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# **ORIGINAL ARTICLE**



# The intergroup sensitivity effect in mergers and acquisitions: Testing the role of merger motives

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# **Abstract**

Research has shown that people are more defensive to criticism when it stems from an outgroup member, compared to an ingroup member (the intergroup sensitivity effect: ISE). We conducted two online vignette experiments to examine the ISE in the context of an organizational merger and the role of merger motives for the ISE. We predicted that the ISE would also emerge in mergers and acquisitions (M&As), but people would respond less negatively to criticism from the outgroup when the motive for the merger is described as achieving synergies rather than growth. In Experiment 1 (N = 452), which did not mention any motives behind the acquisition, a significant ISE emerged. Experiment 2 (N = 587) again showed an ISE regardless of the merger motive. In both experiments, the ISE was mediated by perceptions of the outgroup criticism as less legitimate and constructive. Overall, this research points to the intergroup sensitivity effect as a relevant phenomenon during post-merger integration.

# 1 | INTRODUCTION

Receiving criticism of the group can be difficult for group members. However, legitimate or constructive criticism is vital for group decision making and the group's success (Sommer & Kulkarni, 2012). Legitimate criticism can help to point out blind spots of group issues and push group members to reconsider their decisions and adjust their behaviors (Nemeth & Owens, 1996). For instance, Packer (2008) found that strongly identified group members might engage in dissent and make criticisms of the group when they believed the group norms were harmful to the collective. Thus, openness to criticism and dissenting opinions are indispensable in group life (De Dreu & West, 2001).

The group membership of the critic has been found to be an important factor influencing group members' openness to criticism (Hornsey & Imani, 2004; Hornsey et al., 2002; Hornsey, 2016). Compared with criticism from ingroup members, people are

less receptive to criticism from outgroup members. For instance, in an early study on the intergroup sensitivity effect (ISE), Hornsey et al. (2002) found that Australians were more defensive when their country was criticized by Non-Australians than when it was criticized by Australians. Ingroup criticism was evaluated as more constructive than outgroup criticism. If it is not handled well, intergroup criticism might trigger a variety of negative outcomes. For example, Thürmer and McCrea (2018) showed in five experiments that critical comments from the outgroup do not only lead to outgroup derogation but also to hostile actions toward outgroup members. Subsequent research showed that criticism from the outgroup leads to counterarguing at the expense of group productivity (Thürmer et al., 2019).

The ISE can be explained on the basis of social identity theory (e.g., Hornsey & Imani, 2004; Hornsey et al., 2002). According to social identity theory, people define themselves as members of social groups; part of an individual's self-concept derives from the social groups he or she belongs to (Tajfel & Turner, 1986). People

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who identify with their group are motivated to see their group as being more positive than outgroups. Based on social identity theory, criticism from an ingroup member could be interpreted in a positive way, because people from the same group are tacitly assumed to care for their group and to have an interest in maintaining their group identity. However, when people receive criticism from an outgroup member, their social identity might be threatened. In order to maintain positive self-evaluation and protect self-esteem, people tend to defend the integrity of the group, thus showing more resistance to outgroup criticism (Hornsey & Imani, 2004; Hornsey et al., 2002). Importantly, these results are only to be expected when the criticism is directed at the ingroup. As shown by Adelman and Verkuyten (2020), outgroup critics are evaluated more positively than ingroup critics when their criticism is directed at the outgroup. These results suggest that outgroup critics are not rejected because of their outgroup identity per se, but because they are assumed to be less knowledgeable and constructive.

Such ingroup-outgroup dynamics are potentially relevant in all organizations with substructures. For example, a marketing department may come up with suggestions to change the design of a product. However, if these suggestions are viewed by the engineers as outgroup criticism, they are not likely to be appreciated. Thus, the ISE can be a factor that impedes organizational learning and innovation. In the present research, we study the ISE and its potential moderators in a context that is particularly likely to involve salient ingroup-outgroup distinctions, namely the context of Mergers and Acquisitions (M&As).

# 2 | INTERGROUP SENSITIVITY EFFECT IN ORGANIZATIONAL CONTEXTS

The ISE has been studied in different circumstances. For instance, it has been found in the context of people from different nations (Hornsey et al., 2007; Hornsey & Imani, 2004), student groups from different universities (O'Dwyer et al., 2002), people varying in their seniority (Hornsey et al., 2007) or religion (Ariyanto et al., 2006). All of these studies replicated the ISE by showing that ingroup criticism is viewed as more positive than out-group criticism.

In the early work about the ISE, Hornsey et al., (2002) mentioned that the ISE can be applied to organizational contexts, too. For instance, in order to reduce employees' defensiveness toward criticism, they proposed that managers could appeal to a shared organizational identity (e.g., "You must raise productivity or WE might become uncompetitive"). Surprisingly, though it seems meaningful to apply the ISE to organizational practices, it has been examined only in few empirical studies. Hornsey et al. (2007) investigated how organizational members respond to criticism stemming from a newcomer or an old-timer (i.e., someone with longer tenure at the organization). They found that the newcomer aroused more resistance than the old-timer; the effect was mediated by the extent to which the critic was seen to be attached to their group identity. Specifically, when an old-timer

criticized their group, participants were confident that he/she was psychologically invested in and connected to the group. However, when the criticism was made by a newcomer, participants would question whether the critic was attached to his or her group identity. Thus, group-directed criticism is less influential and can arouse more negative reactions when it stems from a newcomer rather than an old-timer.

The goal of the present research was to extend the scarce research on the ISE in organizational contexts. More specifically, we sought to understand the role of the ISE in the context of a form of organizational change that often creates friction and employee resistance: mergers and acquisitions (M&As). A merger or an acquisition can be defined as "a formal recategorization of two social groups as one new group" (Van Knippenberg et al., 2002, p. 234). Thus, ingroups and outgroups exist in M&As by definition. Indeed, studies have found that intergroup dynamics (e.g., us-vs.-them mindsets) become salient in both groups (e.g., Terry & Callan, 1998), which may hinder the collaboration after M&As. Weber and Camerer (2003) showed experimentally that group coordination deteriorates and hostility increases when formerly separate groups are merged. This might be due to an ingroup/outgroup bias which often occurs after M&As. For instance, Haunschild et al. (1994) found that employees show ingroup favoritism and treat outgroup members less fairly in M&As.

In a later study, Giessner and Mummendey (2008) pointed out that M&As which maintain salient intergroup differences and fail to create a common identity are likely to experience conflict when performance is low. When performance drops, constructive criticism, whether it comes from ingroup members or outgroup members, could be important for detecting blind spots of group issues and pushing group members to reconsider their decisions. Thus, it is important to understand if the ISE occurs in the context of M&As, and if so, what might be the conditions influencing its strength.

Previous research on moderators of the ISE has revealed that the ISE is not inevitable but depends on how the criticism is packaged and delivered. First, Moscatelli et al. (2019) have shown that criticism from an outgroup source is evaluated more positively if it is formulated in more concrete terms (e.g., "Italians talk loudly") rather than abstractly (e.g., "Italians are noisy"). Second, Hornsey et al. (2008) found that outgroup critics are viewed more positively when they combine their criticism with praise of another aspect of the criticized group, or when they acknowledge a similar problem in their own group. In contrast, the ISE is not reduced when the criticism targets only some group members (Hornsey et al., 2008), when the ingroup's identity has been affirmed beforehand (Thürmer et al., 2019), or when the criticism is based on high-quality arguments (Esposo et al., 2013).

Although some of the moderator effects established by previous research appear to be applicable to M&A contexts (e.g., the rhetorical strategies tested by Hornsey et al., 2008), we sought to examine a new moderator that might be particularly relevant in M&As, namely, the motive of an acquisition.

As in other contexts, employees of an organization involved in M&As are likely to assume more malevolent motives behind outgroup critics. However, the motive for the acquisition may also be important. Research shows that there are times when outgroup criticism is welcomed, especially when their criticism is seen as legitimate and constructive for improving the group (Hornsey et al., 2002). What might be the circumstances under which employees involved in M&A activities might perceive outgroup criticism as more constructive and respond less defensively? Possibly, the motives underlying the merger affect the way outgroup criticism is perceived.

M&As take place for different strategic motives, the most common motives are synergy (Damoah et al., 2015) and growth (Schweizer, 2005). The synergy motive assumes that the combination of two firms is more profitable than the two individual firms (Chatterjee, 1986). Synergy is created when two companies have complementary capabilities, which provide a chance for the acquiring firm to access valuable know-how held by the acquired firm (Hitt et al., 2009). Thus, when a CEO emphasizes that the motive behind the merger is to expand on the know-how of the acquiring company, it might create a learning orientation (Shimizu et al., 2004) that could make employees more open to criticism. In contrast, other M&As are pursued to achieve growth. Growth motive M&As might allow companies to expand into different product markets without starting from scratch. However, this motive does not necessarily entail knowledge transfer or the necessity to learn. In this strategy, the acquirers adopt a "hands off" policy which requires little change in human resource policy or firm structure (Napier, 1989).

Understanding the motives behind M&As can be helpful to explain intergroup conflict (Angwin, 2007). There is evidence showing that merger motives significantly influence employees' attitudes toward the other group and the merger itself. Rentsch and Schneider (1991) studied how people respond to fictitious merger announcements depending on the relative size of their organization and the motive behind the merger (growth vs. survival). They found the most positive expectations regarding power and job security when the motive was described as growth and participants imagined being in the larger organization. However, mentioning that growth is the motive behind a merger or acquisition might leave people's attitude toward criticism relatively unchanged. In contrast, achieving synergies would seem to require being open to influences from the other organization, and therefore, the criticism might be received more positively.

Thus, it is theoretically interesting and practically relevant to explore the role of merger motives on ISE. After integrating into one new group, different reactions to ingroup and outgroup criticism might have a direct influence on group decision making and the success of integration. The focus of the current paper is to understand how people from acquiring organizations might react differently to criticism from ingroup and outgroup members after M&Ascontingent on the motives behind the M&A.

# **THE CURRENT RESEARCH**

We conducted two<sup>1</sup> online experiments embedding the usual ISE paradigm in the context of an acquisition. First, we expected to replicate the ISE in the context of M&A, such that people would show more defensiveness and negative reactions to criticism from a member of the acquired organization than to ingroup criticism. Second, we assumed that employees' learning orientation would be higher and, therefore, the ISE would be smaller when the motive of the acquisition is described as synergy rather than growth. Experiment 1 used a simple two-group design comparing reactions to ingroup versus outgroup criticism without mentioning any motives behind the merger. Having shown the ISE in Experiment 1 we used a 2 (Motive: Synergy vs. Growth) x 2 (Source of Critic: Ingroup vs. Outgroup) between-subjects factorial design in Experiment 2.

In both studies, we used both conventional significance tests and Bayes Factors using JASP (JASP Team, 2019) to aid in the interpretation of the results. In contrast to conventional significance tests, Bayes Factors allow data analysts to assess the strength of the evidence both against and for the null hypothesis (Wagenmakers et al., 2018). The output of each analysis is a Bayes Factor BF<sub>10</sub> which is the ratio of the likelihood of the data given the alternative hypothesis over the likelihood of the data given the null hypothesis. Bayes Factors greater than 3 are considered conclusive evidence for the alternative hypothesis, whereas Bayes Factors smaller than 1/3 are considered conclusive evidence for the null hypothesis.

# **EXPERIMENT 1**

In the first experiment, we temporarily set aside the role of different motives and aimed to establish whether the ISE exists at all in the context of hypothetical M&A scenarios, and if so, what are its psychological underpinnings.

# 5.1 | Method

# 5.1.1 | Participants and design

According to a power analysis, at least n = 504 participants are required to achieve a statistical power of 80% for detecting small effects according to Cohen's thresholds (d = .25) with an alpha of 5%. Thus, we recruited n = 517 participants through M-Turk and paid them 0.5 U.S. dollars for participation. Participants were randomly assigned to one of two conditions (Critic's Group Membership: ingroup vs. outgroup). We removed 65 participants (12.57%) who

<sup>&</sup>lt;sup>1</sup>For transparency we would like to mention that we conducted another experiment in which a large number of participants failed to pass the comprehension check, resulting in a small sample size and non-significant effects. Because the results of this initial experiment were inconclusive they are omitted from the present report. However, the data underlying this study as well as the data for the two studies reported in this paper can be found in the Open Science Framework, https://osf.io/6adg5/

1591816, 2021, 8, Downloaded from https://onlinelibrary.wiley.com/doi/10.1111/jasp.12785 by Ub Frankfurt/Main Universitaet, Wiley Online Library on [08/03/2023]. See the Terms Wiley Online Library for rules of use; OA articles are governed by the applicable Creative Commons

failed to correctly answer the comprehension checks. Our final sample (N = 452) consisted of 179 women and 273 men.

# 5.1.2 | Materials and procedure

The experiment was presented to participants as a study investigating how people respond to a critical event occurring in an organization. Participants first recorded their demographic details and were then asked to imagine interacting with an ingroup or outgroup member in the context of an acquisition. The description of the merger context included company logos (see Figure 1) and read as follows:

You have been working for a company called Sun Group (see the first logo below) for 5 years, Sun group is a famous company in the retail industry. It has been listed to fortune global 500 for five consecutive years. Currently, your organization (Sun Group) has just acquired a small company called Moon group (see the second logo below). After the acquisition, some colleagues from Moon Group move to your office located in a city center of a global metropolis.

Participants were then asked two questions as comprehension checks (i.e., "which organization are you coming from?" and "which organization has acquired the other one?"). On the same page, we also measured *learning orientation*, the variable presumably affected by merger motives, to gain insights for the manipulation of merger motives in Experiment 2 ("How much do you think your organization can learn from listening to employees from the other organization?"; "How important is it that you pay attention to what employees from the other organization say about your organization?"; "How important is it that you and your colleagues learn new things from the other organization?"), Cronbach's alpha = .85.

### Manipulating critic's group membership

Next, participants were randomly assigned to either an ingroup or outgroup condition. Depending on the condition, the colleague expressing criticism was described differently: Alex is a colleague from [your company (Sun Group)/from the acquired company (Moon Group)], Alex is 40 years old and likes reading, keeping up with current events and is interested in talking about fresh news in the company. Participants



FIGURE 1 The company logos used in Experiment 2

completed one question about the group membership of Alex after reading the introduction, that is, to what extent do you perceive Alex as a member of your organization? After that, a hypothetical scenario was presented: In a coffee break after lunch, you see [your colleague Alex (from Sun Group)/your colleague Alex (from Moon Group)]. Alex begins to make a number of criticisms about your company (Sun Group). Alex criticizes that: "the culture at [our/your] workplace is not good at all, there is a very bad feel around [our/your] place." Alex also suggests that "the leadership at [our/your] workplace could be improved and that the physical environment could be improved." Our hypothetical scenario was adapted from the manipulation used by Hornsey et al. (2007). Consistent with Hornsey et al. (2002), the critic referred to the workplace as "our workplace" in the ingroup condition and as "your workplace" in the outgroup condition.

### Mediators

We then measured a series of variables as our potential mediators, *identity attachment* (i.e., "please indicate to which extent you think that Alex cares about your group?"), *constructiveness* (measured with the item "To what extent do you think the comments were constructive?"), and *legitimacy* (measured with three items: "To what extent do you think the speaker's comments were well-informed?", "To what extent did you think the speaker had the right to make these comments?", "To what extent do you think the speaker was qualified to make these comments?", Cronbach's alpha = .90) Responses to these and all subsequent items were made on 5-point scales (1 = not at all, 5 = very much).

# Dependent variables

Participants reported on the extent to which they perceived the personality of the critic as positive (intelligent, trustworthy, friendly, open-minded, likable, nice, respect, interesting; Cronbach's alpha = .96) and the criticism as negative (disappointing, irritating, offensive, insulting and judgmental; Cronbach's alpha = .92).

# 5.2 | Results

# 5.2.1 | Manipulation check

A t-test on ingroup belonging revealed a significant main effect of speaker group membership, t(445.01) = 4.66, p < .001,  $\mathrm{BF}_{10} = 3.133$ , indicating that the ingroup critic (M = 4.50) was rated as belonging to their organization to a greater extent than the outgroup critic (M = 4.15). Thus, participants understood the manipulation of different group memberships as intended.

# 5.2.2 | Dependent measures

Consistent with the intergroup sensitivity effect, the ingroup critic was evaluated more positively on personality attributes (M=3.10) than the outgroup critic (M=2.62), t(449)=5.04, p<.001,

 $BF_{10} = 17,082$ , d = .47. Likewise, the criticism expressed by the ingroup critic was perceived as less negative (M = 2.71) than the same criticism expressed by the outgroup critic (M = 3.49), t(449) = 7.58, p < .001, BF<sub>10</sub> = 3.133e+10, d = .71.

Further t-tests also revealed significant effects of speaker group membership on identity attachment, t(449) = 7.30, p < .001, BF<sub>10</sub> = 5.066e+9, d = .69, legitimacy,  $t(449) = 8.33, p < .001, BF_{10} = 5.237e+12$ , d = .78, and constructiveness, t(449) = 4.92, p < .001,  $BF_{10} = 9,957$ , d = .46. As expected, the ingroup critic was perceived as more strongly attached to the group (M = 3.55) than the outgroup critic (M = 2.82), and their criticism was considered to be more legitimate (M = 3.66), and more constructive (M = 3.26) than was the criticism from the outgroup member (M = 2.90, and M = 2.72 respectively).

Finally, the sample mean of participants' learning orientation (which was measured prior to the ingroup-outgroup manipulation) was 3.94, suggesting that there would be room for increasing and decreasing learning orientation by describing the motives for the merger in Experiment 2. Cell means, t-values, and Cohen's d are summarized in Table 1.

#### 5.2.3 Tests of mediation

We tested the psychological underpinnings of the intergroup sensitivity effect by performing serial bootstrapping mediation analysis (1,000 bootstraps). We assumed that legitimacy, identity attachment, and constructiveness were the three mediators of the ISE.

For positive evaluations of the personality of the critic as dependent variable, we observed significant indirect effects of speaker group membership (1 = ingroup, 2 = outgroup) via legitimacy (b = -.57, 95% CI [-.72, -.43]), identity attachment (b = -.46, 95% CI [-.59, -.37]), and constructiveness (b = -.30, 95% CI [-.43, -.17]).

For negative reactions to the criticism as dependent variable, we observed significant indirect effects of speaker group membership (1 = ingroup, 2 = outgroup) via legitimacy (b = .43, 95% CI [.30, .56]), identity attachment (b = .38, 95% CI [.25, .50]), and constructiveness (b = .22, 95% CI [.12, .32]).

This analysis confirms that all three mediators qualify as processes leading to the intergroup sensitivity effect. More specifically, the results are consistent with the assumption that people respond more negatively to outgroup criticism because they view the criticism as less legitimate, less constructive and they think the person expressing the criticism does not care about their group. However, it is important to point out that, despite the popular belief, mediation analysis cannot prove the mediation model to be true, considering that several alternative models (e.g., dependent variable has a causal effect on the mediator variable) could also generate the pattern of results (Fiedler et al., 2011). Rather, it only shows that the results are consistent with the assumed mediation model.

#### 5.3 Discussion

The main objective of Experiment 1 was to examine whether the ISE could be found in an M&A context. A simple acquisition scenario was presented without mentioning any merger motive. As predicted, an ISE (Hornsey et al., 2002, 2004) emerged. Specifically, criticism from an outgroup member was perceived more negatively than criticism from an ingroup member and the outgroup critic was derogated more strongly than was the ingroup critic when they made the same

As predicted, the ISE was mediated by perceptions of the extent to which the critic was attached to his or her workplace identity. The outgroup critic was seen to be less attached to their workplace identity than the ingroup critic. Specifically, participants viewed the outgroup critic as caring less about their organization than the ingroup critic, which in turn was related to more resistance to and derogation of the outgroup critic. The legitimacy and constructiveness of the criticism were found as the other two mediators. Compared with the outgroup critic, the ingroup critic was seen as more qualified to criticize the group and the criticism was rated as fairer, more wellinformed, and constructive. Indeed, based on social identity theory, the outgroup criticism could pose an identity threat. In order to maintain positive self-evaluation and protect self-esteem, people tend to defend the integrity of the group, thus, the ingroup member's criticism was perceived as more legitimate and constructive.

In M&As contexts, ingroup and outgroup speakers might be both perceived as ingroup members. Indeed, the outgroup critic

TABLE 1 Effects of speaker group membership on responses to ingroup and outgroup criticism (Experiment 1)

	Cell means	Cell means			Confidence
Measure	Ingroup	Outgroup	t	Cohen's d	interval
Learning orientation	3.90(0.78)	3.99(0.75)	-1.24	12	[-0.27,0.04]
Identity attachment	3.55(1.04)	2.82(1.07)	7.30***	.69	[0.53,0.84]
Legitimacy	3.66(0.89)	2.90(1.05)	8.33***	.78	[0.62,0.94]
Constructiveness	3.26(1.13)	2.72(1.19)	4.92***	.46	[0.30,0.62]
Negative reactions to criticism	2.71(1.13)	3.49(1.08)	-7.58***	71	[-0.87,-0.55]
Personality attributes	3.10(0.92)	2.62(1.09)	5.04**	.47	[0.32,0.63]

Note: Numbers in parentheses are standard deviations.

<sup>\*</sup>p < .05; \*\*p < .01; \*\*\*p < .001.

received ratings above the midpoint of the scale (i.e., "To what extent do you perceive Alex as a member of your organization?" 1 = not at all, 5 = very much;  $M_{\text{ingroup}} = 4.61$ ,  $M_{\text{outgroup}} = 4.21$ ). However, the difference between ingroup and outgroup critic ratings was significant, and this was sufficient for the ISE to emerge. This suggests that the ISE exists not only in the context of clear-cut ingroup-outgroup distinctions (e.g., different nations, different religions), but also in nested structures where the group membership of the critic can be ambiguous. Indeed, considering the superordinate level of categorization, employees from the acquired or acquiring company are "ingroup" members in terms of post-acquisition organization, but at the subgroup level, the same employees from the acquired group could be categorized as outgroup members by people from the acquiring group.

# 6 | EXPERIMENT 2

Having demonstrated the ISE in the context of M&As without mentioning a motive for the merger, we were now interested in the question if different motives would be associated with smaller or larger ISE. Thus, Experiment 2 relied on the same scenario as Experiment 1 but added a new version of the manipulation of motives.

# 6.1 | Method

# 6.1.1 | Participants and design

In order to ensure that we would have at least 80% power to detect the expected interaction between Critic's Group Membership and Motive, we used the simulation tool provided by Lakens and Caldwell (2019). We assumed that the ISE would be as large as .5 SD in the growth condition, but only .25 SD in the synergy condition. The simulation revealed that a sample size of n = 560 affords 83% power for detecting this interaction with an alpha of 5%. In total, we recruited 738 participants through M-Turk and paid them .5 U.S. dollars for participation. Participants were randomly allocated to the cells of a 2 (Motive: Synergy motive vs. Growth motive) × 2 (Source of Critic: Ingroup vs. Outgroup) between-subjects factorial design. We removed 151 participants (20.46%) who failed to correctly answer the comprehension checks (i.e., after presenting the information of the organization and the acquisition, we asked the question: "which organization are you coming from?" and "which organization has acquired the other one?"). Our final sample (N = 587) consisted of 217 women, 369 men, and 1 participant who reported their gender as "other".

# 6.1.2 | Materials and procedure

The general procedure, measures and cover story were identical to Experiment 1.

Motive manipulation

Participants in different groups read the same introduction about their organization (see Experiment 1). The acquisition scenarios were different across the motive conditions. Those in the "synergy motive" condition read the following scenario: ...Moon Group is a company which owns a lot of business innovations, and has strong competitive advantages in e-commerce. This acquisition would help your company expand into e-commerce through learning from Moon group. Your CEO announced:" If we are open to the fresh perspectives offered by the newly acquired moon group, our company will have a great future". After the acquisition, some colleagues from Moon Group move to your office located in a city center of a global metropolis.

Those in the "growth motive" condition read the following scenario: ...Moon Group is a company which has access to international markets that your company has been lacking. Like most acquisitions, the motive for this acquisition was to expand the business of your organization and grow in new international markets. Your CEO announced: "If the newly acquired moon group keeps their great work, our company will have a great future." After the acquisition, some colleagues from Moon Group move to your office located in a city center of a global metropolis.

Participants then completed two questions designed as comprehension check ("Which organization are you coming from?", "Which organization has acquired the other organization?"). Then, participants completed three questions designed to measure *learning orientation* ("How much do you think your organization can learn from listening to employees from the other organization?"; "How important is it that you pay attention to what employees from the other organization say about your organization?"; "How important is it that you and your colleagues learn new things from organization B?", Cronbach's alpha = .74).

Manipulating critic's group membership

The manipulation of critic's group membership was identical to Experiment 1.

# 6.2 | Results

# 6.2.1 | Manipulation check

A t-test on ingroup belonging (IB) revealed a significant main effect of critic's group membership, t(577.4) = 7.14, p < .001, indicating that the manipulation of different group memberships made sense for participants, as the ingroup critic (M = 4.45) was rated as belonging to their organization to a greater extent than the outgroup critic (M = 3.95).

# 6.2.2 | Dependent measures

A t-test on learning orientation revealed a significant main effect of merger motive, t(583) = 2.17, p < .05. The result suggests that participants expressed a significantly stronger learning orientation when the merger motive was synergy (M = 4.21) than was growth

(M = 4.09). However, a Bayesian t-test did not confirm this conclusion. With a BF<sub>10</sub> of .911, the results are almost equally likely under the null hypothesis as under the alternative hypothesis. In other words, the evidence we obtained for learning orientation being higher in the synergy condition must be considered as inconclusive. We also compared the means of learning orientation with the mean observed in Experiment 1, which revealed that the mean in the synergy condition was significantly higher than the mean in Experiment 1, t(747)= 4.96, p < .001, which was also supported by the Bayes Factor BF<sub>10</sub> = 12,253. The mean in the growth condition was also significantly higher than the mean in Experiment 1, t(740) = 2.62, p < .01, but the evidence indicated by the Bayes Factor was inconclusive,  $BF_{10} = 2.39$ . A  $2 \times 2$  ANOVA on negative reactions to criticism revealed a significant main effect of critic's group membership, F(1, 583) = 11.76,

p < .001, such that criticism from ingroup members (M = 2.86) was evaluated less negatively than criticism from outgroup members (M = 3.18), Cohen's d = .28. However, there was neither a main effect of motive, F(1, 583) = 1.43, p = .23, nor the expected interaction between critic's group membership and motive, F(1, 583) = 1.09, p = .30(see Table 2 for means and standard deviations). A Bayesian ANOVA confirmed these conclusions. The best model was the one including only a main effect of critic's group membership, which yielded a BF<sub>10</sub> of 28.83. This model was roughly six times better than the secondbest model which included the two main effects of critic's group membership and motive and yielded a  $BF_{10}$  of 5.23 (see Table 3).

A  $2 \times 2$  ANOVA on evaluations of the critic's personality revealed a similar pattern. There was a significant main effect of the critic's group membership, F(1, 583) = 8.09, p = .005. The personality of ingroup critics was evaluated more positively (M = 3.33) than the personality of outgroup critics (M = 3.12), Cohen's d = .235. The main effect of motive was non-significant, F(1, 583) = .25, p = .62. The expected interaction between the critic's group membership and motive was marginally significant, F(1, 583) = 2.845, p = .09, and would qualify as significant if one-sided testing was applied.

TABLE 2 Means and std. deviation of negative reactions to criticism and personal attributes on ingroup and outgroup criticism and critic (Experiment 2)

	Negative r	eactions to	Personal attributes		
	Ingroup	Outgroup	Ingroup	Outgroup	
Mean	2.858	3.176	3.332	3.118	
Std. deviation	1.155	1.084	0.899	0.928	

TABLE 3 Model comparison (negative reactions to criticism)

Models	P(M)	P(M data)	BF <sub>M</sub>	BF <sub>10</sub>	Error %
Null model	0.200	0.027	0.113	1.000	
Group	0.200	0.790	15.023	28.834	2.739e-6
Group + motive	0.200	0.143	0.669	5.233	3.514
Group + motive + group $\times$ motive	0.200	0.034	0.141	1.243	14.052
Motive	0.200	0.006	0.022	0.201	4.557e-4

However, a Bayesian ANOVA revealed that the best model was the one that included only a main effect of speaker's group membership,  $BF_{10} = 4.55$ , which constitutes conclusive evidence for an ISE (see Table 4). The best model was considerably better than the secondbest model (which included the two main effects and yielded a BF<sub>10</sub> of .46) and the third-best model (which included the two main effects and the interaction with a  $BF_{10}$  of .23). These results imply that there is conclusive evidence against the hypothesized interaction between critic's group membership and motive.

# 6.2.3 | Tests of mediation

We tested the psychological underpinnings of the intergroup sensitivity effect by performing serial bootstrapping mediation analysis (1,000 bootstraps). We assumed that legitimacy, identity attachment, and constructiveness were the three mediators of the ISE.

For positive evaluations of the personality of the critic as dependent variable, we observed significant indirect effects of critic's group membership (1 = ingroup, 2 = outgroup) via legitimacy (b = -.23, 95%CI[-.34, -.12]), identity attachment (b = -.22, 95% CI[-.32, -.12]), but not via constructiveness (b = -.09, 95% CI [-.18, .01]).

For negative reactions to the criticism as dependent variable, we observed significant indirect effects of critic's group membership (1 = ingroup, 2 = outgroup) via legitimacy (b = .12, 95% CI [.06, .19]), identity attachment (b = .15, 95% CI [.07, .23]), but not via constructiveness (b = .07, 95% CI [-.04, .14]).

The results demonstrate that the differences between the ingroup critics and the outgroup critics on ratings of sensitivity and personality evaluation were mediated by perceptions of how legitimate criticisms are seen to be, and how attached to the group identity the critic is seen to be. Specifically, it appears that outgroup criticism arouses more sensitivity because it is seen as less legitimate, and the critic is less strongly perceived as caring about their group than the ingroup critic.

# 6.3 | Discussion

Having obtained evidence for the ISE in the context of M&As in Experiment 1, we examined whether the ISE would be smaller when the motive for the merger was described as achieving synergies rather than growth. Experiment 2 replicated the ISE obtained in Experiment 1, but obtained no evidence for a moderating effect of merger motive. The lack of a moderating effect of merger motive

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Models	P(M)	P(M data)	BF <sub>M</sub>	BF <sub>10</sub>	Error %
Null model	0.200	0.157	0.747	1.000	
Group	0.200	0.717	10.110	4.554	1.828e-5
Group + motive	0.200	0.073	0.313	0.462	1.717
Group +motive + group $\times$ motive	0.200	0.037	0.152	0.233	1.494
Motive	0.200	0.017	0.069	0.107	8.729e-4

**TABLE 4** Model comparison (personality attributes)

may not be surprising considering the fact that motive did not reliably affect the learning orientation.

Consistent with Experiment 1 and other papers about the ISE (Hornsey & Imani, 2004; Hornsey et al., 2004), we found legitimacy and identity attachment to mediate the ISE in Experiment 2. That is to say, the ingroup critic was seen as more attached to their group and the criticism as more legitimate which in turn led participants to show more positivity to the ingroup critic. However, contrary to the results of Experiment 1 and previous research (Hornsey et al., 2002, 2004), the constructiveness of the criticism did not mediate the ISE.

# 7 | GENERAL DISCUSSION

When organizations merge, their employees often need to collaborate and respond to feedback from the merger partner. In the present article, we have sought to better understand this scenario by building on social psychological work on the intergroup sensitivity effect (ISE). We have asked our participants to imagine that their organization acquires another organization and that an employee from their organization or the acquired organization presents them with criticism. Would they respond more negatively to the criticism if it comes from an outgroup member? Overall, our results suggest that people evaluate criticism originating in the acquired organization (i.e., the outgroup) more negatively (and the critic less positively) than criticism originating in the acquiring organization (i.e., the ingroup). Thus, as in the contexts of different nations (Hornsey et al., 2007; Hornsey & Imani, 2004), universities (O'Dwyer et al., 2002), or religions (Ariyanto et al., 2006), for the first time, the ISE has been found to be also relevant in M&A contexts. Mediation analyses suggested that the results were consistent with a model in which the legitimacy of the criticism as well as the identity attachment of the critic mediate the ISE. This corresponds with the finding of Hornsey et al. (2002) that the criticism originating in the ingroup is seen to be more legitimate and the ingroup critic is seen to be more attached to the ingroup than the outgroup critic.

We further reasoned that the motive behind an acquisition might moderate the ISE. More specifically, a synergy motive implies more integration of knowledge and processes from the acquired organization than a growth motive (Hitt et al., 2009). Thus, when a merger is described with the goal of synergies rather than growth, people might be expected to be more open to criticism from the acquired organization because they view it as a learning opportunity. However,

our results did not support this notion. Participants reading a synergy scenario did not indicate a higher learning orientation than participants reading a growth scenario, and the merger motive did not moderate the ISE. Using Bayesian Analyses, we obtained conclusive evidence for the absence of the moderating influence of merger motive. Of course, our conclusion is only true in the context of the methods that we used. Employees involved in actual mergers may well respond differently than M-Turkers responding to hypothetical scenarios.

Considering the potential cost of not responding well to criticism, and the conflicts the ISE might trigger during the post-merger collaboration, it is important to further examine what could be done to prevent ISE. As our mediation analyses revealed, the ingroup critic was perceived as more psychologically attached to participant's organizational identity, and ingroup criticism was seen as more legitimate than outgroup criticism. Thus, for the outgroup critic, showing more attachment to the group could be effective in reducing resistance. In a study about ISE in organizations, Hornsey et al. (2007) proposed that outgroup members (newcomers) could choose to distance themselves from their ex-group to show their identity attachment to the current group. However, in M&As, it would be difficult for the critics to detach themselves from their original organizational identity. In fact, changing from the old identity to a new identity could trigger threats to the critics themselves (Joseph, 2014). Thus, we propose that stressing a post-merger shared identity (van Dick et al., 2018) could be a solution for an outgroup critic to gain acceptance by ingroup members. This would be in line with the results of Wirtz and Doosje (2013) who found that outgroup critics are evaluated more positively if they present themselves in terms of a shared identity.

Interestingly, contrary to previous research by Hornsey et al. (2002, 2004, 2007), constructiveness did not consistently emerge as a mediator in our experiments. This showed that even if the outgroup criticism was perceived as constructive, the outgroup critic was derogated. However, this is in agreement with the finding of Esposo et al. (2013), which showed that outgroup criticism is more likely to be "shot", even if it is objectively well-justified. This is not a trivial point in M&As where dissent or criticism from the other group can be important for organizational improvement. Thus, if such criticism is rejected because of the critic's "wrong" group membership, it would not be helpful for the organization's viability. This is a reminder to top managers that they should be more cautious about the human side with its psychological aspects during the post-merger integration.

# 8 | LIMITATIONS AND FUTURE **DIRECTIONS**

A reviewer of this paper alerted us to a procedural difference from previous research on the ISE which has often measured the evaluation of the critic's personality twice, using the first measurement as a covariate. For example, in the work of Hornsey and Imani (2004), participants first read the information about the critic and answered the measure of trait evaluation (Time 1 questionnaire), then participants read the criticism and answered the question of the trait evaluation again (Time 2 questionnaire). This technique might result in greater sensitivity for detecting the ISE because it controls for individual differences in perceptions of outgroup individuals regardless of whether they express criticism or not. The fact that we have obtained conclusive evidence regarding the ISE in two studies suggests that this procedural difference is less crucial. Nevertheless, it does seem desirable to maximize sensitivity in future research by following this covariate procedure.

We also acknowledge the limitation that our scenario described the acquired company as a "small company" and in Study 2 attributed very positive attributes to it. A comparison between Study 1 and Study 2 revealed that learning orientation was higher in Study 2, and this may reflect participants' impressions of the acquired company as a highly attractive company. This suggests a need for further research before the results can be confidently applied to acquisitions differing in size and status.

Another limitation is that our results are based on hypothetical M&A scenarios. Thus, it would seem highly promising to extend this research to field studies and also reexamine the moderating role of merger motive. In future research, our reasoning could be integrated with recent research on the functional indispensability of lower-status groups involved in a merger (Rosa et al., 2019). As this research has shown, employees from a lower-status group might cope more effectively with the merger threat when they view their ingroup as functionally indispensable. Future research on merger motives might reveal that, when the merger motive is synergy, employees of the acquiring organization consider the outgroup to be functionally indispensable to the goals of the merger and therefore be more open to criticism.

# CONCLUSION

The present research has highlighted that the intergroup sensitivity effect could play an important role in Mergers & Acquisitions. Being aware of the ISE could help managers to think twice when they are about to reject the criticism from outgroup members. In this way, the group would not miss out on potentially valuable feedback, and outgroup members would not meet with resistance because of their group membership.

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