% CI [-.04, .79]. This effect becomes fully significant if a one-tailed test is adopted ( $p = .04$ ), which would be appropriate given our *a priori* expectation of the direction of change in line with previous results in this paper. Participants in the imagined contact condition also reported significantly greater evaluation of the CEO ( $M = 4.67$ ,  $SD = 0.44$ ), relative to the control ( $M = 4.42$ ,  $SD = 0.52$ ),  $t(89) = 2.45$ ,  $p = .02$ ,  $d = .51$ , 95% CI [.10, .93]. If the length of participants employment at the company and

their career level were included as covariates the effect of imagined contact remained significant on both organizational identification,  $F(1, 87) = 2.66, p = .10$  ( $p = .05$  one-tailed)  $\eta_p^2 = .03$ , and evaluation of the CEO,  $F(1, 87) = 6.13, p = .02, \eta_p^2 = .07$ .

[Insert Figure 5 about here]

A bootstrapped analysis (Hayes, 2013, Model 4) using 5,000 bootstrapped resamples confirmed the significance of the indirect effect of imagined contact on organizational identification via increased evaluation of the CEO with a mean estimate of .15 ( $SE = .07$ ) and a 95% confidence interval of .05 to .33. Full path estimates are displayed in Figure 5.

Experiment 2 successfully replicated the results of Experiment 1 within real organizational contexts. Participants in Experiment 2A were all employees at a retail department store, and those in Experiment 2B were employees at an insurance firm. Unlike the scenario experiments, participants had pre-existing relationships with the organization. Across both contexts, a simple cognitive intervention in which participants are asked to spend a few minutes imagining a positive interaction with the CEO of the company was sufficient to improve their feelings towards the leader and increase their identification with the organization.

We note that the effect size is somewhat smaller in Experiment 2B than Experiment 2A. There may be due to a number of factors, including the different occupational contexts and data collection methods (online vs. offline). Most notably, Experiment 2B employed a more stringent control condition in which participants were asked to imagine meeting an unspecified stranger, rather than an outdoor scene. The fact that the imagined contact effect still held against this new control allow us to

rule out generalized positive affect arising from social interaction as an alternative explanation for effects.

### **Experiment 3A and 3B**

Experiment 2A and 2B demonstrated that the effects of imagined contact on organizational identification replicate in a real organizational context, and when compared to a new control condition in which participants imagine contact with a non-relevant (non-organizational) stranger. While we can now rule out the alternative explanation that the tendency to socially affiliate with the organizational group is driven simply by the social interaction inherent in the task, it remains to be demonstrated that it is imagined contact with an organizational *leader*, specifically, that is important. As discussed early, we assume that organizational leaders are positioned particularly well to impact group identification because the leader is seen as representative - or prototypical - of the group, such that they embody the attributes that characterize the group (Hogg & Abrams, 1988; Hogg & van Knippenberg, 2003, van Knippenberg, 2011). To test this assertion more thoroughly we conducted two studies comparing the effectiveness of imagined contact with organizational leaders to imagined contact with organizational co-workers.

Experiment 3A introduced imagined contact with an organizational co-worker as an additional condition. It was predicted that we may observe some increase in organizational identification after imagined contact with a co-worker compared to baselines by virtue of the co-worker's membership within the group. However, when the target of imagined contact is the leader - who is maximally representative of the organization - positive contact is expected to translate most strongly into organizational identification. Experiment 3B went on to test this prototypicality

explanation. We measured the extent to which participants' mental representation of their interaction partner (leader or coworker) overlapped with their mental representation of the organizational group. We expected that to a greater extent than a co-worker, the leader would be perceived as psychologically equivalent with the group, and this prototypicality would provide the medium through which simulated contact with organizational leaders would influence group-level identification.

### **Experiment 3A**

#### **Participants**

We reverted back to an organizational scenario method in line with Experiment 1. Participants were recruited through Prolific Academic. A total of 200 participants were recruited from the UK. The sample consisted of 81 males and 119 females, aged between 18 and 57 ( $M = 30.05$ ,  $SD = 9.92$ ). Participants received £1 in exchange for their participation.

#### **Procedure**

All participants read the same organizational vignette as employed in Experiment 1. Participants were asked to imagine that they worked for Flash Media and their job role was briefly described. Participants were randomly assigned to one of three conditions; imagined contact with CEO, imagined contact with a co-worker, or control. We employed the outdoor scene control condition to provide a baseline comparison. The instructions for the imagined contact with CEO conditions were also identical to those used in Experiment 1. In the new, imagined contact with co-worker condition, participants received identical instructions but the target of imagined contact became a co-worker rather than the CEO.

Participants then completed the measure of organizational identification (Randsley de Moura et al, 2009) used in Experiment 1A, 1B and 2B. As this experiment employed a commercial sample again, participants also completed the same attention screen as in Experiment 1A and 1B.

## Results and Discussion

In line with all previous studies it was decided *a priori* to remove any participants who had failed the attention screen, or whose written responses indicated that they had completed the imagery task incorrectly. The final sample size was 172, which included 67 males and 105 females, aged between 18 and 56 ( $M = 30.08$ ,  $SD = 9.86$ ).

A univariate ANOVA revealed a significant omnibus effect of condition on organizational identification,  $F(2, 169) = 3.42$ ,  $p = .04$ ,  $\eta_p^2 = .04$  (see Figure 6). Pairwise comparisons revealed that organizational identification was significantly higher in the imagined contact with the CEO condition ( $M = 4.17$ ,  $SD = 0.51$ ), compared to the control condition ( $M = 3.85$ ,  $SD = 0.78$ )  $M_{diff} = .32$ , 95% CI [.07, .57]  $p = .01$ . Organizational identification was also significantly higher in the imagined contact with CEO condition compared to the imagined contact with co-worker condition ( $M = 3.92$ ,  $SD = 0.66$ ),  $M_{diff} = .25$ , 95% CI [.01, .50],  $p = .05$ . There was no significant difference in organizational identification between the imagined contact with co-worker and the control condition,  $p = .56$ .

[Insert Figure 6 about here]

The results of Experiment 3A supported our prediction that it is imagined contact with organizational *leaders* that is important when it comes to increasing organizational identification. Although organizational identification was above

baseline in the imagined contact with co-worker condition, this difference was not statistically significant. It is, uniquely, imagined contact with the organizational leader that inspires organizational identification.

In Experiment 3B we went on to test the mechanism hypothesized to underlie the superior impact of imagined contact with organizational leaders (vs. coworkers) by measuring participants' perceptions of the prototypicality of their interaction partner. Perceived prototypicality has frequently been examined as a moderator of the relationship between leadership performance and perceptions of effectiveness (e.g. Giessner, van Knippenberg & Sleebos, 2009; van Knippenberg & van Knippenberg, 2005). Here, we measured perceived prototypicality as a mediator, or process variable, in order to demonstrate that imagined contact with leaders increases organizational identification to a greater extent than imagined contact with co-worker *because of* their greater prototypicality.

### **Experiment 3B**

#### **Participants**

A total of 200 participants were recruited from the USA via Amazon's MTurk. The sample consisted of 106 males and 94 females, aged between 19 and 65 ( $M = 35.12$ ,  $SD = 10.63$ ).

#### **Procedure**

We dropped the baseline control condition in Experiment 3B as the sole comparison of interest here was between the leaders and co-workers. Participants were randomly allocated to imagine contact with either the CEO, or a co-worker. Organizational identification was measured with the same measure as used in Experiment 1, 2B and 3A. Group prototypicality of the interaction partner was

measured using an adapted IoS scale (Aron et al., 1992). In Experiment 2A we employed an IoS scale to measure the extent to which participant's mental representation of the self and their employing organization overlapped (i.e. their organizational identification, Bergami & Bagozzi, 2000). Here, we adapted this measure to assess the extent to which participant's representation of their interaction partner overlaps with their representation of the organization. Participants were presented with seven pairs of increasingly overlapping circles, one which represents their interaction partner and one, which represents 'Flash Media'. They indicated which pair of circles best describes the relationship between the person they imagined meeting and Flash Media, the greater the overlap between the circles, the more prototypical the individual is of the group (1 = *no overlap*, 7 = *highest degree of overlap*).

## **Results and Discussion**

Consistent with previous studies we excluded participants who failed the attention screen, or whose written responses indicated that they had not properly engaged with the simulation manipulations. The final sample size was 183, which consisted of 93 males and 90 females, aged between 19 and 65 ( $M = 35.07$ ,  $SD = 10.91$ ).

An independent samples *t*-test was conducted to compare the level of organizational identification in the two conditions. Levene's test indicated the presence unequal variances ( $p = .01$ ) so an unequal-variances *t*-test with adjusted degrees of freedom was employed. The test confirmed that organizational identification was significantly higher when participants imagined contact with the CEO ( $M = 4.31$ ,  $SD = 0.44$ ) compared to co-worker ( $M = 4.11$   $SD = 0.74$ ),  $t(156.9) =$

2.19,  $p = .03$ ,  $d = .32$ , 95% CI [.03, .62]. A further  $t$ -test confirmed that the participants perceived their interaction partner to be significantly more prototypical of the organization in the imagined contact with CEO condition ( $M = 5.30$ ,  $SD = 1.29$ ) compared to the co-worker condition ( $M = 4.67$ ,  $SD = 1.09$ ),  $t(181) = 3.59$ ,  $p < .001$ ,  $d = .53$ , 95% CI [.24, .80].

[Insert Figure 7 about here]

A mediational analysis was then conducted to examine whether the effect of imagined contact with the leader (vs. co-worker) on organizational identification was accounted for by the increased prototypicality of this interaction partner. A bootstrapped analysis (Hayes, 2013, Model 4) based on 5,000 resamples confirmed the significance of this indirect effect, which a mean estimate of .06 ( $SE = .03$ ) and a 95% confidence interval of .01 to .15. Full path estimates are displayed in Figure 7.

In line with results of Experiment 3A, Experiment 3B demonstrated that imagined contact with an organizational leader increased organizational identification to a greater extent than imagined contact with a co-worker. Here, we also demonstrated that the superior impact of imagined contact with a leader was explained by the higher degree of group prototypicality possessed by the leader. To a greater extent than a co-worker, the leader is perceived as psychologically equivalent with the group. Mentally simulating a positive interaction with the leader increases identification with the organizational group by virtue of their prototypicality.

#### **Experiment 4**

The results of Experiment 1 - 3 provide consistent evidence that the mental simulation of a positive interaction with organizational leaders can be used as a tool to



enhance organizational identification. The aim of Experiment 4 was to extend this model by examining the consequences of the identification processes enabled by imagined contact. As we discussed earlier, organizational identification is important because when an individual strongly identifies with his or her organization, they will be more motivated to behave in a ways that promotes or maintains the interests of the group (Lee et al., 2015; Riketta, 2005). Here we focused specifically on organizational citizenship behaviors. Organizational citizenship behaviors are generally conceived as voluntary extra-role behaviors that are beneficial to the organization (Organ, 1988) and are known to predict productivity and profitability at the organizational level (Koys, 2001; Podsakoff, Ahearne & MacKenzie, 1997). Organizational identification is known to be a strong and reliable predictor of organizational citizenship behaviors (van Dick et al., 2006). Accordingly, in Experiment 4 we tested whether imagined contact with an organizational leader would increase individuals' willingness to engage in organizational citizenship behaviors.

We previously demonstrated that the effect of imagined contact on organizational identification was mediated by improved evaluation of the leader. In Experiment 4, we extend this mediational model by considering evaluation and organizational identification as sequential mediators of the effect of imagined contact on willingness to engage in organizational citizenship behaviors. More specifically, we predicted and tested a pathway in which imagined contact increases evaluation of the leader, which generalizes to increase identification with the organizational group, which, then increases willingness to engage in organizational citizenship behaviors.

## Participants

A total of 200 individuals were recruited from the USA via Amazon's MTurk. The sample consisted of 118 males and 81 females (one participant did not indicate their gender), aged between 18 and 65 ( $M = 30.66$ ,  $SD = 9.25$ )

## Procedure

A same experimental protocol from previous scenario studies was adopted. As we had now ruled out effects arising from imagined contact with a stranger (Experiment 2B) or with a co-worker (Experiment 3A & 3B) we reverted back to the original, outdoor scene simulation as a baseline in Experiment 4. Participants in the experimental condition completed the standard imagined contact with CEO imagery task.

Organizational identification and evaluation of the CEO were measured with the same scales used in previous studies (Randsley de Moura et al., 2009; Wright et al., 1997). Willingness to engage in organizational citizenship behaviors was measured with the organizational citizenship behavior intentions instrument developed by Williams and Shiaw (1999). Considering their role at Flash Media, participants were asked to rate how likely they think they would be to engage in a number of behaviors. Sample behaviors included "A colleague seems to be having work problems. Your workload is manageable. How likely are you to help him/ or her in any way to clear the work?", and "Someone mentions that there is a function which is not compulsory for all employees to attend but it will look better if more employees of the organization are going. How likely are you to go?" Participants responded to a total of 11 items on a 7-point Likert scale, (1 = *Not at all likely*, 7 = *Very likely*).

Items were scored such that a higher value indicated higher intentions to engage in organizational citizenship behaviors ( $\alpha = .76$ ).

## Results and Discussion

As in previous studies we included methods to identify careless respondents. Participants who failed the attention screen, or whose written responses indicated that they had not completed the simulation in line with instructions were excluded from the analyses. The final sample size was 181, which included 105 males and 76 females, aged between 18 and 65 ( $M = 31.12$ ,  $SD = 9.36$ ).

We first conducted a series of independent samples *t*-test to examine the direct effect of imagined contact (vs. control) on each of the dependent variables. Levene's test indicated that the assumption of homogeneity of variance was violated for evaluation of the CEO, so degrees of freedom were adjusted. In line with predictions, results revealed that evaluation of the CEO was significantly higher in the imagined contact ( $M = 6.12$ ,  $SD = 0.80$ ) compared to the control condition ( $M = 5.08$ ,  $SD = 1.07$ ),  $t(167.13) = 7.34$ ,  $p < .001$ ,  $d = 1.09$ , 95% CI [0.78, 1.40]. Unequal variances were also apparent in organizational identification. The adjusted test revealed that organizational identification was significantly higher in the imagined contact condition ( $M = 4.31$ ,  $SD = 0.52$ ), compared to the control ( $M = 3.61$ ,  $SD = 0.86$ ),  $t(150.23) = 6.65$ ,  $p < .001$ ,  $d = .99$ , 95% CI [.68, 1.30]. Willingness to engage in organization citizenship behaviors was also significantly higher in the imagined contact condition, ( $M = 5.11$ ,  $SD = 0.78$ ) compared to the control ( $M = 4.86$ ,  $SD = 0.78$ ),  $t(179) = 2.10$ ,  $p = .04$ ,  $d = .31$ , 95% CI [.02, .61].

[Insert Figure 8 about here]

A mediational analysis was then conducted with two serial mediators using a bootstrapped procedure (Hayes, 2013, Model 6). Figure 8 shows the full coefficients for the model with imagined contact condition as the independent variable, and evaluation of the CEO and organizational identification as multiple mediators operating in sequence on the dependent variable, willingness to engage in organizational citizenship behaviors. The path coefficients indicate that imagined contact exerted a significant effect on evaluation of the CEO. Evaluation of the CEO then predicted organizational identification, which in turn was positively associated with willingness to engage in organizational citizenship behaviors. The mean estimate for the serial indirect effect of imagined contact on willingness to engage in organizational citizenship behaviors was .15 (SE = 0.06), with a 95% CI of .05 to .29. Since zero fell outside of this interval, it can be concluded that the effect of imagined contact on willingness to engage in organizational citizenship behaviors was explained by elevated evaluation of the CEO, and organizational identification, in turn.<sup>1</sup>

In Experiment 4 we replicated the finding that after imagined contact with an organizational leader participants liked this individual more and identified more strongly with the organization they represent. We then extended this model by demonstrating that this heightened identification is translated into increased willingness to engage in organizational citizenship behaviors.

### **General Discussion**

The importance of identity in shaping peoples' relationships to organizations is widely acknowledged. Through identification, individuals' take the organization's goals as their own, motivating behavior in the group interest (van Knippenberg, 2000). In this paper, we developed a tool to increase organizational identification

based on principles of mental simulation. We found that imagined contact with organizational leaders improved individuals' feelings towards the leader, and identification with the organization they represent.

Confidence in the ability of imagined contact to increase organizational identification is bolstered not just by replication across seven experiments, but also by the fact that the studies employed different samples (UK, USA) and different methods (scenario experiments, field experiments). In the scenario experiments, participants read an organizational vignette and were asked to imagine that they worked for the company described. Participants in the experimental condition imagined themselves engaging in a positive interaction with the CEO of the company before rating their feelings toward the CEO and their identification with the organization. In the field studies, participants completed the dependent variables with reference to their real employing organization after imagining a positive interaction with the CEO of that company. The intervention was successful across both contexts.

We also replicate the effect of imagined contact against a variety of control conditions. We first employed an outdoor scene control simulation that is commonly used in imagined intergroup contact research. Confirming the success of the intervention compared to this control allowed us to be confident that effects were not just to do with the cognitive load required to engage in mental simulation. We then used a control in which participants imagined themselves in an organizational environment, allowing us to confirm that effects were not merely due to the salience of the organizational setting primed by the imagined contact task. In Experiment 2B participants in the control condition were asked to imagine engaging in a social interaction with an unspecified stranger. This stranger then became a fellow organizational member, a co-worker in Experiment 3A and 3B. Supporting our

hypotheses, we found that there is something special about mentally simulating contact with the *leader* specifically that cultivates organization identification.

Mental simulation techniques have previously been applied to help people achieve greater performance in sport, better health and exercise outcomes, and even to improve relations between different ethnic groups (for review see Crisp et al., 2011). This paper represents the first application of these principles to organizational behavior. The principle benefit of simulation techniques is that they can be applied with little difficulty or expense. We suggest that imagined contact techniques may offer managerial teams with a low-cost, simple and flexible means of encouraging employees to see themselves, and act as, members of the organizational group. Based on this research we might expect internal communications from the CEO to inspire great commitment when they are imbued with language that draws on imagined contact. The CEO could use rhetoric that brings to mind a positive, identity-imbed imagined interaction, e.g., “if you met me in the corridor, what would you tell me you love about our company”. Such techniques may be particularly useful in large, multinational corporations, where little prospect of actually meeting the CEO exists.

In both the field studies conducted within this investigation, participants were unlikely to have had any direct interaction experience with the CEO of the organization. Both organizations were branches of a larger company, which the CEO sits at the top of. It may be fruitful to consider whether interventions based on contact with more immediate authority figures (e.g. store managers, supervisors, line managers) may also provide an effective means of increasing organizational identification. Indeed, contact may be easier to implement directly at the work-group level, without the need for indirect solutions. However, this approach runs the risk of motivating behavior in the interest of the specific work-group and not necessarily the

organization as a whole, and may even create hostility between different workgroups (e.g. Christ, Van Dick, Wagner, & Stellmacher, 2003, van Knippenberg & Van Schie, 2003). We suggest that imagined contact may represent a means to overcome this apparent paradox: Through imagined contact we are able to capitalize upon the beneficial effects that interaction with leaders as the ultimate representative of an organization provide, but are more difficult to establish.

In contexts where leaders and followers do meet each other, it will be important for future research to consider whether the imagined contact effects may be moderated by the quality of direct interactions. Encouragingly, research in intergroup relations demonstrates that imagined contact techniques can improve intergroup attitudes even in the face of prior negative experiences with outgroup members (Birtel & Crisp, 2012). It will be important for future research to establish how far imagined contact can override direct experiences with organizational authorities. Similarly, research should consider how easily imagined contact effects might be overruled by subsequent direct encounters, or whether imagined and direct contact may have additive effects.

In the present investigation participants were always asked to imagine a *positive* interaction with the organizational leader. Some research in the intergroup relations domain has recently examined the impact of *negative* imagined interactions. Findings suggest that negative imagined contact functions in the opposite way to positive contact, increasing rather than reducing prejudice in this case (Harwood, Paolini, Joyce, Rubin, & Arroyo, 2011). Given that the impact of imagined negative contact have already been established in the broader literature, and these effects appear to be straightforward (i.e. they have an unqualified negative impact), here we focused on the most effective way to apply the benefits of positive imagined contact

to provide a tool to enhance employment employee's engagement in organizational settings. Future research should seek to further refine the optimizing conditions for this intervention. For instance, we note that the wording used in the simulation instructions, and in other imagined contact scripts, would be classified within the circumplex model of emotions (Larsen & Diener, 1992) as positive, but "low activated" terms (i.e. relaxed, positive and comfortable). It may be fruitful for future studies to employ more "high activated" terms (e.g. exciting, stimulating, energizing). Research surrounding transformational and charismatic leadership (Ashkanasy, 2003; Ashkanasy & Tse, 2000) would suggest that imagining positive, high activated interactions with organizational leaders may lead to even stronger organizational identification and assessment of the CEO.

Similarly, We found in Experiment 3B that the superior effects of imagined contact with organizational leaders compared to co-workers was driven by leaders' greater perceived prototypicality. Of course, prototypicality also varies within leaders. We may expect imagined contact to have stronger effects on group level identification when the leader is perceived (or portrayed) as highly prototypical, but weaker effects in cases where the leader is not necessarily prototypical of the group (e.g. the only female in an all-male team). Models of leader-follower identity transfer suggest, however, that high perceived leader identification can compensate for low prototypicality. Leaders who are seen to be highly identified with the group can elicit personal identification amongst their followers, even if they are not necessarily regarded as representative of that group (e.g. Steffens et al., 2015; van Dick & Schuh, 2010). We did not measure perceived leader identification in the present investigation, however, it may be fruitfully studied as an alternative explanatory pathway in future research. When leader prototypicality is low, imagined contact may still be effective if



the leader is perceived as highly identified with the organization, which then spills over to personal identification.

It will also be important consider how long lasting the effects of imagined contact on organizational identification are. Previous use of imagined contact techniques within the intergroup relations domain help alleviate concerns that the effects of the intervention will be transient. Studies have shown that individuals who imagine a positive interaction with an outgroup member show improvements in intergroup attitudes when measured one week after the intervention (Stathi, Cameron, Hartley, Bradford, 2014; Vezzali, Capozza, Stathi, & Giovanni, 2012). Implementing delayed testing will be an important next step for this application to organizational contexts. In a sense, however, the transience or intransience of the intervention is not of critical importance. Imagined contact strategies may be expected to be just like any of these techniques – the greater exposure, the greater impact on (in this case) organizational identification. We know that, as a rule, attitudinal interventions are more effective with greater exposure (Bornstein, 1989). It may be the case that with programmatic interventions simulated contact techniques will reinforce and sustain improvements organizational identification.

Finally, it may also be interesting for future research to consider whether the methods developed in this paper may facilitate identification with organizations to which individuals *do not belong*. The concept of organizational identification has been extended to the context of customer-company relations (Ahearne, Bhattacharya, & Gruden, 2005; Bhattacharya & Sen, 2003). Through customer-company identification individuals become champions of the companies with whom they identify. Highly identified customers tend to purchase more and recommend the company and its products to others more (Ahearne et al., 2005). Anecdotally, there

are many examples of companies where the leader is emblematic of the organization, and acts a communicator of company identity (e.g. Steve Jobs and Apple, Richard Branson and Virgin). Future research may consider whether imagery techniques based on the simulation of contact with these individuals may provide a tool to build strong customer relationships.

### **Conclusion**

In this paper, we develop a simple and versatile tool to increase organization identification based on the mental simulation of social interaction with organizational leaders. We show that imagining positive contact with organizational leaders improves attitudes towards this individual, which then translate into increased identification with the organization they represent. This effect replicated in both scenario experiments and in real organizational contexts and was specific to simulated contact leaders as a prototype of the group. As a result of heightened organizational identification following imagined contact with leaders, individuals expressed heightened intentions to participate in activities that advance the interests of the organization. These techniques developed in this paper are highly flexible and easily applicable, and may provide a simple step towards achieving a more motivated and productive workforce.

### Notes

1. As well as testing the sequential mediational effect, the Hayes (2012) PROCESS macro, Model 6, also tests specific indirect effects. These were also significant in Experiment 4, which includes, a) the effect of imagined contact on willingness to engage in organizational citizenship behaviors through leader evaluation only (mean estimate = .28, SE = 0.09, 95% CI [.12, .47] ), and b) the effect of imagined contact on organizational citizenship behaviors through organizational identification only (mean estimate = .04, SE = 0.03, 95% CI [.01, .11]).

## References

- Abrams, D., Ando, K., & Hinkle, S. (1998). Psychological attachment to the group: Cross-cultural differences in organizational identification and subjective norms as predictors of workers' turnover intentions. *Personality and Social Psychology Bulletin, 24*, 1027-1039. doi: 10.1177/01461672982410001
- Aguinis, H., & Bradley, K.J. (2014). Best practice recommendations for designing and implementing experimental vignette methodology studies. *Organizational Research Methods, 17* (4), 351-371. doi: 10.1177/1094428114547952
- Ahearne M., Bhattacharya C.B., & Gruen T. (2005). Antecedents and consequences of customer-company identification: Expanding the role of relationship marketing. *Journal of Applied Psychology, 90* (3), 574-585. doi: 10.1037/0021-9010.90.3.574
- Allport, G. (1954). *The nature of prejudice*. Oxford, England: Addison-Wesley.
- Anderson, C.A. (1983). Imagination and expectation: The effect of imagining behavioral scripts on personal intentions. *Journal of Personality and Social Psychology, 45* (2), 293-305. doi: 10.1037/0022-3514.45.2.293
- Aron, A., Aron, E.N., & Smollan, D. (1992). Inclusion of the other in the self scale and the structure of interpersonal closeness. *Journal of Personality and Social Psychology, 63* (4), 596-612. doi: 10.1037/0022-3514.63.4.596
- Ashforth, B. E., & Mael, F. (1989). Social identity theory and the organization. *Academy of Management Review, 14*, 20-39. doi: 10.5465/AMR.1989.4278999
- Ashkanasy, N.M. (2003). Emotions in organizations: A multi-level perspective. In F. Dansereau & F.J. Yammarino (Eds.), *Research in multi-level issues* (pp. 9-54). Oxford: UK: Elsevier. doi:10.1016/s1475-9144(03)02002-2

- Ashkanasy, N. M., & Tse, B. (2000). Transformational leadership as management of emotion. In: N. M. Ashkanasy, C. E. J. Hartel & W. Zerbe (Eds), *Emotions in the workplace: Research, theory, and practice* (pp. 221-235). Westport, CT: Quorum Books.
- Bass, B.M. (1985). *Leadership and performance beyond expectation*. New York: Free Press.
- Bergami, M., & Bagozzi, R.P. (2000). Self-categorization, affective commitment and group self-esteem as distinct aspects of social identity in the organization. *British Journal of Social Psychology*, 39 (4), 555-577. doi: 10.1348/014466600164633
- Bhattacharya, C. B., & Sen, S. (2003). Consumer-company identification: A framework for understanding consumers' relationships with companies. *Journal of Marketing*, 67(2), 76 – 88. doi: 10.1509/jmkg.67.2.76.18609
- Bies, R. J., & Moag, J. S. (1986). Interactional justice. In R. J. Lewicki, B. M. Sheppard, & M. H. Bazerman (Eds.), *Research on negotiations in organizations* (Vol. 1, pp. 43-55). Greenwich, CT: JAI.
- Birtel, M.D., & Crisp, R.J. (2012). "Treating" prejudice: An exposure-therapy approach to reducing negative reaching towards stigmatized groups. *Psychological Science*, 23 (11), 1379-1386. doi: 10.1177/0956797612443838
- Blader, S. L., & Tyler, T. R. (2009). Testing and extending the group engagement model: Linkages between social identity, procedural justice, economic outcomes, and extrarole behavior. *Journal of Applied Psychology*, 94, 445-464. doi: 10.1037/a0013935
- Blair, I.V., Ma, J.E., & Lenton, A.P. (2001). Imagining stereotypes away: The moderation of implicit stereotypes through mental imagery. *Journal of*

Personality and Social Psychology, 81 (5), 828-841. doi: 10.1037//0022-3514.81.5.828

Bornstein, R.F. (1989). Exposure and affect: Overview and meta-analysis of research, 1968- 1987. *Psychological Bulletin*, 106 (2), 265-289. doi: 10.1037/0033-2909.106.2.265.

Brown, R., & Hewstone, M. (2005). An integrative theory of intergroup contact. In M. Zanna (Ed.) *Advances in experimental social psychology* (Vol. 37, pp. 255-343). San Diego, CA: Elsevier Academic Press.

Burns, J.M. (1978). *Leadership*. New York: Harper & Row.

Christ, O., Van Dick, R., Wagner, U., & Stellmacher, J. (2003). When teachers go the extra-mile: Foci of organizational identification as determinants of different forms of organizational citizenship behavior among schoolteachers. *British Journal of Educational Psychology*, 73, 329-341.  
doi:10.1348/000709903322275867

Crisp, R.J., Birtel, M., & Meleady, R. (2011). Mental simulations of social thought and action: Trivial tasks or tools for transforming social policy. *Current Directions in Psychological Science*, 20 (4), 261-264.  
doi: 10.1177/0963721411413762

Crisp, R.J., & Turner, R.N. (2009). Can imagined interactions produce positive perceptions? Reducing prejudice through simulated social contact. *American Psychologist*, 64 (4), 231-240. doi: 10.1037/a0014718.

Crisp, R. J., & Turner, R. N. (2012). The imagined intergroup contact hypothesis. In M. P. Zanna & J. Olson (Eds.), *Advances in experimental social psychology* (Vol. 46, pp. 125-182). Burlington: Academic Press.

Decety, J. & Grezes, J. (2006). The power of simulation: Imagining one's own and

other's behaviour. *Brain Research*, 1079 (1), 4-14.

doi:10.1016/j.brainres.2005.12.115

De Cremer, D., & Tyler, T.R. (2005) "Managing group behavior: the interplay between procedural justice, sense of self, and cooperation." In Zanna, M.P. (Ed.): *Advances in experimental social psychology* (Vol. 37, pp. 151-218) San Diego: CA: Elsevier Academic Press.

De Cremer, D., Tyler, T.R., & den Ouden, N. (2005). Managing cooperation via procedural fairness: The mediating influence of self-other merging. *Journal of Economic Psychology*, 26, 392-406. doi:10.1016/j.joep.2004.12.004

De Cremer, D., & van Knippenberg, D. (2002). How do leaders promote cooperation? The effects of charisma and procedural fairness. *Journal of Applied Psychology*, 87, 858-866. doi: 10.1037//0021-9010.87.5.858

De Cremer, D., & van Knippenberg, D. (2005). Cooperation as a function of leader self-sacrifice, trust, and identification. *Leadership & Organizational Development Journal*, 26 (5), 355-369. doi: 10.1108/01437730510607853

Escalas, J.E. (2004). Imagine yourself in the product. Mental simulation, narrative transportation, and persuasion. *Journal of Advertising*, 33 (2), 37-48. doi: 10.1080/00913367.2004.10639163

Escalas, J.E., & Luce, M.F. (2003). Process versus outcome thought focus and advertising. *Journal of Consumer Psychology*, 13, 246-254. doi: 10.1207/S15327663JCP1303\_06

Escalas, J.E., & Luce, M.F. (2004). Understanding the effects of process-focused versus outcome-focused thought in response to advertising. *Journal of Consumer Research*, 31 (2), 274-285. doi: 10.1086/422107

Feltz, D.L., & Landers, D.M. (1983). The effects of mental practice on motor skill

- learning and performance: A meta-analysis. *Journal of Sport Psychology*, 5 (1), 271-351.
- Garcia, S. M., Weaver, K., Moskowitz, G. B., & Darley, J. M. (2002). Crowded minds: the implicit bystander effect. *Journal of Personality and Social Psychology*, 83(4), 843-853. doi: 10.1037/0022-3514.83.4.843
- Giessner, S.R., & van Knippenberg, D., & Sleebos, E. (2009). License to fail? How leader group prototypicality moderates the effects of leader performance on perceptions of leadership effectiveness. *The Leadership Quarterly*, 20, 434-451. doi:10.1016/j.leaqua.2009.03.012
- Greitemeyer, T., & Würz, D. (2006). Mental simulation and the achievement of health goals: The effect of goal difficulty. *Cognition, Imagination, and Personality*, 25 (3), 239-251. doi: 10.2190/D4UA-RQFQ-0H5T-W9YY.
- Harwood, J., Paolini, S., Joyce, N., Rubin, M. & Arroyo, A. (2011). Secondary transfer effects from imagined contact: Group similarity affects the generalization gradient. *British Journal of Social Psychology*, 50, 180-189. doi: 10.1348/014466610X524263
- Haslam, S. A., Reicher, S. D., & Platow, M. J. (2011). *The new psychology of leadership: Identity, influence and power*. London & New York: Psychology Press.
- Hayes, A. F. (2013). *Introduction to mediation, moderation and conditional process analysis: A regression-based approach*. New York: Guildford Press.
- Hewstone, M., & Brown, R.J. (1986). *Contact and conflict in intergroup encounters* (pp. 1-44). Oxford, UK: Blackwell.
- Hogg, M. A. (2001). A social identity theory of leadership. *Personality and Social Psychology Review*, 5, 184–200. doi: 10.1207/S15327957PSPR0503\_1



- Hogg, M. A. (2001). A social identity theory of leadership. *Personality and Social Psychology Review*, 5, 184–200. doi: 10.1207/S15327957PSPR0503\_1
- Hogg, M.A., & Abrams, D. (1988). *Social identifications: A social psychology of intergroup relations and group processes*. London: Routledge.
- Hogg, M. A., & van Knippenberg, D. (2003). Social identity and leadership processes in groups. *Advances in experimental social psychology*, 35, 1–52.  
doi:10.1016/S0065-2601(03)01001-3
- Huang, J-W. (2013). The effects of transformational leadership on the distinct aspects developments of social identity. *Group Processes & Intergroup Relations*, 16 (1), 87-104. doi: 10.1177/1368430212454926
- Kark, R., Shamir, B., & Chen, G. (2003). The two faces of transformational leadership: Empowerment and dependency. *Journal of Applied Psychology*, 88, 246–255. doi: 10.1037/0021-9010.88.2.246
- Kelley, H. H., & Thibaut, J. W. (1978). *Interpersonal relations. A theory of interdependence*. New York: Wiley.
- Kosslyn S.M., Ganis G., & Thompson W. (2001). Neural foundations of imagery. *Nature Reviews Neuroscience*, 2, 635-642. doi:10.1038/35090055
- Koys, D.J. (2001). The effects of employee satisfaction, organizational citizenship behavior, and turnover on organizational effectiveness: A unit-level, longitudinal study. *Personnel Psychology*, 54, 101-114. doi: 10.1111/j.1744-6570.2001.tb00087.x
- Larsen, R.J. & Diener, E. (1992). Promises and problems with the circumplex model of emotion. In M.S. Clark (Ed.) *Emotion* (pp. 25-59). Thousand Oaks US: Sage.
- Lee, E.S., Park, T.Y., & Koo, B. (2015). Identifying organizational identification as a basis for attitudes and behaviors: A meta-analytic review. *Psychological*

- Bulletin*, 141 (5), 1049-1080. doi: 10.1037/bul0000012.
- Lind, E. A., & Tyler, T. R. (1988). *The social psychology of procedural justice*. New York: Plenum.
- Lord, R.G., & Brown, D.J. (2003). *Leadership processes and follower self-identity*. London: Psychology Press.
- Marlatt, G. A. & Gordon, J. R. (1985). *Relapse prevention: Maintenance strategies in addictive behaviour change*. New York: Guilford.
- Meade, A.W., & Craig, S.B. (2012). Identifying careless responses in survey data. *Psychological Methods*, 17 (3), 437-455. doi: 10.1037/a0028085
- Miles, E., & Crisp, R.J. (2014). A meta-analytic test of the imagined contact hypothesis. *Group Processes & Intergroup Relations*, 17 (1), 3-26. doi: 10.1177/1368430213510573
- Oppenheimer, D.M., Meyvis, T., & Davidenko, N. (2009). Instructional manipulation checks: Detecting satisficing to increase statistical power. *Journal of Experimental Social Psychology*, 45, 867-872. doi:10.1016/j.jesp.2009.03.009
- Organ, D. W. (1988). *Organizational citizenship behavior: The good soldier syndrome*. Lexington, MA: Lexington Books.
- Pagotto, L., Visintin, E. P., De Iorio, G., & Voci, A. (2012). Imagined intergroup contact promotes cooperation through outgroup trust. *Group Processes & Intergroup Relations*, 16, 209–216. doi: 10.1177/1368430212450057
- Pettigrew, T. F., & Tropp, L. R. (2006). A meta-analytic test of intergroup contact theory. *Journal of Personality and Social Psychology*, 90, 751-783. doi: 10.1037/0022-3514.90.5.751
- Pham, L.B., & Taylor, S.E. (1999). From thought to action; effects of process- versus outcome-based mental simulations on performance. *Personality and Social*

*Psychology Bulletin*, 25 (2), 250-260. doi:10.1177/0146167299025002010

Podsakoff, P.M., Ahearne, M., MacKenzie, S.B. (1997). Organizational citizenship behavior and the quantity and quality of work group performance. *Journal of Applied Psychology*, 82, 262-270. doi:10.1037/0021-9010.82.2.262

Randsley de Moura, G., Abrams, D., Retter, C., Gunnarsdottir, S., & Ando, K. (2009). Identification as an organizational anchor: How identification and job satisfaction combine to predict turnover intention. *European Journal Of Social Psychology*, 39, 540-557. doi:10.1002/ejsp.553

Riketta, M. (2005). Organizational identification: A meta-analysis. *Journal of Vocational Behavior*, 66 (2), 358-384. doi:10.1016/j.jvb.2004.05.005

Schuh, S.C., Zhang, X, Egold, N.W., Graf, M.M., Pandey, D., & van Dick, R. (2012). Leader and follower organizational identification: The mediating role of leader behaviour and implications for follower OCB. *Journal of Occupational and Organizational Psychology*, 85, 421-432. doi:10.1111/j.2044-8325.2011.02044.x

Shamir, B., House, R.J. & Arthur, M. B. (1993). Motivational effects of transformational leadership: A self-concept based theory. *Organizational Science*, 4 (4), 577-594. doi: 10.1287/orsc.4.4.577

Stathi, S., Cameron, L., Hartley, B. & Bradford, S. (2014) Imagined contact as a prejudice-reduction intervention in schools: The underlying role of similarity and attitudes. *Journal of Applied Social Psychology*, 44, 536-546. doi: 10.1111/jasp.12245

Stathi, S., & Crisp, R. J., (2008). Imagining intergroup contact promotes projection to outgroups. *Journal of Experimental Social Psychology*, 44, 943–957. doi: 10.1016/j.jesp.2008.02.003

- Stathi, S., Crisp, R.J., & Hogg, M.A. (2011). Imagining intergroup contact enables member-to-group generalization. *Group Dynamics: Theory, Research, and Practice*, 15 (3), 275-284. doi: 10.1037/a0023752
- Steffens, N.K., Haslam, S.A., Reicher, S.D., Platow, M.J., Fransen, K., Yang, J., ...Boen, F. (2014). Leadership as social identity management: Introducing the Identity Leadership Inventory (ILI) to assess and validate a four-dimensional model. *The Leadership Quarterly*, 25 (5), 1001-1024. doi: 10.1016/j.leaqua.2014.05.002
- Steffens, N.K., Schuh, S.C., Haslam, S.A., Perez, A., & van Dick, R. (2015). 'Of the group' and 'for the group': How followership is shaped by leaders' prototypically and group identification. *European Journal of Social Psychology*, 45 (2), 180-190, doi: 10.1002/ejsp.2088
- Tajfel, H. (1978). *Differentiation between social groups*. London: Academic Press.
- Tajfel, H., & Turner, J. (1979). An integrative theory of inter-group conflict. In J.A. Williams & S. Worchel (Eds.), *The social psychology of inter-group relations* (pp. 33-47). Belmont, CA: Wadsworth.
- Tajfel, H., & Turner, J. C. (1986). The social identity theory of inter-group behavior. In S. Worchel & L. W. Austin (Eds.), *Psychology of intergroup relations*. Chicago: Nelson-Hall
- Taylor, S.E., & Schneider, S.K. (1989). Coping and the simulation of events. *Social Cognition*, 7, 174-194. doi: 10.1521/soco.1989.7.2.174
- Thibaut, J., & Kelley, H. H. (1959). *The social psychology of groups*. New York: Wiley.
- Tropp, L.R., & Wright, S.C. (2001). Ingroup identification as the inclusion of the ingroup in the self. *Personality and Social Psychology Bulletin*, 27 (5), 585-600.

doi: 10.1177/0146167201275007

Turner, J. C., Hogg, M. A., Oakes, P. J., Reicher, S. D., & Wetherell, M. S. (1987).

*Rediscovering the social group: A self-categorization theory*. Oxford, UK:

Blackwell.

Turner, R.N., & Crisp, R.J. (2010). Imagining intergroup contact reduces implicit prejudice. *British Journal of Social Psychology*, *49*, 129-142.

doi:10.1348/014466609X419901

Turner, R. N., Crisp, R. J., & Lambert, E. (2007). Imagining intergroup contact can improve intergroup attitudes. *Group Processes & Intergroup Relations*, *10*,

427-441. doi:10.1177/1368430207081533

Tyler, T. R. (1999). Why people cooperate with organizations: An identity-based perspective. In R. Sutton & B.M. Staw (Eds.) *Research in organizational behavior* (Vol. 21, pp 201-246). US: Elsevier Science/ JAI Press.

Tyler, T.R. (2010). *Why people cooperate: The role of social motivations*. Princeton: Princeton University Press.

Tyler, T. R., & Bies, R. (1990). Interpersonal aspects of procedural justice. In J. S. Carroll (Ed.), *Applied social psychology in business settings* (pp. 77-98). Hillsdale, NJ: Lawrence Erlbaum Associates, Inc.

Tyler, T. R., & Blader, S. L. (2000). *Cooperation in groups: Procedural justice, social identity, and behavioral engagement*. Philadelphia: Psychology Press.

Tyler, T. R., & Blader, S., (2001). Identity and cooperative behaviour in groups.

*Group Processes & Intergroup Relations*, *4* (3), 207-226.

doi: 10.1177/1368430201004003003

Tyler, T.R., & Blader, S.L. (2003). The group engagement model: Procedural justice, social identity, and cooperative behavior. *Personality and Social Psychology*

*Review*, 7 (4), 349-361. doi: 10.1207/S15327957PSPR0704\_07

Tyler, T., DeGoey, P., & Smith, H. (1996). Understanding why the justice of group procedures matters: A test of the psychological dynamics of the group-value model. *Journal of Personality and Social Psychology*, 70 (5), 913-930.  
doi: 10.1037/0022-3514.70.5.913

Tyler, T. R., & Lind, E. A. (1992). A relational model of authority in groups. In M.P Zanna (Ed.) *Advances in experimental social psychology*, (Vol. 25, pp. 115-191). New York: Academic Press.

Van Dick, R., Grojean, M.W, Christ, O., & Wieseke, J. (2006). Identity and the extra mile: Relationships between organizational identification and organizational citizenship behavior. *British Journal of Management*, 17 (4), 283-301. doi: 10.1111/j.1467-8551.2006.00520.x

Van Dick, R., & Schuh, S.C. (2010). My boss' group is my group: Experimental evidence for the leader-follower identity transfer. *Leadership & Organization Development Journal*, 31 (6), 551-563. doi: [10.1108/01437731011070032](https://doi.org/10.1108/01437731011070032)

van Knippenberg, D. (2000). Work motivation and performance: A social identity perspective. *Applied Psychology: An International Review*, 49, 357-371. doi: 10.1111/1464-0597.00020

van Knippenberg, D. (2011). Embodying who we are: Leader group prototypicality and leadership effectiveness. *The Leadership Quarterly*, 22 (6), 1078-1091.  
doi:10.1016/j.leaqua.2011.09.004

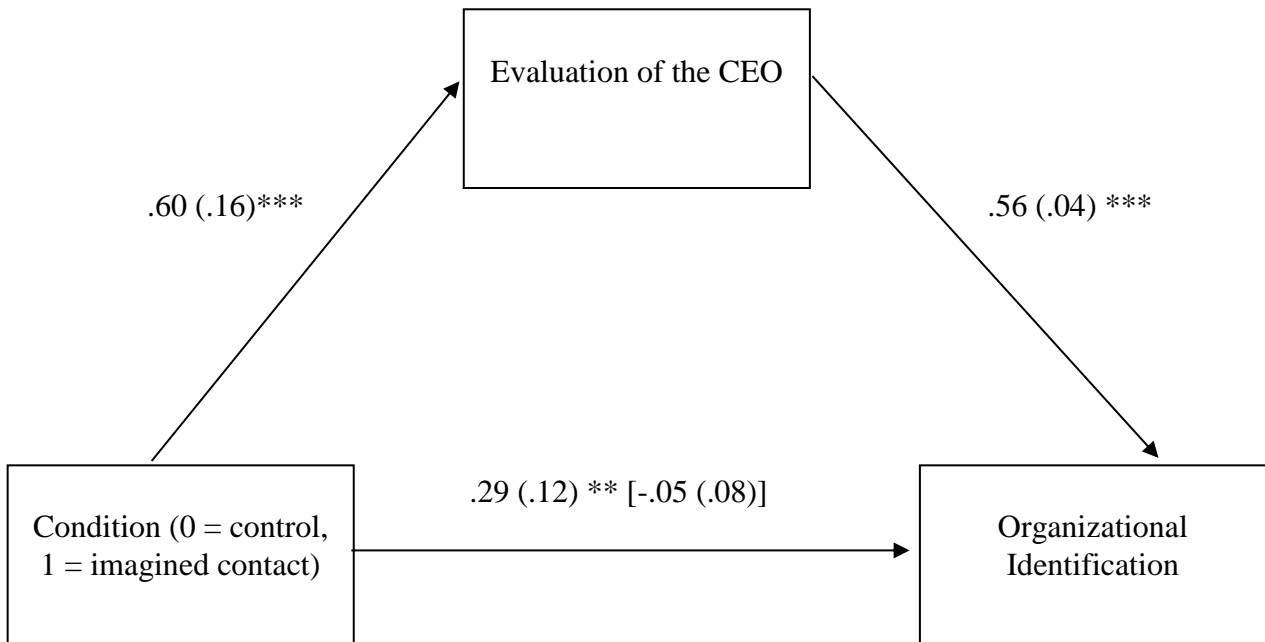
van Knippenberg, D., & Hogg, M. A. (2003). A social identity model of leadership effectiveness in organizations. In R. M. Kramer, & B. M. Staw (Eds.), *Research in organizational behavior* (Vol. 25, pp. 243-295) Amsterdam: Elsevier.

van Knippenberg, B., & van Knippenberg (2005). Leader self-sacrifice and leadership

- effectiveness: The moderating role of leader prototypicality. *Journal of Applied Psychology*, 90, 25–37 doi: 10.1037/0021-9010.90.1.25
- van Knippenberg, D., van Knippenberg, B., De Cremer, D., & Hogg, M.A. (2004). Leadership, self, and identity: A review and research agenda. *The Leadership Quarterly*, 15, 825-856. doi:10.1016/j.leaqua.2004.09.002
- van Knippenberg, D., & Van Schie, E.C.M. (2010). Foci and correlates of organizational identification. *Journal of Occupational and Organizational Psychology*, 73 (2), 137-147. doi: 10.1348/096317900166949
- Vezzali, L., Capozza, D., Stathi, S., & Giovannini, D. (2012). Increasing outgroup trust, reducing inhumanization, and enhancing future contact intentions via imagined intergroup contact. *Journal of Experimental Social Psychology*, 48, 437-440. doi:10.1016/j.jesp.2011.09.008
- Walumbwa, F.O., Avolio, B.J., Zhu, W. (2008). How transformational leadership weaves its influence on individual job performance: The role of identification and efficacy beliefs. *Personnel Psychology*, 61, 793-825. doi 10.1111/j.1744-6570.2008.00131.x
- Williams, S., & Shiaw, W.T. (1999). Mood and organizational citizenship behavior: The effects of positive affect on employee organizational citizenship behavior intentions. *The Journal of Psychology: Interdisciplinary and Applied*, 133 (6), 656-668. doi: 10.1080/00223989909599771
- Wilson, M., & Knoblich, G. (2005). The case of motor involvement in perceiving conspecifics. *Psychological Bulletin*, 131 (3), 460-473. doi: 10.1037/0033-2909.131.3.460
- Wright, S. C., Aron, A., McLaughlin-Volpe, T., & Ropp, S. A. (1997). The extended contact effect: Knowledge of cross-group friendships and prejudice. *Journal of*

*Personality and Social Psychology*, 73, 73-90. doi: 10.1037/0022-3514.73.1.73

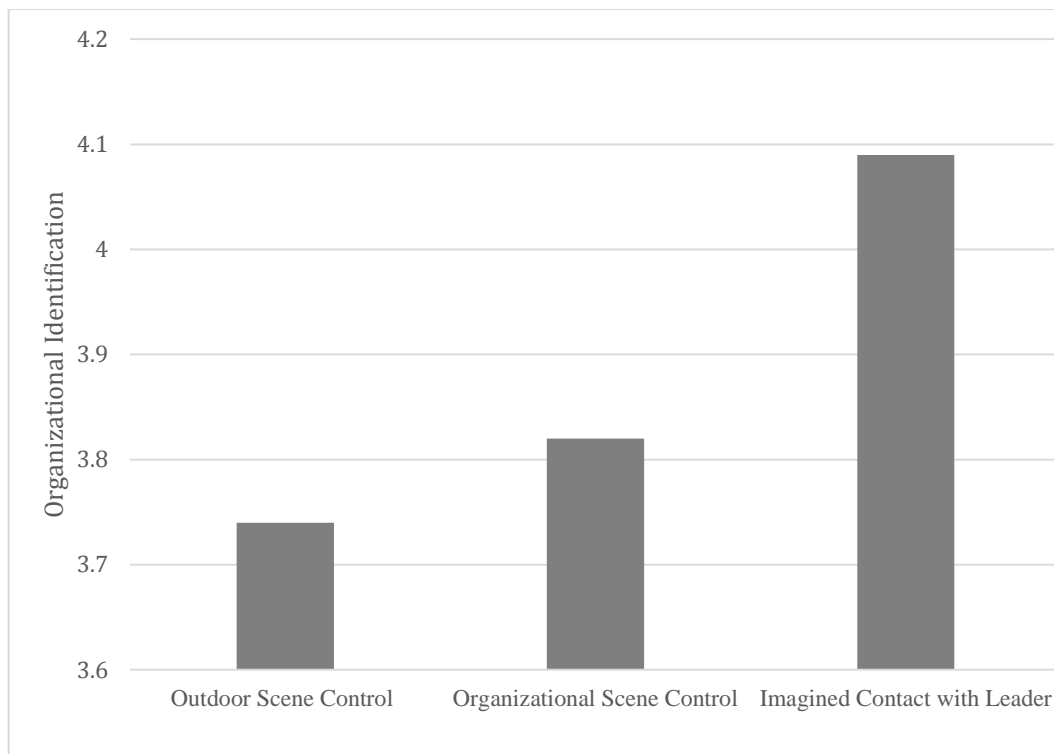




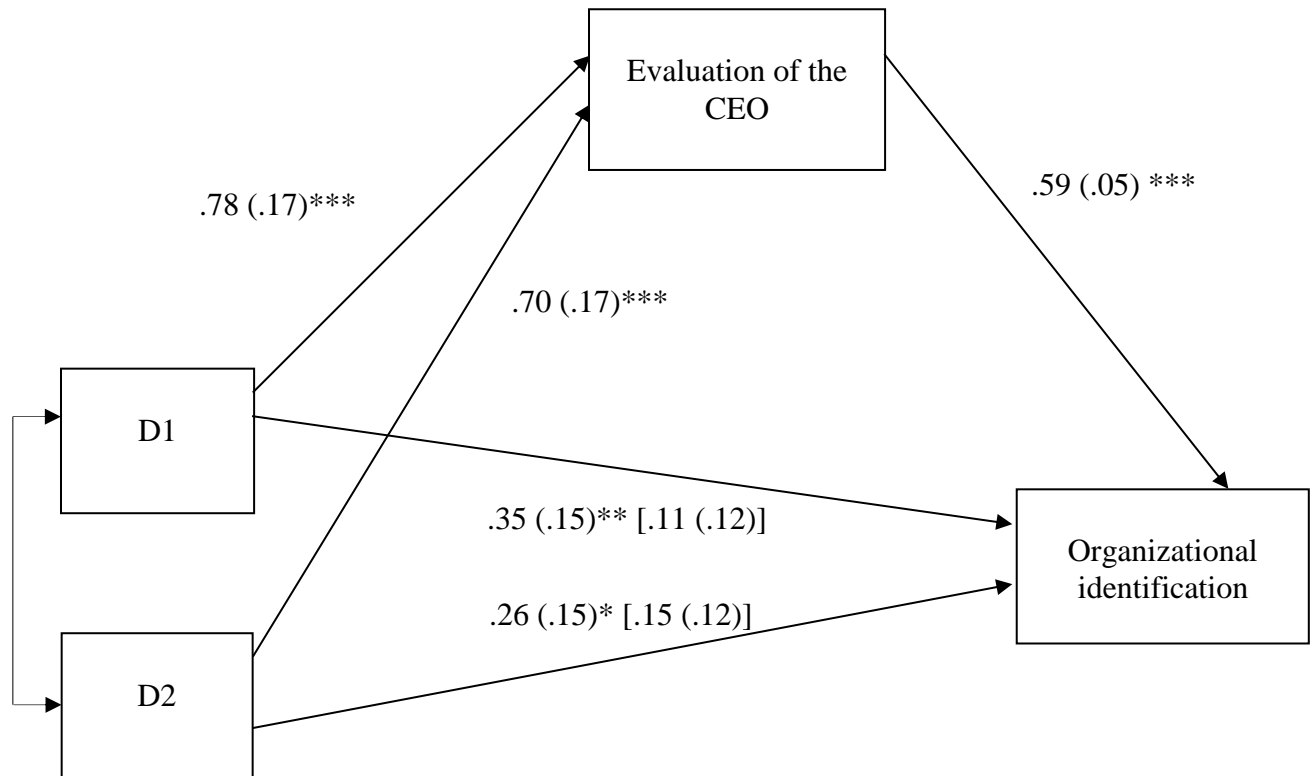
*Figure 1.* Mediation model of the relationship between imagined contact and organizational identification through evaluation of the CEO (Experiment 1A).

*Note:* Path estimates represent unstandardized coefficients. Standard errors presented in parentheses. The direct effect after controlling for the mediator is shown in brackets.

\* $p < .10$  \*\* $p < .05$  \*\*\* $p < .01$ .



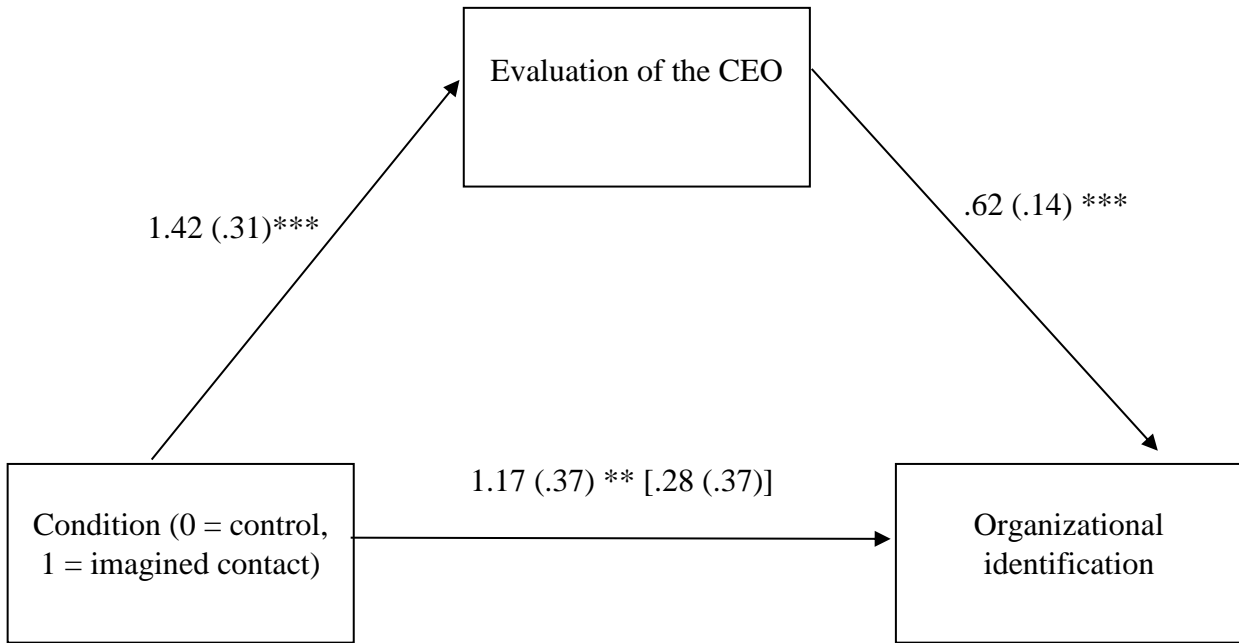
*Figure 2.* Mean level of organizational identification per condition (Experiment 1B).



*Figure 3.* Mediation model of the relationship between imagined contact and organizational identification through evaluation of the CEO (Experiment 1B). D1 tests the effect of imagined contact compared to the outdoor scene control. D2 tests the effect of the imagined contact compared to the organizational scene control.

*Note:* Path estimates represent unstandardized coefficients. Standard errors presented in parentheses. Direct effects after controlling for the mediator are shown in brackets.

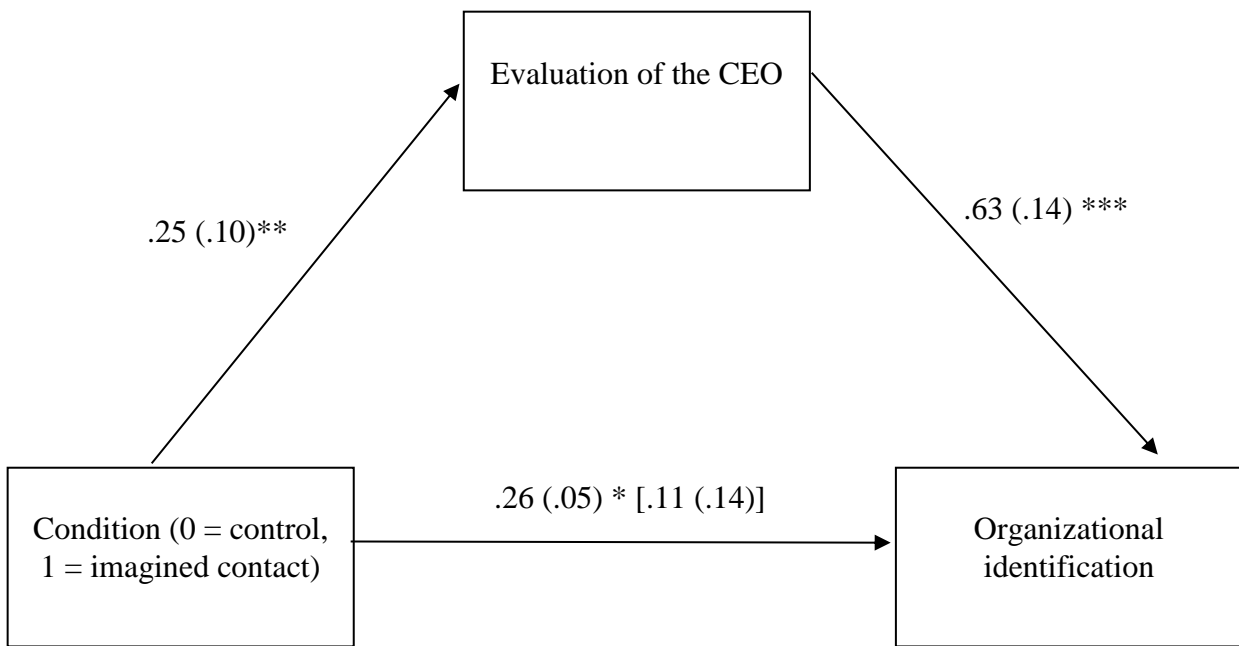
\* $p < .10$  \*\* $p < .05$  \*\*\*  $p < .01$ .



*Figure 4.* Mediation model of the relationship between imagined contact and organizational identification through evaluation of the CEO (Experiment 2A).

*Note:* Path estimates represent unstandardized coefficients. Standard errors presented in parentheses. The direct effect when controlling for the mediation is shown in brackets.

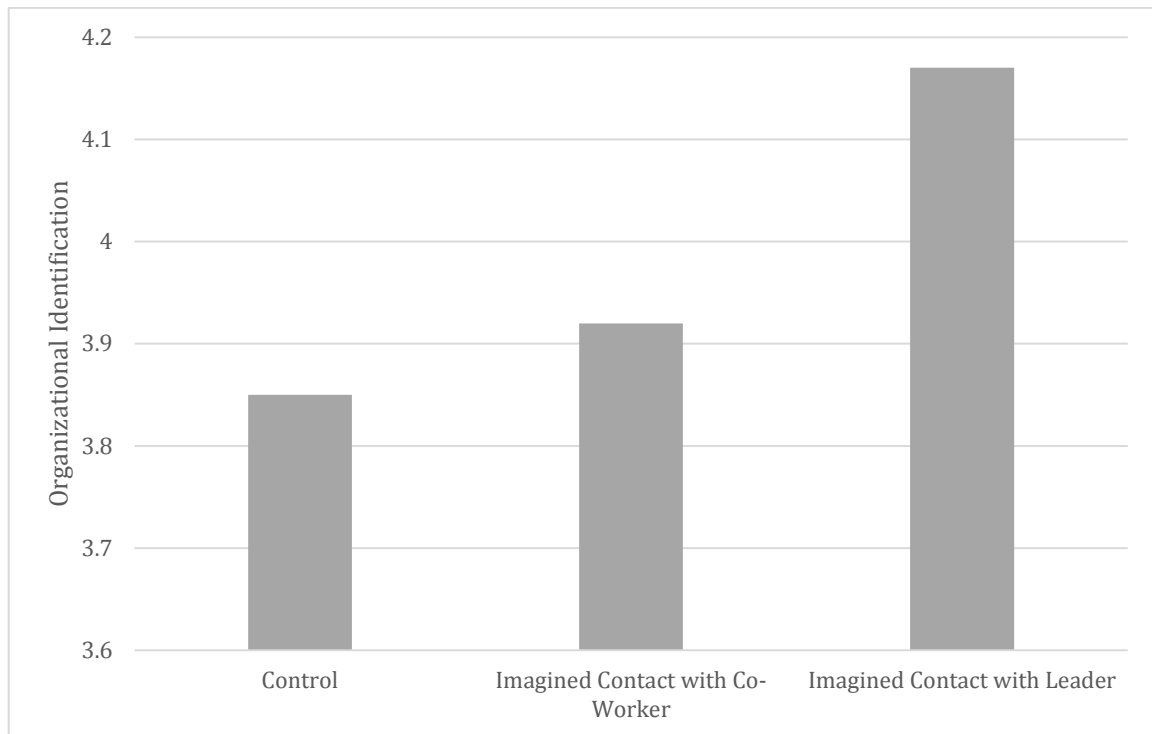
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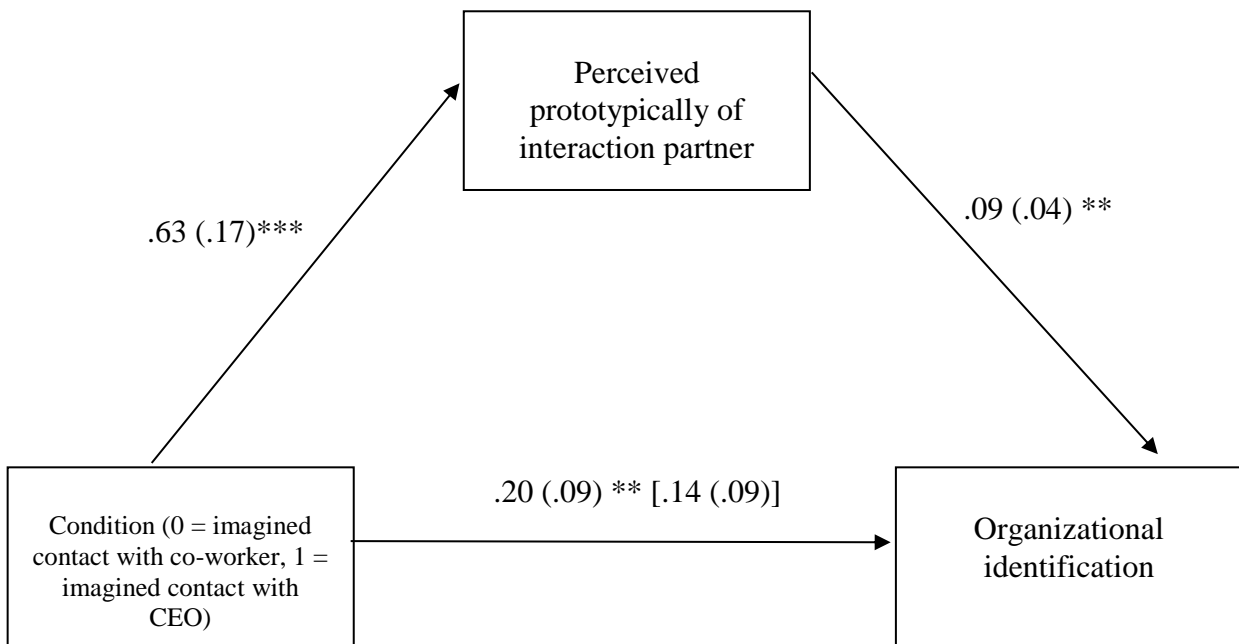
*Figure 5.* Mediation model of the relationship between imagined contact and organizational identification through evaluation of the CEO (Experiment 2B).

*Note:* Path estimates represent unstandardized coefficients. Standard errors presented in parentheses. The direct effect after controlling for the mediator is shown in brackets.

\* $p < .10$  \*\* $p < .05$  \*\*\*  $p < .01$ .



*Figure 6.* Mean level of organizational identification per condition (Experiment 3A).



*Figure 7.* Mediation model of the relationship between imagined contact with CEO (vs. imagined contact with co-worker) and organizational identification through perceived prototypically of the interaction partner (Experiment 3B).

*Note:* Path estimates represent unstandardized coefficients. Standard errors presented in parentheses. The direct effect after controlling for the mediator is shown in brackets.

\* $p < .10$  \*\* $p < .05$  \*\*\*  $p < .01$ .

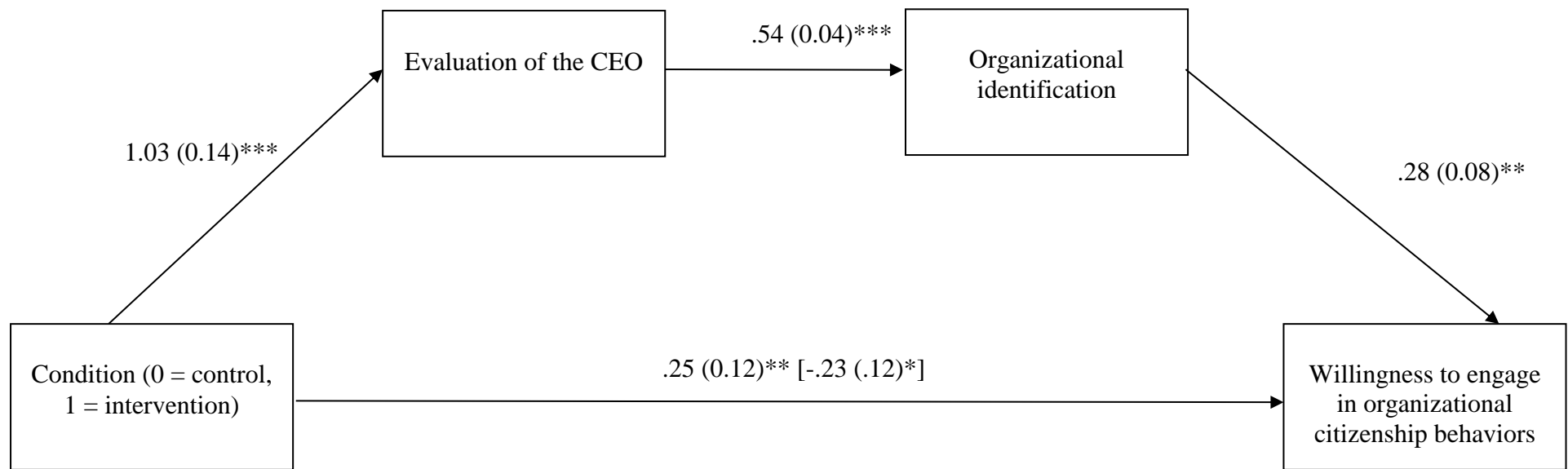


Figure 8. A serial mediation model tested in Experiment 4 in which imagined contact (independent variable) exerts an indirect effect on willingness to engage in organizational citizenship behaviors (dependent variable) through evaluation of the CEO (Mediator 1) and organizational identification (Mediator 2).

Note: Path estimates represent unstandardized coefficients. Standard errors presented in parentheses. The direct effect after controlling for the mediator is shown in brackets.

\* $p < .10$  \*\* $p < .05$  \*\*\*  $p < .01$ .



**Appendix**  
**Organizational Vignette**

We would like you to imagine that you work for a company named Flash Media. Flash media is a marketing agency. Their business involves creating, planning and producing advertising campaigns for client groups. The company has been established for over 50 years. They have multiple offices across the country and a large portfolio of work for a broad range of clients. They employ over 600 members of staff. On a day-to-day basis your job involves taking briefs from clients and liaising with designers and programmers to ensure that projects are delivered on time and to specification.

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