THE IMPACT OF MERGER STATUS AND RELATIVE REPRESENTATION ON IDENTIFICATION WITH A MERGER GROUP

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This experiment tested to what extent identification with a new merger group is determined by the status of that merger group and by the relative representation of the pre-merger ingroup. One hundred university students were assigned to a team of ‘inductive’ thinkers, and were later merged with a team of ‘deductive’ thinkers to form a team of ‘analyst’ thinkers. The status of the merger group (low, high) and the relative representation of the ingroup into the novel merger group (low, high) were manipulated. Participants identified more with the merger group in the high than in the low status condition, and they identified more in the high than in the low representation condition. The predicted interaction between relative representation and merger status was not significant. However, relative representation did interact with participants’ pre-merger identification: Pre- and post-merger identification were positively related when the ingroup was highly represented, but negatively when the ingroup was lowly represented.

Even though the number of organisational mergers and acquisitions has increased dramatically over the last decades, research has shown that about half of them fail to meet the initial targets (Cartwright & Cooper, 1992), and that most result in a financial failure (Devoge & Shiraki, 2000). Based on the growing influence of the Social Identity Approach (SIA) – a combination of social identity theory (Tajfel & Turner, 1979) and self-categorisation theory (Turner, Hogg, Oakes, Reicher, & Wetherell, 1987) – in organisational psychology (e.g., Ashfort & Mael, 1989; Haslam, 2001; Hogg & Terry, 2000), it is now acknowledged that the reluctance of the employees to identify with the new group can be an important cause of the underperformance of merged...
organisations. Many studies have indeed revealed a positive relationship between organisational identification and the willingness of employees to behave in favour of that organisation (e.g., Christ, von Dick, Wagner, & Stellmacher, 2003; Tyler, 1999; van Knippenberg & van Schie, 2000).

From a SIA-perspective, there are two motives why mergers constitute a threat for employees’ organisational identification. The first is related to the perceived status of the merger group. SIA assumes that individuals strive to belong to high status groups, i.e., groups that are positively differentiated from relevant comparison groups on relevant comparison dimensions. Only if this is the case, group membership would contribute to a positive social identity, and consequently to a more positive self-concept. In a series of laboratory experiments, Ellemers and colleagues showed that participants identified more with a high status ingroup than with a low status ingroup (for an overview, see Ellemers, 1993). Similarly, Smidts, Pruyn, and van Riel (2001) reported that the perceived external prestige (or status) of an organisation is positively related to employees’ organisational identification.

It can thus be expected that when two organisations merge, employees are likely to be concerned about the implications of this merger for the status of their new ingroup. For example, members of a pre-merger high status group might fear that merging with a lower status pre-merger outgroup results in an overall lower ingroup status after the merger. Indirect evidence for this assumption was obtained by Haunschild, Moreland, and Murrell (1994). In their experiment, undergraduate students had to work in dyads on a survival problem, and were later merged with another dyad. It turned out that successful dyads were less enthusiastic to merge because they feared that they would be less successful after merging with an unsuccessful dyad.

Despite the intuitive importance of merger status, until now survey-studies on organisational mergers have focused mainly on the effects of pre-merger status on post-merger identification (e.g., Terry & Callan, 1998; Terry, Carey, & Callan, 2001; Terry & O’Brien, 2001). These studies showed that members of high status pre-merger groups identify more strongly with the merger group than members of low status pre-merger groups. In order to assess the impact of the status of the merger group, Boen, Vanbeselaere, and Swinnen (2005) conducted a survey-study in the context of two soccer teams that were about to merge. They observed that the fans supported both the merging process and the new merger team more strongly as they expected a higher status for the new merger team. However, because this study was conducted before the merger took place, no measure of post-merger identification could be included. At present, only Boen, Vanbeselaere, Hollants, and Feys (2005) included a measure of perceived merger success/status on employees’ post-merger identification. In their field-study among pupils and teachers of two merged schools, post-merger identification was positively
and strongly related to the perceived success of the new merger school, both among pupils and teachers. However, so far no experimental studies have been conducted to directly assess the effect of merger status on post-merger identification. Therefore, the first goal of this study was to manipulate merger status and test the prediction that merger status would have a main effect on post-merger identification: Participants who believe that they belong to a high status merger group will identify more with this merger group than participants who belong to a low status merger group (Hypothesis 1).

The second motive why mergers are challenging from a SIA perspective concerns the fact that mergers require that individuals’ pre-merger social identity is transformed into a new post-merger identity. The more individuals value this pre-merger identity, the harder this will be. On the other hand, merger groups usually retain at least some characteristics of the pre-merger groups. This implies that a merger group will often be perceived as a partial continuation of the pre-merger group. Van Knippenberg and van Leeuwen (2002) developed a social identity model of post-merger identification in which they propose that the more the merger group is perceived as a continuation of the pre-merger ingroup, the more group members will identify with the new merger group.

Van Leeuwen, van Knippenberg, and Ellemers (2003) demonstrated the importance of perceived ingroup continuity by developing a new experimental procedure in which they manipulated the relative representation of the pre-merger ingroup in the new merger group. Van Leeuwen et al. found that when the pre-merger ingroup was strongly or equally represented in the merger group, pre- and post-merger identification were positively and strongly related. However, when the ingroup was only weakly represented in the merger group, pre- and post-merger identification were only modestly related. Survey-studies by van Knippenberg, van Knippenberg, Monden, and de Lima (2002) support these experimental results: Pre- and post-merger identification were strongly and positively related for members of pre-merger organisations that were strongly represented in the new merger group. By contrast, no significant relationship emerged for members of weakly represented pre-merger organisations.

However, one might wonder to what extent the impact of relative representation would be moderated by the impact of merger status. The second goal of this study was to study the possible interplay between group members’ desire to see their pre-merger ingroup continued in the new merger group on the one hand, and their desire to belong to a high status group on the other hand. We therefore decided to manipulate the relative representation of the pre-merger ingroup as an additional factor in combination with merger status. Three related hypotheses were formulated. First of all, one could expect that relative representation would have a simple main effect on
post-merger identification: When participants perceive their pre-merger ingroup as strongly represented in the new merger group, they will identify more with this merger group than when they perceive their pre-merger group as only weakly represented (Hypothesis 2). It should be noted that although van Leeuwen et al. (2003) did not find a significant main effect of relative representation on post-merger identification, the observed difference was clearly in the direction outlined above.

In addition, one could also assume that the impact of a weak relative representation might be counteracted by the expectation to belong to a high status merger group. In other words, it could be that the failure to see one’s pre-merger ingroup continued in the new merger group, might be compensated by the perception that this new merger group has a relatively high prestige. Consequently, we also formulated the tentative prediction that relative representation and merger status could interact: The effect of relative representation on post-merger identification could be less pronounced when the status of the merger group is high compared with when it is low (Hypothesis 3).

Based on the data obtained by van Leeuwen et al. (2003) and by van Knippenberg, van Knippenberg, et al. (2002), we also expected that relative representation would moderate the relation between pre- and post-merger identification: Pre- and post-merger identification would be positively and strongly related when the pre-merger ingroup is strongly represented in the new merger group, but less (or even not significantly) when the pre-merger ingroup is only weakly represented (Hypothesis 4).

Finally, taking our reasoning one step further, one could also tentatively predict that the interaction between relative representation and merger status predicted in Hypothesis 3, might be qualified by a three-way interaction including pre-merger identification. More specifically, the moderating influence of merger status on the effect of relative representation might also hold for the interaction between relative representation and pre-merger identification. In other words, the interaction between relative representation and pre-merger identification might be stronger in the low merger status condition than in the high merger status condition (Hypothesis 5). This line of reasoning would imply that merger status would not only have a main effect on post-merger identification but that this main effect would be so strong that the effects of relative representation and of pre-merger identification would be weakened or even absent. In other words, belonging to a high status merger group would result in a high post-merger identification irrespective of the degree of relative representation and of pre-merger identification.
Method

Participants and design

The experiment was announced as a study on ‘thinking in teams’. Participants were 100 students (86 females, 14 males) from the first \((n = 59)\) and second year \((n = 41)\) of psychology at the Katholieke Universiteit Leuven, Belgium. These students participated voluntarily in order to obtain research credits. They were randomly assigned to four conditions of a 2 x 2 factorial design with merger status (low, high) and relative representation (low, high) as independent variables.

Procedure and measures

Our procedure was largely based on the experimental procedure created by van Leeuwen et al. (2003), but with three important differences. First of all, in an attempt to create less minimal groups, we decided to use another categorisation criterion. More specifically, instead of randomly assigning participants into a blue and red team, we categorised participants on the basis of their alleged thinking style. Second, taking into account that van Leeuwen et al. (2003) found no significant differences between the high and equal representation condition, we used only two levels of ingroup representation (i.e., low vs. high). Finally, we manipulated an additional factor (i.e., merger status).

General cover-story

Participants entered the laboratory in groups of 6 or 8. They were told that nowadays many people work in teams that have to solve problems between groups. Recent research had suggested that the thinking style of the individual members of a team was decisive for the quality of the solutions provided by teams. Two types of people could be distinguished: inductionist thinkers (i.e., searching solutions based on facts, symbolised by Sherlock Holmes) and deductionist thinkers (i.e., searching solutions based on a vision or general idea, symbolised by the statue of ‘the thinker’ by Rodin). Each participant would be assigned to one of these groups depending on their thinking style. The goal of the present study was to shed more light on the relation between thinking style and the ability to find efficient solutions for intergroup problems.

Categorisation

Each participant was then led to a separate computer cubicle, where the rest of the instructions would be shown on the screen. Participants first had
to respond to a multiple-choice questionnaire that supposedly would determine their thinking style. After completing this questionnaire, the computer calculated their score and participants had to wait a couple of minutes before they were assigned to a group of thinkers. Meanwhile, participants were informed that if they belonged to the inductive thinkers, the computer screen would turn to blue with a picture of Sherlock Holmes, whereas if they were deductionists, a red screen with a picture of the statue of Rodin would be shown. In fact, all participants were categorised as inductionists and were presented the blue screen with Sherlock Holmes.

First intergroup problem

Participants were offered a detailed description of an intergroup problem (i.e., within a company, troubles had emerged between the autochthon employees and those belonging to an ethnic minority). They were then given four minutes during which they had to generate possible solutions in their own, inductive way. At the end of the four minutes a buzzer rang, and participants had to complete a scale concerning their identification with their pre-merger team of inductive thinkers.

Pre-merger identification

Pre-merger identification was measured with five items: a) I see myself as a typical member of the team of inductionists, b) I am glad to belong to the team of inductionists, c) I feel myself to be a deductionist rather than an inductionist (reverse coded), d) I find it important to belong to the team of inductionists, and e) I feel myself at home in the team of inductionists. These items had to be answered on a seven-point scale ranging from 1 (‘agree not at all’) to 7 (‘agree completely’).

Merger introduction

Participants were then told that the inductionists and deductionists are usually mixed in a team. Sometimes the inductive style was dominant in such a team, and sometimes the deductive style. Both of these styles belonged to the more inclusive analytic style. Analysts would approach a problem in a rational manner, and this style would be expected for university students. By contrast, people with an experiential style would approach a problem in an intuitive manner. In order to study the differences between experientialists and analysts, the existing teams of inductionists and deductionists would be merged into one team of analysts.

Manipulation of merger status

A low merger status was induced by stating that analysts generally come up with worse solutions for dealing with intergroup problems than experientialists.
A high merger status was induced by stating that analysts generally come up with better solutions for dealing with intergroup problems than experientialists.

Manipulation of relative representation

A low relative ingroup representation was induced by informing the participants that all members of the merger group had to work in a deductive analytic way. Inductionists would have to suppress their inductive thinking habit. The characteristics of the deductive style were repeated. In addition, the colour of the computer screen turned to red and a picture of the thinker of Rodin was depicted together with the label ‘deductive analysts’. A high relative ingroup representation was induced by informing the participants that all members of the merger group had to work in an inductive analytic way. Deductionists would have to suppress their deductive thinking habit. The characteristics of the inductive style were repeated. In addition, the colour of the computer screen turned to blue and a picture of Sherlock Holmes was depicted together with the label ‘inductive analysts’.

Second intergroup problem

Participants were offered a detailed description of a second intergroup problem (i.e., within a school, fights had taken place between two classes), and they were given four minutes to come up with solutions, either in an inductive analytic or in a deductive analytic way. After completion of this second intergroup problem, participants had to complete the following measures.

Post-merger identification

Identification with the merger group was measured with the same five items that measured pre-merger identification, but with the label ‘inductionists’ replaced by ‘inductive analysts’ or ‘deductive analysts’.

Manipulation checks

The effect of the merger status manipulation was assessed by means of the question ‘In comparison with experientialists, analysts are worse/better at solving intergroup problems’. Participants had to answer on a scale from 1 (‘much worse’) to 7 (‘much better’). The effect of the relative representation manipulation was assessed by means of the question ‘The team of inductionists is weakly/strongly represented in the team of analysts?’ Participants had to answer on a scale from 1 (‘very weakly’) to 7 (‘very strongly’).

Debriefing

After all participants had completed the manipulation checks, the experimenter comprehensively explained the real purposes of the study, and emphasised that the feedback concerning their thinking style was false.
Results

Manipulation checks

On the two manipulation checks, a 2 x 2 ANOVA was performed with merger status and relative representation as independent variables. With respect to perceived merger status, this ANOVA revealed only a significant main effect of merger status, $F(1, 96) = 31.80, p < .001, \eta^2 = .25$. As intended, participants in the high status condition agreed more that analysts would perform better on intergroup problems compared with experientialists, than did participants in the low status condition, $M = 4.69$ vs. 3.56, $SD = 0.98$ vs. 1.01.

With respect to perceived relative representation, this ANOVA revealed a significant main effect of relative representation, $F(1, 96) = 5.25, p < .05, \eta^2 = .05$. As intended, participants in the high representation condition perceived their pre-merger ingroup to be better represented in the merger group than did participants in the low representation condition, $M = 4.64$ vs. 4.22, $SD = 1.01$ vs. 0.91. Unexpectedly, the main effect of merger status on perceived relative representation was also significant, $F(1, 96) = 8.69, p < .01, \eta^2 = .08$. Participants in the high status condition perceived their pre-merger ingroup to be better represented than participants in the low merger status condition, $M = 4.69$ vs. 4.15, $SD = 0.85$ vs. 1.03. In other words, although our manipulation of relative representation was successful, it should be kept in mind that the merger status manipulation also had an impact upon perceived relative representation. A possible reason for this effect is that participants in the high merger status condition are motivated to exaggerate the merit of their pre-merger ingroup in the ‘success’ of the merger group in order to establish a positive subgroup identity.

Scale construction

The five items referring to respondents’ pre-merger identification as well as the five items referring to their post-merger identification showed a sufficient internal consistency (Cronbach’s $\alpha = .80$ and .76). We therefore computed respondents’ unweighted mean score on these items as an overall measure of their pre-merger identification ($M = 4.17, SD = 0.91$) and of their post-merger identification ($M = 3.81, SD = 0.94$).

Hierarchical regression

In order to test our five hypotheses, a hierarchical regression on post-merger identification was performed. In the first step, pre-merger identifica-
tion, merger status and relative representation were entered as separate predictors. This model accounted for 16% of the variance in post-merger identification. In the second step, the two-way interactions between merger status, relative representation, and pre-merger identification (all centered to avoid multicollinearity) were entered. This model accounted for 36% of the variance, $R_{\text{change}} = .21, F_{\alpha}(3, 93) = 10.01, p < .001$. In the third step, the three-way interaction between merger status, relative representation and pre-merger identification was entered, but this did not result in a significant increase in explained variance, $R_{\text{change}} = .00, F_{\alpha}(1, 92) = 0.45, p = .51$. This means that the three-way interaction predicted in Hypothesis 5 did not emerge. We therefore focused on the model including all two-way interactions.

With respect to the “main” effects in this model, merger status was significantly and positively related to post-merger identification, $\beta = 0.23, t = 2.68, p < .01$. This result is in line with Hypothesis 1 and indicates that post-merger identification was significantly higher in the high merger status condition than in the low merger status condition, $M = 4.69$ vs. $3.56, SD = 0.98$ vs. $1.01$. Moreover, in line with Hypothesis 2, relative representation was significantly and positively related to post-merger identification, $\beta = 0.30, t = 3.56, p < .01$, indicating that post-merger identification was significantly higher in the high representation condition than in the low representation condition, $M = 4.64$ vs. $4.22, SD = 1.01$ vs. $0.91$. Pre-merger identification was not significantly related to post-merger identification, $\beta = 0.04, t = 0.52, p = .61$.

With respect to the two-way interactions in this model, the predicted interaction between relative representation and pre-merger identification turned out to be significant, $\beta = 0.46, t = 5.43, p < .001$. This means that in line with Hypothesis 4, relative representation moderated the relation between pre- and post-merger identification. When elaborating this interaction according to the guidelines provided by Aiken and West (1991), it turned out that pre-merger identification was positively and strongly related to post-merger identification when relative representation was high, $\beta = .49, t = 4.14, p < .001$, but negatively when relative representation was low, $\beta = -.46, t = -3.40, p < .01$.

Contrary to Hypothesis 3, the two-way interaction between relative representation and merger status was not significant, $\beta = 0.10, t = 1.15, p = .26$. The interaction between merger status and pre-merger identification on post-merger identification was also not significant, $\beta = -.10, t = -1.23, p = .22$.

**Discussion**

The present experiment was designed to establish the impact of merger status, in combination with the relative representation of the pre-merger
ingroup, upon group members’ identification with the new merger group. As predicted, merger status did have a significant main effect upon post-merger identification: Participants who believed that the new merger group had a high status identified more strongly with this merger group than participants who believed that this merger group had a low status. This was thus the first study to experimentally substantiate our contention derived from SIA that the perceived status of the merger group is a determinant of employees’ identification with a merged organisation. In other words, if managers want to facilitate employees’ identification with the newly merged organisation, they could consider emphasizing those aspects of the merger that would lead employees to believe that they belong to a high status organisation.

Also in line with our expectations, relative representation had a significant effect upon participants’ post-merger identification. More specifically, participants who belonged to a pre-merger ingroup that was strongly represented in the merger group identified more strongly with this merger group than participants who belonged to a pre-merger ingroup that was only weakly represented. However, contrary to our tentative prediction, this main effect of relative representation was not moderated by a two-way interaction with merger status. This finding suggests that the detrimental impact of a weak relative ingroup representation on post-merger identification cannot be compensated by the perception that the new merger group has a high status. In other words, in order to evoke the maximum amount of post-merger identification, a merger needs to fulfil both group members’ desire to see their pre-merger ingroup as clearly continued in the new merger group, as well as their desire to belong to a high-status group after the merger.

As hypothesised on the basis of van Leeuwen et al. (2003), relative representation moderated the relationship between pre- and post-merger identification, but the specific form of this moderation was surprising. When the pre-merger ingroup was strongly represented, pre- and post-merger identification were strongly and positively related, as was the case in van Leeuwen et al. (2003). However, when the pre-merger group was lowly represented, pre- and post-merger identification were negatively related. This latter finding was not in accordance with the results of van Leeuwen et al.’s (2003) experimental study, which revealed a modestly positive correlation when relative ingroup representation was low.

The implications of this empirical discrepancy are substantial. According to the data obtained by van Leeuwen et al. (2003), one could derive that high pre-merger identifiers would be more likely to identify with the merger group compared with low pre-merger identifiers, regardless of the relative representation of their pre-merger ingroup. However, according to the data obtained in the present experiment, high pre-merger identifiers would be more likely to identify with the merger group than low pre-merger identifiers.
only when their pre-merger group is strongly represented in the merger group. By contrast, when the pre-merger group is only weakly represented in the merger group, high pre-merger identifiers would be less likely to identify with the merger group than low pre-merger identifiers.

Contrary to our last hypothesis, no significant three-way interaction emerged. In other words, merger status did not moderate the obtained two-way interaction between relative representation and pre-merger identification on post-merger identification. This means that although merger status proved to be a determinant of post-merger identification, the effects of relative representation and pre-merger identification do not seem to depend upon the perceived status of the merger group.

Considering that organisational identification is associated with behaviour in favour of the organisation (Haslam, 2001), it is in the best interest of a merged organisation to ensure that the employees identify with this organisation. The data of the present study suggest that managers of such a merged organisation should differentiate between employees who are weakly or strongly identified with their pre-merger organisation and match their intervention strategies to both groups of employees as a function of the characteristics of the merger organisation. More specifically, when the pre-merger organisation is weakly represented in the new merger organisation, managers should pay most attention to employees who identify strongly with their pre-merger organisation. For example, in order to counteract the damaging effect of a low ingroup representation on their post-merger identification, it might be most beneficial to emphasise those aspects of the merger organisation that resemble the pre-merger organisation. However, when the pre-merger organisation is strongly represented in the merger organisation, managers should be targeting employees who are weakly identified with the pre-merger organisation, for example by stressing the potential enhancement in group status by belonging to a larger organisation.

It should be acknowledged that certain specific features of our experimental procedure may have been responsible for the discrepancy between the specific moderation found in our own findings and those reported by van Leeuwen et al. (2003). Whereas van Leeuwen et al. (2003) ‘randomly’ divided participants into a red versus a blue team, we divided our participants into teams on the basis of ‘dispositional’ thinking styles. Although these teams were later combined to form an inclusive merger team of analyst thinkers, the initially suggested dispositional difference between inductive and deductive thinkers may have been perceived as still existing. This could imply that our participants did not really feel that their pre-merger ingroup was discontinued, even in the low representation condition. On the other hand, participants in the low representation condition were instructed to forsake all distinctive characteristics of their pre-merger group (e.g., their way of thinking, the name
and colour of their pre-merger group). As a consequence, the possibility arises that our participants in the low representation condition were convinced that their pre-merger group continued to exist but that they were forbidden to express their distinctive ingroup characteristics. Such a situation could have resulted in the activation of feelings of reactance which could only be expressed in the given situation by psychologically distancing themselves from the merger group. From a SIA perspective, it makes also sense to expect that this kind of processes would mainly occur among the more highly identified members of the pre-merger group. It should be noted however that the merger situation that we created might have been more realistic than the situation created by van Leeuwen and colleagues because pre-merger organisations also continue to exist as psychological entities in the mind of the employees. This psychological survival of the pre-merger group is often facilitated by maintaining the physical location of both pre-merger groups and (part of) their names, logos, procedures, etc.

Another limitation of the present study is that the manipulation of merger status also had an influence on the perception of relative representation. More specifically, when participants belonged to a high status merger group, they perceived their pre-merger ingroup as being more represented in the merger group compared with when they belonged to a low status merger group. As noted before, a possible reason for this finding is that participants in the high merger status condition were inclined to emphasise the contribution of their pre-merger ingroup to the ‘success’ of the merger group in order to obtain a positive social identity.

Finally, our manipulation of relative representation – which was very similar to that used in the studies by van Leeuwen et al. (2003) – may have also influenced participants’ perception about the relative status of the pre-merger groups within the new merger group. In turn, this perception of ingroup status within the merger group might have mediated the impact of relative representation on post-merger identification. Indeed, when the merger group adopts the colour, the symbols, the thinking style, as well as the name of one of the pre-merger groups but not of the other (as is the case in both representation conditions), participants may have interpreted the similarity of the merger group to that pre-merger group in terms of status. As noted earlier, the finding that merger status influenced participants’ perceived relative representation may have reflected participants’ motivation to exaggerate the contribution of their pre-merger group to the successful merger group, suggesting that participants are concerned about the relative status of their pre-merger group within the newly formed merger group. In other words, we are suggesting that the manipulation of relative representation could have an impact on the perceived status of the pre-merger groups within the newly formed merger group and that this status effect, rather than perceived relative representa-
tion per se, is responsible for the impact of the relative representation manipulation upon post-merger identification. Future studies should therefore include measures of the perceived relative status of the pre-merger groups within the new merger group in order to determine whether the impact of relative representation on post-merger identification is linked to the perceived status of the pre-merger groups within the merger group.

To summarise, this was the first study to experimentally substantiate the prediction derived from SIA that the perceived status of the merger group is an important determinant of post-merger identification. Furthermore, this study confirmed and even further emphasised the conclusion based on previous studies that the perceived representation of the pre-merger ingroup in the new merger group is a crucial determinant of post-merger identification, in particular in combination with pre-merger identification. On the other hand, no evidence was obtained for an interaction between relative representation and merger status.

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