We are still better than them: A longitudinal field study of ingroup favouritism during a

merger

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(Word count: 11297)

Abstract

The authors examine the impact of predictors for ingroup favouritism and a positive attitude towards a university merger by conducting a longitudinal field study investigating students' perceptions of a merger. Thus, the focus of this paper lies on the developmental and dynamic aspect of social identity processes and the test of directional hypotheses in an applied setting. Based on a cross-lagged regression approach, it was shown that pre-merger identification increased favouritism, but favouritism also increased pre-merger identification. Moreover, ingroup favouritism was uni-directionally related to a negative attitude towards the merger. Contact with the merger partner revealed lagged effects on ingroup favouritism. These results confirm that issues of identity change and compatibility are crucial aspects in understanding merger adjustment and support.

(Word count: 121)

Gleibs, I. H., Noack, P., & Mummendey, A. (2010). We are still better than them: A longitudinal field study on ingroup favouritism during a merger. *European Journal of Social Psychology*, 40, 810-836.

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merger

Mergers involve the creation of a new superordinate identity for organizational

members, while also requiring them to abandon their pre-merger identity. That is, mergers

trigger the type of recategorisation and social identification processes that are central to

intergroup theories (e.g., Amiot, Terry, & Callan, 2007; Giessner & Mummendey, 2008;

Haunschild, Moreland, & Murrell, 1994; Terry & O'Brien, 2001; van Knippenberg, van

Knippenberg, Monden, & de Lima, 2002). Drawing on social identity theory, self-

categorisation theory (Tajfel & Turner, 1979, 1986; Turner, Hogg, Oakes, Reicher, &

Wetherell, 1987), and intergroup models of superordinate identification (Gaertner, Dovidio,

Anastasio, Bachman, & Rust, 1993; Mummendey & Wenzel, 1999), the present study focuses

on ingroup favouritism in a merger situation. More specifically, we examine the impact of

predictors of ingroup favouritism and merger support. By conducting a longitudinal field

study over the course of a university merger, the focus of this paper lies on the developmental

and dynamic aspect of social identity processes and the test of directional hypotheses in an

applied setting.

Few mergers are mergers of equals (Cartwright & Cooper, 1995; Giessner, Viki,

Otten, Terry, & Taeuber, 2006; van Oudenhoven & de Boer, 1995). Mostly, one merger

partner is more dominant or the acquiring force. In general, organizations that merge differ on

dimensions such as size, performance, and prestige. Conceptually, the differences between

merging organizations can be described in terms of status, organizational dominance or

relative representation. Whereas status often applies to the structural relationship between

conditions before the merger, dominance denotes the different modes of integration that

define power relations within the new organization (Giessner et al., 2006; Malekzadeh &

Nahavandi, 1990). Similarly, relative ingroup representation is understood as the extent to

which characteristics of the new organization correspond with the characteristics of the pre-

merger ingroup, compared to the pre-merger outgroup (Boen, Vanbeselaere, Brebels, Huybens, & Millet, 2007). Generally, status and dominance are related concepts such that groups of higher status often tend to be more powerful or dominant. Also, in the field it is often the case that the pre-merger high-status group will be more dominant and hence will be best represented in the new group (van Knippenberg et al., 2002; but see Boldry & Gaertner, 2006). In the merger at hand, status and dominance are overlapping and we will use the terms dominant vs. subordinate group.

We examined the reaction of a student sample regarding their attitudes towards the merger of two universities. Students are central members of a university and are often highly identified with it (Mael & Ashforth, 1992). As members of the institution their role and functioning in the organization is likely to depend upon their post-merger organizational identification (Boen, Vanbeselaere, Hollants, & Fey, 2005; see also Giessner et al., 2006). Nonetheless, different from employees within a merged organization, identity issues are considered as independent from job loss and changes in roles, which usually come along with a merger. This gives the opportunity to investigate identity issues independent from 'realistic' threats such as job loss.

The described social context of the change process shapes people's willingness to support and adjust to it. To understand this process we apply an intergroup perspective: firstly, the paper extends previous studies by using a longitudinal design to understand the directional effects of pre- and post-merger identification as well as contact on ingroup favouritism. Secondly, we examine whether ingroup favouritism has a direct effect on group members' positive attitudes towards the merger.

Ingroup favouritism in the context of mergers

Ingroup favouritism is a fundamental problem when dealing with an ongoing merger (e.g., McKinsey, 1929; Terry & O'Brien, 2001). Importantly, ingroup favouritism is a central concept in intergroup research and is defined as the tendency to favour the ingroup over the

outgroup in evaluation and behaviour (Hewstone, Rubin, & Willis, 2002). Social identity

theory (Tajfel & Turner, 1986) makes basic assumptions about what motivates people to

favour their ingroup relative to an outgroup. One fundamental postulation is that when people

define themselves in terms of a particular group membership, they are motivated to establish a

positive social identity (Tajfel & Turner, 1986) and self-concept by belonging to groups. One

strategy for establishing or maintaining a positive social identity is to represent the ingroup

more favourably than an outgroup –thereby displaying ingroup favouritism. Yet, ingroup

favouritism is not an automatic or person-specific response, but a reaction to particular

(social) psychological circumstances (Haslam, 2004). Tajfel and Turner (1979) stressed that

for ingroup favouritism to emerge (a) the ingroup has to be central for group members

(ingroup identification), (b) social comparison with an outgroup must be meaningful and (c)

the outcome of the comparison process should be contestable.

A merger accentuates social comparisons between the involved merger partners. This

is because both (previously independent) groups are likely to be evaluated against the

background of the superordinate category (Turner et al., 1987) formed by the newly merged

organization. If the newly merged organization is used as a comparison frame (instead of

another superordinate category such as a third university) social comparisons can lead to

threatened social identities, if for example one's ingroup status position is not favourably

compared to the outgroup (Tajfel & Turner, 1986) or if the ingroup is no longer positively

distinct from the outgroup (Branscombe, Ellemers, Spears, & Doosje, 1999).

More specifically, a merger confronts members of a subordinate group with the reality

of their disadvantaged position in the new structure, which group members may experience as

a threat to their social identity. For the subordinate merger group, ingroup favouritism,

especially on status-irrelevant traits, might be one strategy for *enhancing* a positive social

identity (Scheepers & Ellemers, 2005; Terry & Callan, 1998). On the other hand, the possible

change is a source of uncertainty and threat for the dominant group as well (Ellemers, 1993;

Scheepers & Ellemers, 2005; Tajfel & Turner, 1979). For example, Hornsey, van Leeuwen, and van Santen (2003) argued that the perception of a common fate is a possible source of threat for high-status/ dominant groups. The perception of common fate reflects an undesirable state because access to rewards is perceived to diminish for members of the dominant group and they have the impression of being dragged down by the less prestigious or subordinate group. If a merger is perceived as a common-fate situation, members of the dominant organization might show increased ingroup favouritism as a reaction to distinctiveness threat (Branscombe et al., 1999). Therefore, group members from the dominant group may display favouritism to *maintain* the positive social identity with the pre-merger organization, and to confirm their superior position (Terry & Callan, 1998) within the newly merged organization.

In sum, members of both groups may increase ingroup favouritism in response to threat related to the pre-merger identities (Jetten, Spears, & Manstead, 1997; Ullrich, Christ, & Schlüter, 2006). Therefore, a key point in understanding organizational members' reaction during a merger is to investigate how identification with the previous organization is related to favouritism and attitudes towards change.

Pre-merger identification

Forcing individuals to change or abandon a valued identity often triggers negative reactions to mergers – e.g., by engendering negative intergroup relations. A merger could oblige group members to change the way they define themselves in relationship to the partner. They may feel impelled to change their self-perception by including characteristics that are shared by the merger partner, thus challenging the distinctiveness that the pre-merger group offered. As argued above, this may evoke threat responses such as ingroup favouritism (Branscombe et al., 1999; Spears, Doosje, & Ellemers, 1997; Ullrich et al., 2006). This should be especially pronounced when individuals are highly identified with the pre-merger organization. Indeed, previous social identity analysis of mergers has shown that changes in

pre-merger identification can cause ingroup favouritism and resistance to a merger (Terry &

Callan, 1998; Terry & O'Brien 2001).

Yet, the existing literature is not conclusive about the directional effects of

identification and favouritism. From an SIT perspective, identification should drive ingroup

favouritism rather than vice versa (Jetten et al., 1997), hence identification determines

favouritism unidirectionally. However, an alternative hypothesis is that the identification-

favouritism link operates as a feedback loop (Hewstone et al., 2002). First, ingroup

favouritism can be a reaction of high identifiers to threat, as outlined above. Second, ingroup

favouritism could be understood as a way to express and confirm one's social identity

(Scheepers, Spears, Doosje, & Manstead, 2006), so favouring the ingroup relative to an

outgroup may help to confirm the pre-merger identity. That is, while higher identification

initially leads to higher levels of ingroup favouritism, ingroup favouritism may also enhance

identification. Ingroup favouritism is thus a cause of identity threat but also an effect of

preserving this identity. Therefore, pre-merger identification and ingroup favouritism are in a

dynamic relationship as a response to the changing social context. We are not aware of

empirical studies focusing on an organizational merger and its influence on a bidirectional

relationship between identification and ingroup favouritism. That is, this study is the first that

tries to capture this relationship in an organizational setting examining ingroup favouritism as

both a cause and effect of pre-merger identification.

Dual identification

When predicting adjustment to organizational change, we have to reconsider the

relationship between old and new identity (e.g., Jetten, O'Brien, & Trindall, 2002; Jetten &

Haslam, in press; van Knippenberg et al., 2002). The (in-) compatibility of pre- and post-

merger identification may impact on ingroup favouritism and attitudes towards change.

Theoretical models based on the Social Identity Approach (SIA) suggest a combined

impact of sub- (pre-merger) and superordinate (post-merger) identification on ingroup

favouritism (Gaertner & Dovidio, 2000; Hornsey & Hogg, 2000; Mummendey & Wenzel, 1999). However, previous research has yielded inconsistent findings. For example, dual identity (i.e., high pre- and high post-merger identification) has been related to decreased ingroup favouritism in the Common Ingroup Identity Model (CIIM; Gaertner & Dovidio, 2000; Gaertner, Dovidio, & Bachman, 1996; but see Study 3). Contrariwise, Mummendey and colleagues argued that dual identification increases ingroup favouritism referring to the Ingroup Projection Model (IPM, Mummendey & Wenzel, 1999; Waldzus, Mummendey, Wenzel, & Weber, 2003; Wenzel, Mummendey, Weber, & Waldzus, 2003).

Yet, these two models hold in common that the proposed processes will only come into play if the superordinate category is a positively evaluated reference category (Turner et al., 1987). For example, ingroup projection should lead to a negative evaluation of the outgroup particularly when people identify with both the sub- and superordinate category and evaluate the inclusive category positively. However, if the inclusive category is evaluated negatively, IPM suggests that those high in identification with the subordinate category and low in identification with the superordinate category may display the most ingroup favouritism. In this case, outgroup attributes rather than ingroup attributes are perceived to be prototypical for the (disliked) superordinate category. Hence, individuals distance the ingroup from the superordinate category, which can lead to increased ingroup favouritism (Wenzel et al., 2003).

As outlined before, we expect a positive relationship between pre-merger identification (subordinate identity) and ingroup favouritism. However, it depends on the evaluation of the superordinate category whether a strong identification with the post-merger group leads to a more pronounced effect on ingroup favouritism (thus, dual identification leads to stronger ingroup favouritism) or whether it is the distancing from the superordinate category (high pre-merger identification and low post-merger identification) that would predict more ingroup favouritism. If we suspect that in a merger context the post-merger

group predominately (at least initially) serves as a negative reference group, organizational members should distance themselves from the unwanted merged group, expressed by low post-merger identification. At the same time, we expect that individuals maintain a salient pre-merger identity. This particular identification pattern (high pre-merger identification and low post-merger identification) has been found to result in negative attitudes towards the merger (e.g., van Dick, Wagner, & Lemmer, 2004). We further examine whether the prolonged salience of the pre-merger identity and a distancing from the merged group will negatively influence intergroup relations during the merger process (see Gaertner et al., 1996 Study 3; van Leeuwen, van Knippenberg, & Ellemers, 2003; van Dick, Wagner, & Lemmer, 2004). That is, the longitudinal nature of the present study allows testing whether this relationship holds over time.

Positive intergroup contact

Despite aspects of changing identities, ingroup favouritism and attitudes towards the merger may be associated with the actual contact between members of the merging groups. When two groups merge, their members have more frequent contact with each other than they did before the merger. In line with the contact hypothesis, we suggest that the experience of positive intergroup contact should impact on responses to organizational mergers. According to the contact hypothesis introduced by Allport (1954), intergroup contact promotes the development of harmonious intergroup relations. Allport proposed that contact influences intergroup relations positively only under optimal conditions involving equal status, cooperation, common goals, and a supportive environment. However, Pettigrew and Tropp (2006) showed in a meta-analysis that contact itself typically has a positive influence on reducing intergroup prejudice and conflict. It is assumed that positive contact experiences can help to reduce anxiety, which in turn should reduce prejudice or favouritism (Greenland & Brown, 1999; Terry & O'Brien, 2001).

The original model by Allport (1954), as well as the theoretical extension by Pettigrew (1998), posits that contact causally influences prejudice or ingroup favouritism. However, longitudinal research (Binder, Zagefka, Brown, Funke, Kessler et al., in press; Eller & Abrams, 2003, 2004) has revealed reciprocal relations between contact, prejudice, and several mediators, concluding that contact should not be exclusively regarded as the starting point of a causal sequence resulting in reduced favouritism and reduced prejudice (see also Henry & Hardin, 2006). To our knowledge, no previous study has examined whether a reciprocal relationship between contact and favouritism holds in a merger context. Yet, it seems likely that in the merger process initial positive contact reduces prejudice towards the merger partner, but also that more prejudiced individuals would seek less contact. To sum, we test whether contact and ingroup favouritism are bi-directionally related.

Attitudes towards the merger

Ingroup favouritism is often described as a response to a merger that obstructs its success or support leading to less positive attitudes towards the merger (e.g., Amiot et al., 2007). To our knowledge, this assumption has not been directly tested. Therefore, we explicitly examine the directional relationship between ingroup favouritism and positive attitudes towards the merger.

Normally, the outcome of a merger is measured in terms of economical success (Klendauer, Frey, & Greitemeyer, 2006). However, in a non-profit merger the final outcome is not that clearly defined and is difficult to measure. Moreover, besides the financial success rate, the subjective evaluations of individuals experiencing the merger might be a key variable of merger success (Klendauer et al., 2006; Hogan & Overmyer-Day, 1994). Subjective evaluation includes the perception of support and goal achievement through the merger. Following this line of reasoning, we propose that it is crucial from a psychological perspective to understand what leads to positive attitudes towards the merger.

Boen and colleagues (2005) operationalized *merger success* as the outcome of a comparison between the new merger group and the pre-merger ingroup. Similarly, Giessner et al. (2006) showed that *merger support* depends on the way the merger is implemented (i.e., merger patterns) and how the pre-merger group is represented in the newly merged organization compared to the pre-merger outgroup. That is, merger support mainly depends on a favourable social comparison for the pre-merger ingroup. Hence, a less favourable comparison of the pre-merger groups standing after the merger (either in terms of the pre-merger outgroup or compared to the own groups position before the merger) should reduce positive attitudes towards the merger.

We previously argued that the social comparison made in the merger situation often leads to ingroup favouritism as a reaction to threat. Moreover, ingroup favouritism can be perceived as a strategy for favourably comparing the pre-merger ingroup relative to a pre-merger outgroup. If participants display a bias towards favouring the pre-merger ingroup, it seems unlikely that they will show positive attitudes towards the merger. This is the case, because positive attitudes imply the acceptance of the new organization that includes also the previous outgroup. We therefore predict that ingroup favouritism will be negatively related to positive attitudes towards the merger. More ingroup favouritism should lead to less positive attitudes. Following our argument regarding the dynamic, changing nature of the context, we explore whether this relationship is bidirectional. The more positive the initial attitude towards the merger is, the less the merger is perceived as a threat, thus the less ingroup favouritism organizational members should display. Therefore, higher initial positive attitudes towards the merger should reduce ingroup favouritism. Further, we have no theoretical reason to assume that this effect should be different for members of the dominant and subordinate organization.

The Present Study

The aim of this study is to examine directional effects of pre-and post-merger identification and intergroup contact on ingroup favouritism. Second, we test the directional relationship between ingroup favouritism and positive attitudes towards the merger. This is done in two institutions of higher education that merged. Our hypotheses were as follows: We expected pre-merger identification to have a longitudinal positive relation with ingroup favouritism (Hypothesis 1a). Furthermore, we also expected the reverse: that ingroup favouritism would have a longitudinal positive relation with pre-merger identification (Hypothesis 1b). We further tested whether the effect of pre-merger identification on ingroup favouritism would be most pronounced when post-merger identification is low (Hypothesis 2a) and whether this would hold longitudinally (Hypothesis 2b). Moreover, we expected that positive intergroup contact reduces favouritism longitudinally (Hypothesis 3a); however, we also supposed the reverse, namely that the less ingroup favouritism is shown at Time 1 the higher the willingness to have intergroup contact at Time 2 would be (Hypothesis 3b). Finally, we tested the prediction that ingroup favouritism is negatively related to positive attitudes towards the merger (Hypothesis 4a) and vice versa (Hypothesis 4b).

Method

Field Situation

A longitudinal study was conducted in the context of a merger between two higher education institutions: a university (dominant) and a polytechnic (subordinate)[1]. The merger was initiated by a governmental decision. The official day of the merger was January 1st 2005, in the middle of the winter term of 2004/2005. A new structure with three schools was introduced in October 2005 and implemented in April 2006. Beginning with the winter term of 2005, semester dates, which had been different for the polytechnic and the university, were synchronised and language classes and additional classes (e.g., computer courses, sport classes) were merged and offered to members of both organizations.

The first questionnaire[2] was administered shortly after the beginning of the winter term 2005. The second one was sent out in April shortly after the start of the summer term 2006. By then, the new department structure had been implemented and the new president assigned. Once implemented, the merger followed an integration-proportionality pattern (Giessner et al., 2006). That is, both organizations were represented in the newly merged university, although the former university was represented more strongly than the polytechnic, and was thus more dominant. To give an example, the name of the newly merged organization was the name of the former university and the logo was very similar to the logo of the former university (although the colours of the logo matched the former polytechnic). Furthermore, the merger was implemented in such a way that until the new faculty structure was established in April 2006, most members of the new organization remained segregated in their work and study tasks.

Participants

A total of 314 participants completed the first questionnaire, and 378 completed the second one.[3] 211 completed both questionnaires (67% response rate in reference to Time 1). The sample consisted of 119 students from the former university and 92 students from the former polytechnic. Those who completed the questionnaire at Time 1 and Time 2 were between 20 and 34 years (*M*=24.46) old. Forty-eight percent of the participants were female and fifty-two percent male.

Preliminary analyses indicated that participants from the two involved organizations differed in terms of age, *t*(209)=4.46, *p*=.028, and gender, χ^2(1, *N*=211)=12.66, *p*=.004. Participants from the former polytechnic were slightly older (*M*=25.54, *SD*=2.09) than participants from the former university (*M*=23.62, *SD*=2.63). Former polytechnic participants were 34% female and 66% male, and participants of the former university were 59% female and 41% male.

All participants were enrolled in economics (polytechnic) or economics and social science (university). We focused on students of these subjects because economics was taught in both former institutions and was combined into one school after the merger. Despite slight differences in the distribution of gender and age in the two samples, these differences did not affect any results when they were included as control variables and were therefore dropped from further analyses.

Design and Procedure

Participation was fully voluntary. Participants were informed that the questionnaires were designed to give them an opportunity to express their opinions about a range of issues associated with the merger. All participants were informed that their responses were anonymous and would not be made available to university personnel at any time. At Time 1 and Time 2, a link to an online questionnaire was sent to those participants who had provided their e-mail address in a previous assessment (see Footnote 2). In addition, the survey was announced via a mailing list addressed to all economics students of the former polytechnic and on an electronic platform used by 80% of the former university students. After completion of the Time 1 questionnaire, participants took part in a lottery for compensation and after completing the second wave all remaining participants received vouchers amounting to 15 € each.

Measures

Identification. Post-merger organizational identification was assessed with four items on a 7-point Likert scale adopted from Doosje, Ellemers, and Spears (1995; e.g. "I see myself as a member of the [newly merged organization]). Pre-merger identification was measured with the same four items, whereby the name of the former University, respectively Polytechnic, was included. Cronbach's α at Time 1 and 2 were .79 and .84 for pre-merger identification and .88 and .90 for post-merger identification.

Intergroup contact. Contact was measured with two items adopted from Islam and Hewstone (1993) that focus on quantitative aspects of contact. The two items were "How often do you have contact with members of the former outgroup (OG)?" and "Do you have any friends or acquaintances from the former OG?". Subjects rated these items on a 7-point Likert scale ranging from *1(never)* to *7 (very often)* for the first item and *1(none)* to *7 (very many)* for the second item. These measures were significantly correlated ($r=.68$ at Time 1 and $r=.69$ at Time 2) and were combined to a single index of positive intergroup contact.

Ingroup favouritism. Evaluations of the ingroup and the outgroup were measured with 9 items (e.g., "I like students of …", "I would appreciate having more intensive contact with students of…", "If someone is arguing against the education of …, I usually defend it") on a 7-point Likert scale ranging from *1 (not true at all)* to *7 (completely true)* adapted from Weber, Mummendey, and Waldzus (2002). Internal consistencies were good for ingroup ratings and outgroup ratings both at Time 1 (α's=.88, .88) and at Time 2 (α's=.80, .84). A difference score was computed as a measure of judgemental ingroup favouritism ranging from -6 to 6.

Positive attitudes towards the merger [4]. A five-item scale measured a positive attitude to the merger, ("My willingness to support the merger is high.", "I think, the integration of both organizations will lead to a success.", "I am pleased with the ongoing merger.", "I am committed to leading the merger to a success", "As a student I perceive the merger as a positive development."). Ratings were made on 7-point Likert scales ranging from 1 (*not at all*) to 7 (*very much*). Cronbach's α at Times 1and 2 was .84 and .83.

<center>Results</center>

Analysis Strategy

A key advantage of the present study is that we were able to test the hypotheses using a longitudinal design. For this purpose, we used a cross-lagged regression approach that starts with an autoregression model. A panel model for longitudinal data can overcome some of the

problems of cross-sectional, correlational data. This includes the explicit representation f set

lags that corresponds to the measurement occasions and the ability to measure stability versus

change variability over time (Kline, 2005). A cross-lagged effect of variable A is established

if A at time 1 is related to variables at time 2 while B at time 1 is controlled for. Various

researchers have advocated this type of panel data analysis as a useful way of addressing

issues of reciprocal causality (Cohen, Cohen, Aiken, & West, 2003; Cook & Campell, 1979;

Finkel, 1995). The use of causal terminology must be understood in the context of the

regression approach as outlined by Rogosa (1980). Moreover, using SEM for longitudinal

data expands the cross-lagged panel regression approach framework (Rogosa, 1980; Campbell

& Kenny, 1999) because it allows error correction, factorial invariance, correlated

disturbances, overall model fit assessment, missing data, sample weights, complex sample

designs, and nested model testing.

In the first step, we examined panel attrition and preliminary analysis about

descriptive statistics, mean level changes, and correlation. We then present results from the

cross-lagged panel regression using a SEM approach. In the first model we tested Hypotheses

1, 3, and 4 simultaneously. To test the expected interaction effect of high pre-merger and low

post-merger identification (Hypothesis 2a and b), we conducted a multiple regression

approach.

Panel Attrition

To test whether the sample of participants completing the Time 1 and Time 2

questionnaires (N=211) differed from those who completed only the first questionnaire

(N=57), a multivariate analysis of variance (MANOVA) was used. We compared those

students who only participated only at Time 1 (N=51) with those who participated at both

time points (N=211) in regard to the model variables at Time 1. The MANOVA revealed a

significant difference at the multivariate level, $F(5, 253)$=2.37, p=.04, η_p^2=.04. Further

analyses yielded significant differences at the univariate level for ingroup favouritism, $F(1,$

257)=7.71, $p=.006$, $\eta_p^2=.03$ and for intergroup contact, $F(1, 257)=4.47$, $p=.03$, $\eta_p^2=.02$.

Participants who participated only at Time 1 showed less ingroup favouritism ($M=.23$) than those who also participated at Time 2 ($M=.85$). Furthermore, those participants who dropped out had more contact with the former outgroup ($M=3.78$) than those who completed both questionnaires ($M=3.28$). These results have to be borne in mind when discussing the findings below.

Prior to the main analyses, all variables were tested for missing data. Following a recommendation by Kline (2005) the missing data were imputed using the expectation-maximization (EM) algorithm, as they represented less than 2 % of the sample size.

Preliminary Analysis: Change in Variables over Time and Intercorrelations

Variables were subjected to a mixed-model analysis of variance (ANOVA) with *Time* as the within-participants factor and *organizational membership* as a between-participant factor to assess change over time. A summary of the results is given in Table 1.

Insert Table 1 about here

Post-merger identification and ingroup favouritism increased significantly over time. None of the other variables changed significantly over time (all *F*s <1, see Table 1). Moreover, post-merger identification differed between organizations. Members of the dominant organization identified more strongly with the post-merger organization than those from the subordinate organization. Yet, ingroup favouritism did not differ between organizations. However, members of the dominant and subordinate organization differed in terms of perceived intergroup contact, whereby participants from the subordinate organization reported more positive contact than those from the dominant organization. Positive attitudes towards the merger were not different between time points or organizations (all *F*s < 1). These findings, however, do not rule out longitudinal relations. They merely show that all individual changes within the cells do not average to a significant mean difference between Time 1 and Time 2.

Intercorrelations for all variables are presented in Table 2. The pattern of coefficient was quite similar in both waves.

Insert Table 2 about here

Cross-lagged Effects

To examine the relationships between the model variables over time more closely, we applied structural equation modeling using the program AMOS 7.0 (Arbuckle, 2006). Considering the sample size, we used manifest variables and did path analysis. An advantage of path analysis over multiple regression is that it allows for direct comparison of different paths in the model; by specifying cross-group equality constraints, group differences for specific model parameters can be tested. The fit of the model with constraint paths is compared to that of the unrestricted model without equality constraints. We assessed the model's goodness of fit by using the chi-square ratio, the Normed Fit Index (NFI), and the Root Mean Square of Approximation (RMSEA). An acceptable fit is indicated by a non-significant chi-square value, by RMSEA values between .06 and .08, and a NFI value above .95 (Hu & Bentler, 1999). Additionally, we report the Akaike information criterion (AIC) that is a parsimony-adjusted index favouring simpler models. The AIC is used in path models to select among competing non-hierarchical models estimated with the same data (Kline, 2005). If an unconstrained model has a lower chi-square and AIC than the constrained model, the unconstrained model is preferred and it can be concluded that the groups differ on the constrained parameters.

In a first step, we tested for the validity of our hypothesised model across the two groups simultaneously. The fit of this fully unconstrained model provided the baseline against which the subsequent invariance model was compared.

To test how pre-merger identification, intergroup contact, ingroup favouritism and positive attitudes towards the merger were interrelated, we analysed an unconstraint model (Model 1). Manifest variables were used and the Time 1 predictors were allowed to correlate

with each other, as were the variable residuals at Time 2. Model 1 fitted the data well (χ^2 (12, N=211)=10.24, p=.59, RMSEA=.000, with the 90% confidence interval .000-.062, NFI=.987, AIC=130.24) and there were no modification indices indicated. To test whether the values of parameters differ between groups, the model was tested using the same structure as the initial model but with all structural weights constrained to be equal across the dominant and subordinate organizations. To test for invariance, the fit of the constrained model (Model 2) was compared with the fit of the initially unconstrained model (Model 1), that is, we included cross-group equality constraints. The difference in chi-square between the two models was not significant, $\Delta\chi^2$ (10, N=211)=11.73, p=.30, $AIC_{unconstrained}$=130.24>$AIC_{constrained}$=121.96; fit indices were χ^2 (22, N=211)=21.96, p=.46, RMSEA=.000, with the 90% confidence interval .000-.058, NFI=.97. That is, setting the parameters equal between groups did not significantly reduce the model fit, and led us to assume that relationship between variables are similar between members of the dominant and subordinate organization. This model is depicted in Figure 1.

<p style="text-align:center">Insert Figure 1 about here</p>

In sum, pre-merger identification at Time 1 significantly predicted change in ingroup favouritism from Time 1 to Time 2 for both the subordinate and dominant organizations (H 1a). Additionally, pre-merger identification was bidirectionally related to ingroup favouritism (H 1b). Contact at Time 1 had a significant negative effect on ingroup favouritism at Time 2 (H 3a). The reverse effect of ingroup favouritism on contact was not significant. That is, we found no evidence for a bidirectional relationship between contact and favouritism (H 3b). Ingroup favouritism at Time 1 had a negative association with positive attitudes towards the merger at Time 2, held equal across groups (H 4). Moreover, the relationship of positive attitude at Time 1 and ingroup favouritism at Time 2 was of similar magnitude but not significant.

Following the recommendation of an anonymous reviewer, we tested another model in which we examined differential effect on ingroup evaluation and outgroup evaluation. This model had a satisfying model fit: χ^2 (10, N=211)=20.19, p=.043, RMSEA=.07, NFI=.97, AIC=176.19. The pre-merger identification did not significantly predict ingroup or outgroup evaluation. Yet, positive ingroup evaluation at Time 1 significantly increased pre-merger identification at Time 2. We found no significant effect of outgroup evaluation at Time 1 on identification at Time 2. Contact, however, enhanced outgroup evaluation but had no significant effect on ingroup evaluation. The reversed effect was not significant. Implications of this model will be discussed.

Dual identification

To test the combined effect of pre- and post-merger identification on ingroup favouritism (H 2a and b), we conducted an interaction analysis (Cohen et al., 2003). First, a hierarchical regression analysis was performed on ingroup favouritism at Time 1 and Time 2 separately. Pre-merger identification and post-merger identification were centred and entered in the first step. Additionally, we included organizational membership coded as 1 for subordinate and -1 for dominant organization. This analysis revealed that, at Time 1, pre-merger identification was positively related (β=.32 $p<$ .001) and post-merger identification was negatively related to favouritism (β=-.22, p=.001), but organizational membership had no effect, β=.06, p=.32 (R^2=.17, F(3, 207)=13.98, $p < .001$). In a second and third step we included interaction terms of pre-merger identification with organizational membership, post-merger identification with organizational membership, pre- and post-merger identification, a three-way interaction of pre-, post-merger identification, and organizational membership. All two-way interactions were significant ($\Delta R^2 = .081$, F(3, 204)=7.31, $p < .001$), but they were qualified by a significant three-way interaction (β=.17, p=.01; ΔR^2=.023, F(1, 203=6.34, p=.01). Decomposing this three-way interaction, we found that the two-way interaction of pre- and post-merger identification on ingroup favouritism was stronger for members of the

dominant organization (β=-.37, $p < .001$) than for those in the subordinate organization (β=-.19, p=.054). Inspections of the simple slopes at one standard deviation above and below the mean for the dominant group revealed that pre-merger identification was significantly related to ingroup favouritism when post-merger identification was low (β=.65, p<.001) but not when post-merger identification was high (β=.11, p=.23). For the subordinate group the results were similar. That is, pre-merger identification was only significantly related to ingroup favouritism when post-merger identification was low (β=.35, p<.001) but not when post-merger identification was high (β=.12, p=.28).

The same analysis was applied to the Time 2 data. Again, pre-merger identification was positively related (β=.45, p <.001) and post-merger identification was negatively related to ingroup favouritism (β=-.22, p=.001), but organizational membership had no effect (β=.002, p=.96, R^2=.25, $F(3, 207)$=22.64, p<.001). The inclusion of the two-way interactions revealed significant effects and led to an increase in explained variance (ΔR^2=.044, $F(3, 204)$= 4.17, p=.007). Although the three-way interaction did not reach conventional significance (β=.12, p=.066; ΔR^2=.012, $F(1, 203)$=3.41, p=.066), we analysed the relationship between variables for organizations separately. Results revealed that the two-way interaction of pre- and post-merger identification on favouritism was significant for the dominant organization (β=-.21, p=.009) but not for the subordinate one (β=-.02, p=.86). Inspections of the simple slopes at one standard deviation above and below the mean for the dominant group revealed that pre-merger identification was significantly related to ingroup favouritism when post-merger identification was low (β=.68, p<.001) but also, though weaker, when post-merger identification was high (β=.31, p=.005). Because the three-way interaction did not reach significance, we perceive this result as rather preliminary before further evidence is provided.

Lastly, we investigated whether the interactional effects found for Time 1 held up longitudinally. Interactions were established following an extended version of the standard procedure (Cohen et al., 2003). Ingroup favouritism at Time 2 was predicted by pre- and post-

merger identification while controlling for ingroup favouritism at Time 1. Further, the interactions were added to the model. The argument would be that this kind of moderation rests on the influence of previous identification and not identification experienced during the course of measurement. Accordingly, we chose post-merger identification at Time 1 as a potential moderator. Hence, ingroup favouritism at Time 2 was predicted by pre- and post-merger identification at Time 1, while controlling for ingroup favouritism at Time 1 and organizational membership. Furthermore, the interactions between pre-merger identification and organizational membership, post-merger identification and organizational membership, pre- and post-merger identification, as well as the three-way interaction (all at Time 1) were added to the model. All results of these analyses are summarised in Table 3. The only longitudinal relation that was obtained was pre-merger identification on ingroup favouritism, as outlined previously. None of the other main- or interaction effects at Time 1 accounted for changes in ingroup favouritism at Time 2.[5]

Insert Table 3 here

Discussion

To our knowledge, this was the first study to systematically focus on directional effects of favouritism in the merger context using a longitudinal design. Relationship with ingroup favouritism showed mixed patterns in terms of directed effects. Pre-merger identification and positive intergroup contact at Time 1 significantly predicted changes in ingroup favouritism at Time 2. Additionally, ingroup favouritism at Time 1 was related to pre-merger identification at Time 2. However, the interaction of pre- and post-merger identification at Time 1 did not affect ingroup favouritism at Time 2, even though cross-sectional results revealed significant effects. Moreover, changes in ingroup favouritism significantly predicted changes in positive attitudes towards the merger Time 2, but initial positive attitudes did not significantly reduce ingroup favouritism at Time 2. Moreover, these relations were largely similar for members of the subordinate and dominant organization.

Ingroup Favouritism in the Merger Context

The present study corroborates findings that indicate that when social identity is under threat, identification is positively linked to ingroup favouritism (Jetten et al., 1997). However, high levels of ingroup favouritism also increase pre-merger identification. This finding is in line with the suggestion by Hewstone et al. (2002) that ingroup favouritism might operate according to the principles of a feedback loop. Hence, ingroup favouritism could be understood as a way of expressing and confirming one's social identity (Scheepers et al., 2006): the more individuals identify with their group, the more they show favouritism; the more they show favouritism, the more they identify. The merger situation with its inherent threat to identity and distinctiveness may reinforce and help to secure the positive value of a given group thus serving the purpose of confirming the pre-merger identity. Our analyses showed that this relationship holds true for members both of the dominant and the subordinate organizations. Generally, the finding of a bidirectional relationship between pre-merger identification and ingroup favouritism is similar to findings reported by Kessler and Mummendey (2002) who showed that relations between SIT variables cannot always be understood as linear and sequential effects but appear instead to be a generic process belief system. Our results cannot support a simple causal interpretation of the identity-favouritism link. Rather we suspect that identity processes that are related to ingroup favouritism could function in a belief system in which the representation of identification and intergroup relations overlap. That is, psychological identification and favouritism are intertwined so that once one is activated, the other is activated as well.

Our results showed, in line with the contact hypothesis (Allport, 1954; Pettigrew, 1998), that contact reduced ingroup favouritism over time and that this relationship is similar for members of both organizations. Moreover, contrary to results by Eller and Abrams (2003, 2004) and Binder et al. (in press), we did not find any indication of a bidirectional relationship between contact and ingroup favouritism. Ingroup favouritism at Time 1 had no effect on

contact at Time 2. That is, in the situation of a merger intergroup contact had an effect on favouritism, but we have no indication that a favouritism effect on contact emerged. In a way, a merger is a situation which imposes contact, and individuals may learn that the outgroup members are not as bad as they expect. However, it doesn't seem to be a situation in which relatively unbiased individuals seek more contact than highly biased ones. In future, it would be interesting to examine how contextual factors may impact on the directional effects of contact and favouritism.

The significant cross-sectional results of pre- and post-merger identification on ingroup favouritism were in line with our hypothesis. We supposed that if the newly merged organization was perceived as rather negative, the effect of pre-merger identification leading to more ingroup favouritism should be most pronounced when post-merger identification is low. This result is in line with the IPM and its predictions that highly identified group members should distance their ingroup from the negatively evaluated inclusive category (Wenzel et al., 2003). The low values for post-merger identification may be one indicator of participants distancing their ingroup from the negatively evaluated inclusive category. Additionally, the salient pre-merger identification in the context of this merger may have conflicted with the goals of the superordinate organization (Gaertner et al., 1996).

Surprisingly, neither post-merger identification nor the interaction effect of pre- and post-merger identification revealed longitudinal relations. This lack of significant effects is contrasted by cross-sectional evidence of intercorrelations and regression analyses at Time 1 and Time 2, indicating that the identification measures cannot be dismissed as simply an unreliable operationalisation since we indeed found significant effects on ingroup favouritism at Time 1 and Time 2. Thus, in the short-term, post-merger identification as well as the interaction of pre- and post-merger identification may affect favouritism, but there is no evidence for long-term effects.

Previous research on the effects of superordinate identification on ingroup favouritism found similar results concerning longitudinal associations. Eller and Abrams (2003, 2004) tested the CIIM longitudinally and found no longitudinal effects of identification at the superordinate level on outgroup attitudes. Likewise, a four-wave longitudinal study by Hong, Liao, Chan, Wong, Chiu, et al. (2006) found that social identity measured in Waves 2 and 3 did not predict attitudes in subsequent waves. Also, Kessler and Mummendey (2001) found mixed evidence for a causal relationship between common ingroup categorisation and intergroup conflict. A possible explanation for the lack of longitudinal associations is that identification with the superordinate category might have been less defined for participants at beginning of the study, thus shortly after the institutions merged. However, what it means to be part of the new organization might have become more concrete over time. Thus, the meaning of identification with the new organization might have changed for participants as the merger unfolded. This change in the content of the identity might have brought along changes across the constructs' relations. Thus, one explanation for lack of a longitudinal relation is based on the notion that the meaning of constructs themselves can change, thus implying time-varying effects of identification (see Gleibs, Mummendey, & Noack, 2008).

Generally, our results tie in with research on identity change (see Iyer, Jetten, & Tsivrikos, 2008; Jetten, Iyer, Tsivrikos, & Young, 2008). Iyer and colleagues argue that identity change has more negative consequences in terms of adjustment and well-being if the individual's identity network before the change is not consistent with the new identity. More specifically, it may take time before people feel accustomed to claiming a new identity and before it feels like a vital part of their self-concept. This can (temporarily) undermine the stability of people's social identities. If the new identity is resisted in favour of the old one and a new sense of belonging is not established over time, it may be especially hard to adjust to change (Iyer et al., 2008). Moreover, our results showed that the persistence of a pre-merger identity amplifies ingroup favouritism. Therefore, future research should examine

whether and how identity incompatibility may not only influence well-being and adjustment for individuals within a group, but what consequences it has for intergroup relations.

Ingroup favouritism influenced individuals' attitudes towards the merger, specifically decreasing positive attitudes towards change. Here, the directional effect from favouritism to positive attitudes was significant but the reversed effect did not reach conventional significance. This is preliminary evidence that if ingroup favouritism is high, it will tend to affect organizational members' attitudes towards the merger. In line with the argument that social comparison throughout the merger may lead to ingroup favouritism as a means of displaying status enhancement and maintenance, it can further lead to reduced positive attitudes. Therefore, ingroup favouritism can obstruct subjective evaluations of the merger. These results confirm the assumed psychological framework for merger processes by Hogan and Overmyer-Day (1994) and Klendauer and colleagues (2006). They supposed that social identity processes and related constructs precede and directly influence the final results of a merger, which also included also a subjective evaluation by the involved merger partners. Additionally, our results correspond to anecdotal evidence from Buono and Bowditch (1989) and others (Cartwright & Cooper, 1992; Marks & Mirvis, 1986). The results of the present research also underline the point that negative responses to a merger are likely to emerge not only from individual-level responses (Terry, Callan, & Sartori, 1996), but also as a consequence of group-level concerns.

Lastly, we tested whether pre-merger identification and contact have differential effects on ingroup and outgroup evaluation. Indeed, we only found a significant effect of positive ingroup evaluation enhancing pre-merger identification; the more individuals favoured their ingroup at Time 1, the more they identified with the pre-merger organization at Time 2. Additionally we found that contact enhances positive outgroup evaluation, but not vice versa. Although this effect was not explicitly predicted, it yields an interesting avenue for further research, by focusing explicitly on attitudes towards the ingroup and outgroup and

investigating whether mergers trigger ingroup favouritism and/ or outgroup devaluation. Our results suggests that it is rather an enhancement of attitudes towards the ingroup than a devaluation of the outgroup that determines ingroup favouritism in the context of this merger.

Limitations and future research

The present study was conducted within a student sample. We acknowledge that employees' reactions towards a merger might be different than those experienced by students (e.g., Boen et al., 2005). More directly involved organizational members (such as members of the workforce) are expected to identify more strongly with their previous organization and experience additional threat and uncertainty (Bartels, Douwes, de Jong, & Pruyn, 2006). However, students are highly involved in the university, are active members of the educational process and often act according to role expectations (Hoffman & Kretovics, 2004). We believe that their relationship with the academic institution is strongly influenced by a merger. Additionally, we replicated previous research, which suggests that similar processes underpin the reaction of all organizational members. Yet, generalizing our results to all kind of mergers and populations should be done with caution and future research should be dedicated to systematically comparing different groups within an organization and their reaction in times of change.

The attrition analysis revealed that participants who completed the Time 2 questionnaire after they had completed the Time 1 survey differed in the sense that those who completed both questionnaires displayed higher levels of ingroup favouritism. A possible interpretation of this systematic drop out is that only those participants who were attached to the pre-merger organization and interested in the fate of the organization in the course of a merger continued. In terms of generalisation, we thus suspect that the reported findings from the present sample are slightly stronger than for those who dropped out.

In general, the autoregressive, cross-lagged panel approach that was used is not without limitations. First, the comparison of cross-lagged regression parameters does not

necessarily identify cause and effect relationships (Herzog & Nesselroade, 2003). In particular, Campbell and Kenny (1999) argue that the regression model does not account for spuriousness that arises from the impact of possible third variables. Curran and Bollen (2001) argued that autoregression approaches might not reflect a dynamic equilibrium in causal structure, because a first measurement point is not generally the point of inception of this process. Also, autoregression parameters are indifferent to the functional form of change over time (such as exponential rates) and last, but not least, change in a variable cannot be modelled as a case of change in another variable (Herzog & Nesselroade, 2003).

Some of the inconsistent results about directional associations between variables could be due to some of the above-mentioned methodological problems. For this reason, future research should focus on questions of systematic change in the outcome variables and the time-varying nature of the predictors under investigation (Bollen & Curran, 2004; Singer & Willet, 2003). Generally, future research should examine the interplay of cross-sectional and longitudinal relations of superordinate identification and focus on possible time-varying effects of predictor variables and the importance of time-lags (Mitchell & James, 2001).

Implications

Managing mergers involves managing groups and their relationship. Therefore, practitioners and managers need to be competent and trained in the process of transforming organizations, and informed about group processes. Importantly, training for leaders and managers should highlight the role of organizational identification processes and structural relations between groups, the need for positive distinctiveness, and the aftermath of identity threat. Issues of identity change and compatibility have to be taken into consideration, as they are vital aspects for merger success. It is essential to increase awareness of the "normal" reactions of group members following a merger. These reactions could imply strong ingroup favouritism, resistance, stress-related symptoms, and absenteeism (Marks & Mirvis, 2001).

We identified group identity and intergroup contact as crucial in determining ingroup favouritism and ultimately perception of merger success and support. Hence, one possibility in managing a merger might be to manage the multiple identities in a merger in a sensitive way and to promote positive intergroup contact. Facilitating information meetings, workshops, common classes, and courses, thus creating situations that establish contact between organizational members, could do this. Especially promising might be stressing common goals and positive interdependence (see also Sherif & Sherif, 1953; Sherif, 1966; for a more updated account see Eggins, Haslam, & Reynolds, 2003; Haslam, Eggins, & Reynolds, 2003).

Conclusion

Overall, the results of the present research add to a growing body of literature supporting the importance of adopting an intergroup perspective on organizational merger research. We investigated how identification processes and contact in a merger process influence ingroup favouritism over time and provided first indications that ingroup favouritism directly influences attitudes towards a merger. Moreover, it is one of the few longitudinal studies investigating mergers from a social psychological perspective (but see Amiot, Terry, Jimmieson, & Callan, 2006; Amiot et al., 2007). Theoretical constructs are applied to and tested throughout a merger in higher education thus enhancing the external validity of results.

In 1929 John McKinsey, the founder of McKinsey and company, wrote, "when two or more competing companies are merged there is sometimes a feeling of jealously and rivalry […]. Each group of employees is inclined to be loyal to its former company and to doubt the efficiency of the employees of the other company." (p. 334). Eighty years later these difficulties when merging are still apparent - both in non- and for-profit organizations. This paper aimed at highlighting problems that can appear on the group-level when making two organizations become one. On a practical level this might help managers and decision makers

to recognise the intergroup dynamics involved in a merger and to incorporate this knowledge

throughout the implementation process.

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Footnotes

[1]In the German tertiary education system universities are regarded as more prestigious than polytechnics. In general universities are more theoretically oriented whereas polytechnics are more oriented towards practical and training. In the merger at hand, the University had more students (appr. 7000) than the Polytechnic (appr. 4000), suggesting that is held more influence in the merger process. Additionally, we asked for dominance perception ("Which group has the stronger influence on the merger process?" ranging from 1=outgroup to 7=ingroup). The perception of dominance differed between the students of the Polytechnic (M=2.53, SD=1.09) and those of the University (M=5.17, SD=1.08), $t(148)$=-15.53, $p < .001$, but both organizations members perceived the University to be the stronger merger partner. We also asked for status perception ("How do you perceive the status of your IG relative to that of the OG?", ranging from 1=low to 7=high). Again, status perception was different for students from the Polytechnic (M=4.56, SD=1.44) and University, (M=5.43, $SD = 0.96$), $t(149) = -4.39$, $p < .001$, indicating that University students perceive their pre-merger organization as being higher in status than Polytechnic students. These measures were correlated, $r(150)$=.30, p<.001.

[2]This data is part of a larger research project that was designed to have three points of measurement. The first point of measurement was prior to changes being implemented and measures crucial to the present study were only included at the two later time points. At the first measurement point, students were approached in lectures and a total of 466 respondents completed the first questionnaire, with 309 agreeing to provide their email address. These students were approached for the later two measurement points. Additionally, students were approached using an e-mail list for economics students both at the former University and Polytechnic. A total of 157 completed all three questionnaires (33% response rate in reference to Time 1). For the present analysis we rely only on the second and third points of

measurement, because crucial measures were only included at Time 2 and Time 3. These will be labelled Time 1 and Time 2 for reasons of clarity. Parts of this research were published elsewhere (Gleibs et al., 2008), where the focus lay on the predicting changes in post-merger identification using a growth model that did not test for directional relations between constructs.

[3]The increase in participants is due to wide recruitment of participants via e-mails, mailing lists, and an internet platform that attracted also some people who did not participate earlier.

[4]To test whether post-merger identification and attitudes towards the merger represent two distinct constructs, we set up a measurement model both at T1 and T2. First, we fitted the data to a one-factor solution. At T1 and T2 the one-factor solution did not reveal a sufficient fit, T1: χ^2 (27)=250.83, p<.001, RMSEA=.19, NFI=.76: T2: χ^2 (27) = 271.33, p<.001, RMSEA=.20, NFI=.76. The two-factor solution, indicating that we had two distinguishable constructs, revealed a significantly better solution both at T1 and T2 (T1: χ^2 (26)=53.22, p<.001, RMSEA=.07, NFI=.95; $\Delta \chi^2$ (1, N=211)=197.61, p<.001; T2: χ^2 (26)=82.35, p<.001, RMSEA=.10, NFI=.93, ; $\Delta \chi^2$ (1, N=211)=188.98, p<.001). All factor loadings for the measurement model were significant, thus confirming the factor structure.

[5]We tested whether the effect of pre-merger identification was moderated by post-merger identification at Time 2. Theoretically, this would imply that participants high in pre-merger identification at Time 1 and who do (not) identify with the post-merger organization at Time 2 display the highest ingroup favouritism. However, also this analysis did not reveal significant results for any of the interaction terms: R^2=.40 for Step 1; ΔR^2=.016 for Step 2 (p =.13); ΔR^2 < .001 for Step 2 (p=.75) for Step 3.

Figure Caption

Figure 1. Multiple-sample analysis using maximum likelihood estimation for cross-lagged

panel model to examine the directions regarding associations between pre-merger

identification, contact, ingroup favouritism, and positive attitude towards the merger at both

measurement points.

Table 1 Means and Standard Deviation for changes over Time and differences between groups

	Time 1		Time 2		Time of measurement		Organization	
	Domt. M (SD)	Subord. M (SD)	Domt. M (SD)	Subord. M (SD)	F-value	η_p^2	F-value	η_p^2
Post-merger id.	3.84	3.20	4.10	3.45	9.41***	.043	13.95***	.063
	(1.36)	(1.40)	(1.38)	(1.38)				
Pre-merger id.	5.68	5.58	5.50	5.66	0.63	.003	0.85	.004
	(1.01)	(1.20)	(1.24)	(1.02)				
Contact	3.06	3.60	3.11	3.62	0.20	0.01	8.27**	.04
	(1.41)	(1.44)	(1.36)	(1.48)				
Ingroup favouritism	0.87	1.15	1.22	1.27	8.07**	.037	1.01	.005
	(1.49)	(1.20)	(1.34)	(1.13)				
Perception Success /	2.92	3.15	3.00	3.13	0.30	.001	1.50	.007
Support	(1.10)	(1.11)	(1.03)	(1.16)				

Note. Domt.= dominant, Subord.= subordinate; all interactions between Time and Organization were non-significant (all *F*'s <2)

*p<.05, **p<.01, ***p<.001

Table 2

Intercorrelations between subscales at Time 1 and Time 2 (*N*=211)

Variable	1	2	3	4	5
1. Post-merger identification		-.08	.17*	-.26**	.56**
2. Pre-merger identification	.04		-.06	.33*	-.27**
3. Contact	.15*	-.04		-.27**	.18**
4. Ingroup favouritism	-.21**	.48**	-.31**		-.30**
5. Perception Success/ Support	.57**	-.27**	.17*	-.45**	

Note. Correlations in the upper half-matrix refer to Time 1, in the lower half to Time 2.

*p<.05, **p<.01 (two-tailed tests)

Table 3

Summary of Hierarchical Regression Analysis for Variables Predicting Ingroup Favouritism

at Time 2 (N=211)

Variable (Time 1)	B	SE B	β
Step 1			
Ingroup Favouritism	.47	.054	.52***
Pre-merger id.	.23	.065	.20***
Post-merger id.	-.03	.051	-.03
Organization (-1, 1)	-.04	.07	-.03
Step 2			
Ingroup Favouritism	.45	.057	.50***
Pre-merger id.	.23	.066	.21***
Post-merger id.	-.03	.051	-.038
Organization (-1, 1)	-.05	.071	-.036
Pre-merger id. x Org.	-.10	.066	-.093
Post-merger id. x	-.01	.053	-.01
Org.			
Pre-x Post-merger id.	-.05	.045	-.07
Step 3			
Ingroup Favouritism	.44	.057	.48***
Pre-merger id.	.27	.069	.24***
Post-merger id.	-.02	.053	-.20
Organization (-1, 1)	-.03	.071	-.02
Pre-merger id. x Org.	-.10	.066	-.09
Post-merger ide. x	-.02	.053	-.02

Org.

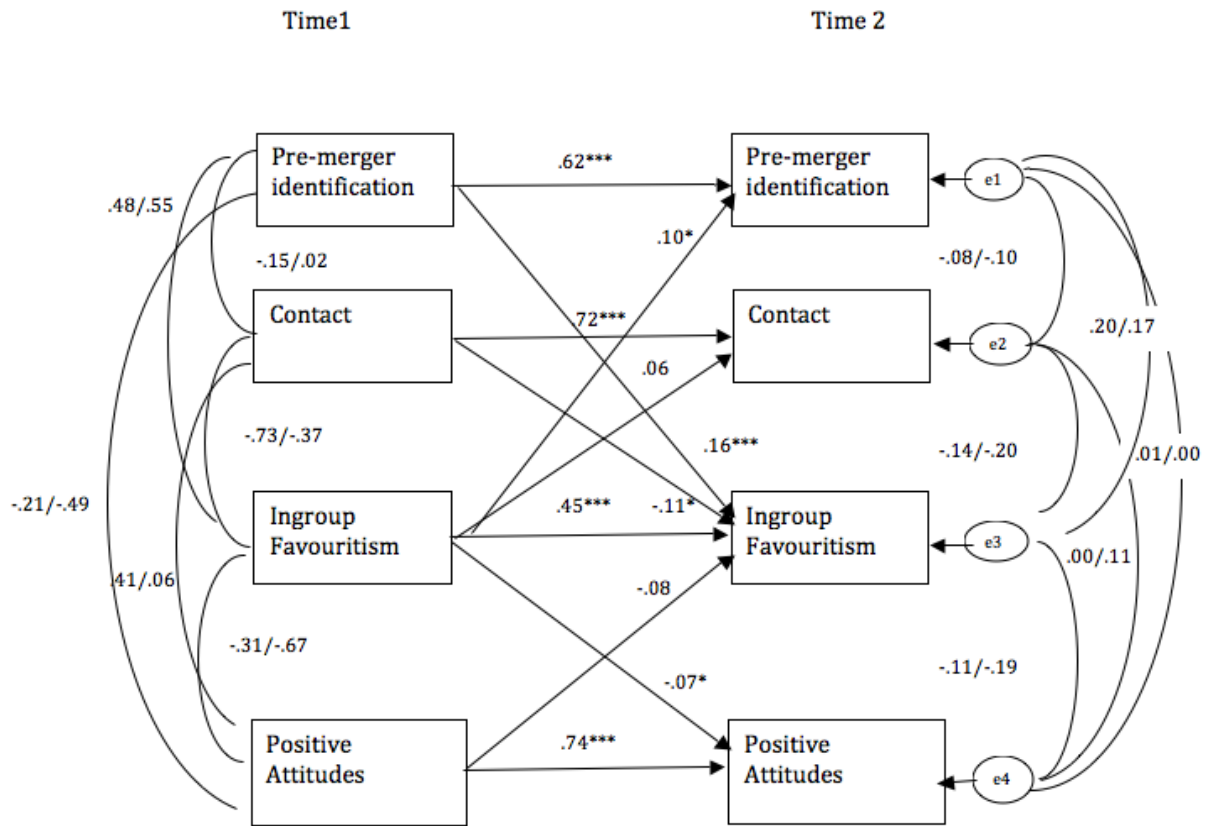|			
Pre-x Post-merger id.	-.06	.046	-.09
Pre-x Post-merger id x Org	.06	.044	.09

Note. $R^2 = .40$ for Step 1; $\Delta R^2 = .009$ for Step 2 (p =.38); $\Delta R^2 = .006$ for Step 3 (p =.14).

**p<.01, ***p<.001

Figure 1

Note. The coefficients represent the regression weights for the lags between Time 1 and Time 2. All variables were z-standardised before inclusion in the model. The coefficients represent the common solution for the dominant and subordinate organization. Time 1 predictors were correlated, as were the Time 2 variable residuals, these were allowed to vary between dominant and subordinate organization (values for dominant organization are indicated first).

Model fit is χ^2 (12, *N*=211)= 21.96, *p* = .59

*p<.05, **p<.01, ***p<.001