The pernicious effects of unstable work group membership: How work group changes undermine unique task contributions and newcomer acceptance

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Abstract
This research demonstrates that group membership instability tends to raise self-related concerns that make it less likely that people value and accept constructive task contributions offered by newcomers. In Study 1 (\(N = 88\)), unstable group membership heightened self-related concerns. Participants indicated increased intentions to make unique task contributions and lowered the evaluations of others’ contributions, particularly those from a newcomer. Study 2 (\(N = 81\)) used an online minimal group paradigm to obtain behavioral outcomes. Unstable group membership again heightened self-related concerns and gave rise to unique task contributions, even when a newcomer had just offered a high-quality task solution that benefitted the group. Because of their self-related concerns, members with an unstable position also evaluated other members—and the newcomer in particular—more negatively than did members with a stable position. In this way, workgroup instability can undermine (rather than foster) change and innovation.

Keywords
group commitment, group membership (IN)stability, newcomer acceptance, self-related concerns, task behavior

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Introduction
In most organizations, work groups are the primary unit in which employees have to operate (Ilgen, Hollenbeck, Johnson, & Jundt, 2005). Yet it is common practice for organizations to reposition their employees from one work group to another in order to reduce costs and to survive in a continuously transforming environment (Amabile & Conti, 1999). The general assumption is that these structural changes will compel groups to reflect on their own practices (De Dreu & West, 2001) and to learn from new members.

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who have different training and bring in unique work experience (Moreland & Levine, 2006). Eventually, these adaptations should benefit work group productivity.

Empirical research demonstrates, however, that structural group changes often fall short in increasing work group productivity. Group members are reluctant to adapt their task behavior when it has been successful in the past (Ziller, 1965) and tend to use the input from newcomers suboptimally because they distrust their intentions (Rink, Kane, Ellemers, & van der Vegt, 2013). Researchers have therefore argued that it is important to examine how group members are personally affected by membership instability (Kraimer, Wayne, Liden, & Sparrowe, 2005). Indeed, it is difficult to realize the group-level benefits associated with structural changes when these changes elicit distress among members who are no longer secured of a stable group position. We therefore examine the personal concerns that structural group changes raise among individual group members. Knowledge of these concerns can help organizations prevent some of the negative consequences associated with work group changes.

We propose that the possibility of membership loss due to group changes threatens members’ overall evaluative view of the self. Because of these heightened self-related concerns, we anticipate that members with an unstable membership do not always improve their task behavior. Instead, they will evaluate the task contributions of other members negatively, particularly the input of socially distinct newcomers whose intentions to contribute to the group are not self-evident. In the following sections, we specify how group membership instability is operationalized in this research and present a theoretical framework for our propositions.

**Theory and Hypotheses**

**Group Membership Instability**

Research on the individual-level consequences of membership instability induced by structural changes in work groups is relatively scarce. The limited research that exists on this topic treats membership (in)stability as a group-level feature, arguing that groups differ in how often they change their composition to increase efficiency (Levine & Choi, 2010; Ziller, 1965). “Open” groups are characterized by high change rates, and arguably, cannot offer stability to each member in the group, whereas “closed” groups have low change rates and thus offer relatively stable memberships to all members involved. Ziller and colleagues established that when a group reshuffles frequently, all members are relatively receptive to new ideas as they work hard to minimize their change-related problems (Ziller, 1965; Ziller, Behringer, & Jansen, 1961). In practice however, organizations rarely change group structures completely or disintegrate groups entirely, making it likely that often just one, or a few members experience membership instability. We focus on this more naturalistic situation where there is within-group variance in membership instability and expect that the individual experience of instability differs fundamentally from sharing this experience with all members in an “open” group.

We realize that at the individual level, group membership instability can originate from other causes than structural changes alone. In times of crisis, for instance, members can have an unstable membership because there is uncertainty about the continuity of certain organizational jobs (Ashford, Lee, & Bobko, 1989), or, members can have an unstable membership because they perform below standards (Peterson & Behfar, 2003). These other causes of membership instability can be related to structural group changes, but this is not the case by definition. Organizations often strive to implement structural changes without staffing cutbacks (Greenhalgh & Rosenblatt, 2009), and, under these circumstances, also relocate high-performing members if they are expected to increase work productivity elsewhere (Cohen & Levinthal, 1990). It is therefore important to specify the effects of membership instability arising from such structural changes on members’ self-related concerns, their task behavior, and their evaluation of others.
Self-Related Concerns

The importance of group memberships for how people evaluate themselves is explicitly acknowledged by social identity theory (Tajfel & Turner, 1986). Groups provide individuals with a sense of belonging, offer social validation, and help them understand how to operate in their larger social environment. This theory further posits that people particularly derive a sense of self-worth from memberships that are meaningful to them. Within organizations, one’s direct work group tends to be most meaningful, as this group offers people face-to-face contact and contextual interdependence in working on joint projects and assignments (Ellemers, De Gilder, & Haslam, 2004; Haslam, 2004). It can therefore be expected that that membership instability due to (anticipated) group changes will have self-definitional implications for individual members.

There is indeed evidence that the likelihood for individual members to change groups (i.e., group permeability) elicits self-definitional responses (Wright, 2001). Confronting group members with open group boundaries creates a focus on individual interests and personal outcomes instead of a focus on group interests and collective outcomes. However, there are studies that examined unstable memberships when transitions are voluntary and entail a more attractive group alternative (Bettencourt, Dorr, Charlton, & Hume, 2001; Ellemers, van Knippenberg, De Vries, & Wilke, 1988). Such group changes do not personally threaten employees (Boros & Curseu, 2014; George, Chattopadhyay, & Zhang, 2012). Our current interest is in unstable memberships when group changes are imposed upon people and when alternative memberships are uncertain, or may be less attractive. Research on group members who are being marginalized and research on job insecurity suggests that under these more negative circumstances, members do worry how they personally relate to others and do not immediately think about leaving their group—at least not if this option is not explicitly provided to them (Broschak & Davis-Blake, 2006; Chattopadhyay & George, 2001; Jetten, Branscombe, & Spears, 2002; Tyler & Blader, 2000). We thus predict that;

H1: The experience of group membership instability due to structural group changes will raise self-related concerns among individual members.

Individual Task Contributions

We also propose that group membership instability, by heightening self-related concerns, will impact on members’ task behavior. No studies exists on this indirect effect, but heightened self-related concerns generally elicit self-regulation costs (Baumeister, Campbell, Krueger, & Vohs, 2003; Crocker & Knight, 2005) and motivate people to adopt personal performance goals at the expense of others’ needs (Crocker & Park, 2004). Moreover, there are some indications that marginalized or disrespected members, who feel insecure about their group position, tend to act out of self-related concerns. These members are no longer motivated to make contributions that help reach group goals; they only contribute when their efforts help improve their personal position in the group (Jetten et al., 2002; Sleebos, Ellemers, & De Gilder, 2006a, 2006b; Weber & Hertel, 2007). We thus think that members with an unstable group membership may be motivated to make unique contributions through which they hope to impress others and to restore their self-view. Our second hypothesis is therefore;

H2a: Group membership instability will give rise to personal task contributions.
H2b: The relationship between group membership instability and personal task contributions is explained by heightened self-related concerns.

The evaluation of others. By heightening self-related concerns, group membership instability should also impact on members’ evaluations of others in the group. This expectation is based on research on self-threat, demonstrating that people with heightened self-related concerns pay close
attention to the behaviors of others (Dunning, Leuenberger, & Sherman, 1995) because they have difficulty discerning whom to trust (Frost, Stimpson, & Maughan, 1978; Mayer, Davis, & Schoorman, 1995).

We focus on group changes that may lead to the entry of a newcomer at a time where the positions of some existing members become unstable. In this context it is of interest to examine whether group members will evaluate the newcomer differently from the rest of the group. Research on newcomer acceptance shows that in principle, all group members are more positively disposed towards existing members—who are more similar and familiar to them—than towards newcomers (Byrne, 1961; Rink et al., 2013). Long-standing group members are more likely to endorse the same norms, fit the group prototype, and communicate in the “same language,” whereas newcomers, who are socially distinct and yet unknown (Cimino & Delton, 2010; Moreland, 1985), do not offer these benefits (Hinds, Carley, Krackhardt, & Wholey, 2000).

People’s preference for similarity and familiarity tends to be amplified when they are in highly ambiguous situations where they need to regain control and want to avoid further uncertainties (Thompson, 1967). They then have an additional motive to distrust the intentions of a newcomer, who has not yet proven to be a “good” member and may demonstrate unpredictable behavior (Hornsey, Grice, Jetten, Paulsen, & Callan, 2007). An unstable membership due to group changes represents such an ambiguous situation. So although members with an unstable position will probably become more critical towards everyone in their group because they feel threatened, group membership instability should make people feel particularly threatened by newcomers.

Results from field studies offer evidence in line with this notion, as these demonstrate that feelings of job insecurity are negatively associated with helping intentions towards one’s colleagues (Broschak & Davis-Blake, 2006), but that this relationship is particularly strong when evaluating temporary newcomers (Barnett & Miner, 1992; Uzzi & Barsness, 1998). These effects were also explained by arguing that employees feel threatened by newcomers who seem to reduce opportunities for the self to secure or regain one’s personal position (Davis-Blake, Broschak, & George, 2003). Our third hypothesis therefore is:

**H3a:** Group membership instability will negatively affect the evaluations of other group members, but this effect should be more pronounced for the evaluation of a newcomer.

**H3b:** The relationship between membership instability and the evaluation of other members is explained by heightened self-related concerns.

**Overview of Studies**

We opted to test these predictions in two experiments, as these allow us to systematically vary group membership stability (independently of individual, group, or organizational performance differences or other environmental requirements) and establish the causal direction of the predicted effects. Participants were asked to think of a situation in which they belonged to an organizational work group, and were informed that their personal group position was either stable or unstable due to structural changes that were needed. These structural changes referred to the number of members allegedly needed to perform a certain group task (i.e., fixed vs. varied staffing levels; Barker, 1968). The first study tested whether—with all else being equal—anticipating externally induced membership instability increases self-related concerns, and whether these concerns subsequently influence task intentions and the evaluations of others in the group. Study 2 immersed participants in virtual interactive groups through preprogrammed computerized interactions, enabling us to observe how group membership instability affected participants’ actual task behavior and their actual acceptance of task contributions from an existing team member versus a newcomer.
Study 1

Method

Design and participants. This study employed a 2 (group membership: stable or unstable) x 2 (identity of person who made a task suggestion: fellow member or newcomer) design. We used Amazon Mechanical Turk to recruit participants, who were redirected to the study web site after sign-up (Buhrmester, Kwang, & Gosling, 2011). We paid $.40 and attained 95 participants who were all residents of the United States. Seven participants were removed from the sample because they indicated that they did not understand the scenario. Inclusion of these data did not influence the results reported next, but these participants commented either that they had thought of their real-life job while answering the questions or that they were uncertain about the cause of their (un)stable position. The final sample comprised 88 participants with at least 21 participants in each condition (44 female, $M_{age} = 33.77$ years, $SD = 11.70$). Seventy-three percent were Caucasian and 51% had a bachelor degree or higher. Participants in this study reported having 13 years of work experience on average.

Procedure and manipulations. Participants had to imagine that they were a member of an organizational work group that needed to complete different projects. Not all projects required the same staffing level, and management therefore sometimes made structural group changes. For the current project, management had just decided to expand the group by adding a new member, but they could also downsize the group again. Group membership instability was subsequently manipulated by providing participants with the following information:

Management just announced that [more/no new] membership changes will take place in future projects. These future projects required [less/the same amount of] work. The group will thus [not] stay intact as it currently is, as [one member/ nobody] will be reallocated. This means that it is highly [uncertain/certain] that you keep your position in the group. You [could be reassigned at a later stage/will remain a group member for a longer period of time].

We subsequently manipulated the identity of another group member, who offered a task suggestion; “After working on the current project for some time, [the new member/one of the existing members of the group] offered a suggestion to improve the group’s performance.”

After reading the scenario, participants had to complete a questionnaire containing our measures and two checks; “I was secured of a stable position in this group” and “Continuation of my group membership depended on the number of members needed for each project.” All questions had to be answered on a 7-point scale (1 = “Do not agree at all” to 7 = “Agree completely”).

Measures

Self-related concerns. Participants’ self-related concerns were assessed with the State Social Self-Esteem Scale because this construct captures temporal threats to people’s self-view that are caused by alterations in their social relations (Heartherton & Polivy, 1991). The scale contained the following items; “My position in this group would make me (a) worry about whether others regard me as a success or failure, (b) feel self-conscious, (c) feel displeased with myself, (d) worry what others think of me, (e) feel inferior to others, (f) feel concerned about the impression I am making, and (g) worry about looking foolish” ($\alpha = .92$).1

Group commitment. To be able to rule out the alternative option that membership instability lowers individual attachment to the group altogether, we included a group commitment scale (Ellemers, Kortekaas, & Ouwkerk, 1999). The items were; “I would like to (a) continue working with my group, (b) remain a member of my group, (c) develop strong ties with the members of this
group, (d) remain attached to this group, and (e) establish a fit between me and the group members” (α = .87).

**Individual task contributions.** Participants’ intentions to make personal task contributions were assessed with the following self-developed scale; “Given my position, I would try to (a) provide unique task information, (b) develop better work approaches, (c) come up with novel task suggestions, (d) make new task propositions, (e) introduce new task ideas, (f) share my task opinions, and (g) express my task views” (α = .89).

**Evaluations of others.** Participants’ evaluations of the other person who made a task suggestion (either an existing member or the newcomer depending on condition) were measured with an adapted version of the aforementioned scale (e.g., “I would appreciate unique task information from this person” and “I would accept a better work approach from this person”; α = .92).

A principal components analysis with varimax rotation confirmed that these measures represented four separate factors, which together explained 69% of the variance in the individual items (eigenvalues ≥ 2.35; item loadings ≥ .61, cross loadings = −.34 to .29).

**Results**

All results were obtained by performing analyses of variance (ANOVARs) on the measures with group membership stability (stable vs. unstable) and the identity of the other person (existing member vs. newcomer) as independent variables.

**Manipulation checks.** The results of the checks confirmed that our membership manipulation was successful. When group membership was unstable, participants agreed significantly less with the statement that they were secured of a stable position (M = 1.98, SD = 1.61) than when group membership was stable, M = 5.71, SD = 1.68, F(1, 87) = 115.12, p < .0001, η² = .58. There was no main effect of the identity of the individual who made a task suggestion (p = .11), nor did this factor interact with the membership manipulation (p = .50). Moreover, across all conditions, participants were equally aware that the continuation of their position depended on the number of members needed for each project (lowest p = .10). Their mean response to this check was clearly above the midpoint of the scale, M_{average} = 5.94, SD = 1.85, t(87) = −12.41, p < .0001.

**Self-related concerns.** The results of self-related concerns support Hypothesis 1. When group membership was unstable, participants were significantly more concerned with the self (M = 3.12, SD = 0.84) than when group membership was stable, M = 2.10, SD = 0.85, F(1, 87) = 31.46, p < .0001, η² = .27. However, the identity of the person who made a suggestion also affected these concerns F(1, 87) = 5.01, p = .016, η² = .07. Participants were more concerned when the newcomer offered a suggestion (M = 2.82, SD = 0.89) than when an existing member did (M = 2.39, SD = 1.02). Although this effect was not hypothesized, it matches our line of reasoning and converges with prior research demonstrating that newcomer input generally poses a threat to group members (Rink et al., 2013). There was no interaction effect between the two factors (p = .72).

**Group commitment.** We did not find significant main effects of group membership instability or the identity of the person who made a suggestion, on the level of group commitment reported (lowest p = .37). The interaction effect was marginally significant, F(1, 87) = 2.88, p = .09, η² = .03, but simple main effect tests (Tukey LSD) demonstrated that none of the specific condition comparisons was significant. Moreover, across all conditions the mean level of group commitment clearly fell above the midpoint of the scale, M_{average} = 5.78, SD = 0.78, t(87) = −26.75, p < .0001. Accordingly, group membership instability did not lower participants’ overall commitment to the group.

**Task intentions.** The results on task intentions offer support for Hypothesis 2a. When group
membership seemed unstable, participants were more inclined to make an effort to offer unique contributions to the group ($M = 5.47, SD = 0.74$) than when membership was stable, $M = 4.83, SD = 1.13, F(1, 87) = 9.40, p = .003, \eta^2 = .10$. No main effect emerged for the other person’s suggestion ($p = .48$), nor did this suggestion influence the effect of membership instability ($p = .50$).

Hypothesis 2b predicted that membership instability would affect participants’ task intentions because it heightens self-related concerns. We estimated the simple mediation model with the process macro developed by Hayes (2012; 5,000 resamples). As predicted, the direct effect estimate for membership instability became .25, and had a bootstrapped 95% confidence interval that contained zero [−.12, .63] indicating nonsignificance, while there was a significant indirect effect for self-related concerns, indicated by an estimate of .38, with a bootstrapped 95% confidence interval that did not contain zero [.20, .64].

Evaluation of others. The results of participants’ evaluation of others largely support Hypothesis 3. There were separate main effects for membership instability, $F(1, 87) = 8.52, p = .005, \eta^2 = .09$ and the other person’s suggestion, $F(1, 87) = 10.71, p = .002, \eta^2 = .11$, but the anticipated interaction effect was only marginally significant $F(1, 87) = 3.27, p = .07, \eta^2 = .04$. Simple main effect testing (post hoc LSD) did reveal significant differences between specific conditions. As predicted, when group membership was unstable, participants evaluated the suggestion that was made less positively when it was offered by the newcomer ($M = 4.10, SD = 1.08$) than when it was offered by an existing group member ($M = 5.02, SD = .76, p = .001$). When group membership was stable, participants evaluated the suggestion that was made relatively positively, regardless of who offered it (newcomer; $M = 4.96, SD = .71$ vs. older member; $M = 5.22, SD = .79, p = .30$).

Hypothesis 3b predicted that membership instability would particularly affect participants’ evaluations of the newcomer because it heightens self-related concerns. We estimated the second stage moderator mediation model with Hayes’s process macro (2012; 5,000 resamples). The unconditional direct effect estimate for group membership instability remained significant, −.45, 95% CI [−.80, −.10]. However, when the contribution came from the newcomer the indirect effect estimates for self-related concerns also became significant, −.34, CI 95% [−.77, −.04]. The indirect effect estimate for self-related concerns was not significant when the contribution was made by one of the existing members, .22, CI 95% [−.0003, .46]. So the negative evaluation of a newcomer’s contribution under unstable group membership was indeed mediated by an increase in self-related concerns.

Discussion

In Study 1, group membership instability due to structural changes did not lower participants’ overall commitment to the group, but heightened self-related concerns instead. These concerns subsequently raised people’s intentions to make unique task contributions. This form of membership instability thus seems to elicit a similar response as the experience of marginalization or exclusion in a group. Indeed, in all such situations, afflicted group members do not have an attractive group alternative to rely upon. They may therefore attempt to regain control over their original position by showing their worth to the group, at least initially.

As predicted, group membership instability also induced a more negative evaluation of other members of the group, but the results tentatively suggest that it made participants particularly sensitive to the newcomer. Newcomers are generally evaluated more harshly than existing group members because of their social distinctiveness (Rink et al., 2013)—it seems that this general effect is exacerbated when people’s group membership is unstable.

Study 2

Initial behavioral intentions may well predict an individual’s readiness to perform the behavior
once actually confronted with the reality of the situation in question (Ajzen, 2002). Nevertheless, the data from Study 1 do not allow us to draw final conclusions about the effects of group membership stability on actual task behaviors or responses to others due to self-related concerns. In Study 2, participants were therefore led to believe that they were interacting with other individuals in an online group. Participants were told that they interacted with other members via a computer network, through which all individual contributions could be monitored. However, the contributions allegedly made by other members were preprogrammed so that any differences in the effects observed can only be attributed to our membership manipulation.

Study 2 was also designed to further examine how the unique task contributions made by members with an unstable position relate to the achievement of relevant group goals. Organizations implement structural changes because they believe that an increase in personal efforts and fresh input from newcomers will enhance group productivity. Yet, as indicated, many groups experience unique task contributions primarily as disruptive and studies have found that such contributions only benefit groups when all members still strive for similar, overarching task goals (Postmes, Spears, Lee, & Novak, 2005; Rink & Ellemers, 2010). It is therefore possible that the unique contributions made by these members, which are driven by self-related concerns, do not necessarily benefit the group.

Crocker and Park (2004) provide evidence in line with this reasoning, as they suggest that an increase in self-related concerns may reduce people’s focus on the group’s ultimate goal to perform optimally. In a similar vein, research demonstrates that members who feel insecure about their position because they lack respect become so preoccupied with their own group position that they no longer adequately recognize the valuable contributions made by others (Kraimer et al., 2005; Sleebos et al., 2006a). Finally, field research shows that employees who are primarily interested in advancing in their own careers invest a lot in personal training, but are disinclined to help their colleagues (Ellemers, De Gilder, & van den Heuvel, 1998; George et al., 2012). We therefore hypothesize:

H4: Group membership instability should give rise to personal task contributions that do not benefit group outcomes.

We tested this hypothesis by examining whether membership instability induces people to promote their personal contribution to the task, even after having received a high-quality task solution from a newcomer. We examined this under different task conditions, including a convergent task situation in which such a response would clearly be dysfunctional because member agreement is needed to reach a joint outcome (Guilford, 1967).

**Method**

**Design and participants.** We employed a one factorial design with two conditions (group membership: stable or unstable). Participants were 81 undergraduate students from a Dutch university (age $M = 21.93$, 65% female) who were paid 5.00 euros to take part in a study on group collaboration. After study completion (which took 45 minutes), participants were fully debriefed and thanked for their cooperation.

**Experimental procedure.** Upon arrival, participants were seated in separate cubicles in front of a computer through which all procedures were explained and dependent measures were taken. We communicated that the study wanted to imitate personnel shuffles in organizations and that we therefore invited four-person groups to the lab to perform five types of tasks (of 45 minutes in total). Participants were told that their computer was connected to the computers of their fellow group members so that they could work together via email. In reality, however, these members were computer-programmed confederates designed by the experimenter (Wirth & Williams, 2009). This study set-up created an engaging and meaningful group setting for participants (Postmes et al.,
that also offered sufficient control to assess their behaviors in a nonreactive, anonymous way (De Cremer, van Dijke, & Mayer, 2010).

**Cover story.** Participants were informed that some tasks required different staffing levels than others. Each group therefore had an alleged leader, who was responsible for making the appropriate group changes. This leader had been randomly selected by the experimenter amongst the participants upon arrival in the lab. For each new task, the leader had to determine whether group size would remain intact or would be changed. Some tasks could require downsizing, whereas other tasks could require extra positions. Participants learned that they were not guaranteed of an attractive alternative group membership in case their leader decided to make their position redundant. Members who were not needed at a certain point in time remained on call for future tasks and were required to work individually on a tedious text correction task in the meantime. To further ensure that participants’ responses to their group positions were solely determined by these structural changes, they did not receive any personal or group-level performance feedback until the end of the experiment.

**Phase 1.** At the start of the collaboration, each preprogrammed member sent a two-line salutation, after which participants could reply with their own introductory message. The designated leader then informed the group that the first two tasks (a series of self-developed word association tests and a series of number association tests) required the same group size. For this reason, the group’s composition would remain fixed throughout this period. During each association test, all members were allowed to send their association preference to the group before the leader made a final group decision. A fixed order was used for this information exchange, so that participants were always the last to respond. The tests deliberately differed in complexity level so that it was difficult for participants to discern how each member performed. Nevertheless, we randomized the objective correctness of all preferences provided, and kept these preferences identical in both conditions.

After this phase, we checked whether all participants had equal baseline levels of motivation to stay with the group; “I am willing to make an effort to remain a part of the group” and “I want to continue working in this group” (1 = “Not at all” to 7 = “Very much”). The results of an ANOVA on the aggregated scale confirmed that there were no a priori motivational differences across conditions. Moreover, participants’ average motivation level was clearly above the midpoint of the scale, $M_{\text{average}} = 5.16$, $SD = 1.25$, $t(80) = 11.94$, $p < .001$.

**Phase 2.** Participants subsequently entered the second phase where we added a newcomer to the group and manipulated membership instability. The alleged leader had learned what additional tasks the group needed to perform and communicated that for the third and fourth tasks, it would be best to expand the group from four to five members. As a result, a newcomer would be added to the team.

In the unstable membership condition however, the leader additionally notified participants that it was difficult to tell whether this new group size would also be needed for the fifth task. Participants were told that it was thus uncertain whether they would keep their position or whether they might be reassigned to work on the tedious individual task at a later stage. In the stable membership condition, the leader notified participants that the expanded group size was also needed to complete the final task and that as such, their group membership was ensured throughout the duration of the whole experiment. Note that the prospect of doing five tasks was only introduced to manipulate membership instability. The experiment ended after completing the fourth task.

**Precollaboration responses.** We first tested whether the leader announcements raised immediate self-related concerns and/or caused a variation in participants’ continued commitment to the group. We used the same scales as in
Study 1, but recoded a few items to balance the positive and negative wording across the constructs (Items C and E for Social Self-Esteem Scale and Item B for group commitment). Both scales proved to be sufficiently reliable (respectively $\alpha = .64$ and $\alpha = .79$, $1 = \text{"Not at all"}$ to $7 = \text{"Very much"}$).

Phase 3. Phase 3 was designed to observe whether participants’ task behavior was affected by our manipulations. The alleged newcomer first entered the group by sending out the same short introduction message across conditions. Participants then learned that their group had to perform a creativity task (that requires unique contributions from members) as well as a judgment task (that requires collective agreement among all members). The order of these tasks was counterbalanced.

In both tasks, participants again first received the task contributions made by other group members before they could submit their own responses. The newcomer always offered a task solution that was objectively superior to the solutions offered by existing group members. We could thus test whether an unstable group membership induced participants to submit a personal contribution and to negatively evaluate the objectively superior solution provided by the newcomer, even when doing so clearly does not benefit group performance.

During the brainstorming task (Rietzschel, Nijstad, & Stroebe, 2006), the group had to think of different ways to improve the quality of university teaching. This task offers a set of solutions that has been pretested and empirically validated on their objective originality and feasibility in previous studies (see also Rietzschel, Nijstad, & Stroebe, 2007). The ratings of these solutions range from relatively conservative to highly creative. Participants first received the same, conservative solution from the existing group members (i.e., reducing the size of student groups), after which the newcomer suggested a solution that in previous studies was rated as objectively more creative (i.e., promoting student use of Internet facilities).

During the judgment task (Gordijn, De Vries, & De Dreu, 2002), the group had to form a joint opinion on work load intensification for students at the university. The materials for this task also include a pool of arguments that had been pretested on their argumentation strength. From this pool, we selected a relatively weak argument against work load intensification (e.g., “I like the way it is now. I want to have enough time for my job and friends”) and a relatively strong argument in favor of work load intensification (i.e., “Students will increase their chances of finding a job, which is important in these days of high unemployment rates”). Participants received a weak argument from both existing members, and the stronger argument from the newcomer.

Postcollaboration responses. After these two group tasks, we asked participants to evaluate the contributions others had made during these group tasks: “I valued the input from the newcomer” and “I valued the input from the existing members.” We also presented three self-developed items that assessed whether participants felt threatened by the newcomer; (a) “I feel threatened by the newcomer,” (b) “I see the newcomer as a competitor,” and (c) “I felt rivalry between myself and the newcomer” ($\alpha = .88$; $1 = \text{"Not at all"}$ to $7 = \text{"Very much"}$). Finally, participants had to indicate which of the following two statements applied to their situation: “I was secured of a stable position in this group” or “I was not secured of a stable position in this group.”

Results

All participants selected the membership statement that corresponded with their experimental condition, indicating that they were sufficiently aware of the stability of group membership.

Precollaboration responses. A one-way ANOVA with group membership instability as the independent factor showed no immediate effects for participants’ commitment towards the group ($p = .94$). Their mean response to this measure was above the midpoint of the scale, $M_{\text{average}} = 4.43$,
In support of Hypothesis 1, however, group membership instability did raise self-related concerns, \( F(1, 80) = 7.82, p = .001, \eta^2 = .09 \). When group membership was unstable, participants were significantly more concerned with the self (\( M = 3.70, SD = 0.87 \)) than when group membership was stable (\( M = 3.21, SD = 0.72 \)).

**Task behavior.** Two independent coders who were blind to our predictions rated participants’ behavior during the two tasks into three categories; (a) acceptance of the solutions offered by older members, (b) acceptance of the newcomer’s solutions, or (c) provision of personal solutions. Their interrater reliability (based on 20 random cases) was sufficient, \( k = .79 \) (Landis & Koch, 1977).

As participants’ behavioral responses fell into nominal categories that were dependent on each other (e.g., a higher number of personal solutions submitted by definition implied lower acceptance rates of others’ solutions and vice versa), we conducted log-linear regressions (Christensen, 1997). This technique calculated the probability that membership instability causes participants to behave in accordance with each of the three categories. As we could only compare two categories at a time, we dummy-coded each response category. We subsequently ran a regression model for the convergent and the divergent tasks to test the main effects for each separate category as well as their interactions with membership instability. Both models had a good fit (brainstorming task, \( X^2(8, N = 73) = 97.08, p < .001 \); judgment task, \( X^2(8, N = 69) = 87.10, p < .001 \)), showing that, on average, group membership instability was significantly related to the behavioral response categories (see Table 1).

The results from the regression on the brainstorming task largely confirm Hypothesis 2a. Membership instability did not interact with participants’ acceptance rates of the solutions offered by existing group members (\( p = .13 \)), but it did interact marginally with participants’ acceptance rates of the newcomer’s solution and interacted significantly with the number of personal solutions participants offered. When group membership was unstable, participants accepted the newcomer’s solution less often than when membership was stable (\( B = -1.06, SE = .59, z = -1.81, p = .07 \)). At the same time, they more often suggested a personal solution when group membership was unstable (\( B = 1.43, SE = .59, z = 2.96, p = .003 \)).

To rate the quality of the 33 personal solutions that were offered across both conditions, we used the validated creativity ranking developed by Rietzschel et al. (2006). Thirty solutions fell into the pool of ideas commonly generated by people on this task that have relatively high feasibility scores, but only moderate originality ratings. Only three ideas could be rated as objectively creative. So most participants came up with personal solutions that were less creative than the solution proposed by the newcomer. This was the case in both membership conditions, but as demonstrated before, the number of participants in the unstable condition that proposed a personal solution was much larger than the number of participants who chose this option in the stable condition.

The results from the regression on the convergent judgment task provided even stronger support for Hypothesis 2a. Group membership instability again did not interact with participants’ acceptance rates of the solution offered by existing group members (\( p = .29 \)), but it interacted significantly with participants’ acceptance of the newcomer’s solution and with the number of personal solutions participants offered. When group membership was unstable, participants accepted the newcomer’s solution less often than when group membership was stable (\( B = -1.44, SE = .59, z = -1.93, p = .05 \)). At the same time, group membership instability increased participants’ tendency to offer a personal solution, even after having seen the solution from the newcomer (\( B = 2.31, SE = .80, z = 2.89, p = .004 \)).

We compared the personal solutions provided by participants with the pretested high-quality arguments commonly generated in this task (Gordijn et al., 2002). There was hardly any overlap between the solutions participants provided and these established arguments, independently
of participants’ group membership position. But in the unstable membership condition, 75% of the participants explicitly indicated that they were unable to provide a convincing argument because they could see the merits of different positions. Thus, these participants did not openly reject others’ solutions by offering an alternative. However, they also did not accept the objectively strong argument provided by the newcomer, nor did they make a contribution that might help the group to find a single convergent judgment. So in this task context where mutual agreement is important, participants in the unstable membership condition displayed behavior that did not advance the group towards its goal.

To test Hypothesis 2b, which proposed that membership instability affects people’s task behavior because of self-related concerns, we performed simple mediation models for each task (Hayes’s 2012; 5,000 resamples). We did not find evidence for mediation in the convergent judgment task. In the divergent brainstorming task, the direct effect estimate for group membership instability remained significant as well −.65, CI 95% [−1.04, −.27], but there was also significant indirect effect estimate for self-related concerns .16, CI 95% [.04, .36]. This implies that we obtained partial evidence self-related concerns determined participants’ task contributions.

### Postcollaboration Responses

To examine participants’ postcollaboration evaluations of others’ contributions, we first performed two one-way ANOVAs with group membership instability as the independent factor. In line with Hypothesis 3, we found no reliable effect for participants’ evaluation of the solutions offered by the existing members (M_{average} = 4.80, SD =1.29, p = .14), but group membership instability did influence their evaluation of the newcomer’s solution, F(1, 80) = 6.53, p = .01, η² = .08. In the unstable group membership condition, participants evaluated the solution proposed by the newcomer less positively (M = 4.00, SD = 1.51) than in the stable group membership condition (M = 4.83, SD = 1.52).

A repeated measures analysis that treated participants’ evaluations of the newcomer and the existing members as a within-subjects factor only yielded a marginal main effect, F(1, 80) = 3.22, p = .08, η² = .04. Although this factor did not interact significantly with membership instability, p = .32, the pattern of results was in the predicted direction. To explore the nature of this effect, we conducted post hoc tests (based on least significant difference [LSD]) within each condition. Within the stable group membership condition, participants did not evaluate the newcomer’s solutions differently (M = 4.83, SD = 1.52) than
the solutions provided by existing group members \((M = 5.00, SD = 1.29, p = .57)\). However, as anticipated, participants in the unstable membership condition seemed to evaluate the newcomer’s solutions significantly more negatively \((M = 4.00, SD = 1.95)\) than the solutions from the existing members, \(M = 4.60, SD = 1.11, F(1, 79) = 3.85, p = .05, \eta^2 = .05\), even though these solutions were objectively superior. This means that there is a suggestive trend that participants were more critical of the newcomer when group membership was unstable, despite the fact that this undermined their joint performance as a group.

Group membership instability also influenced participants’ feelings of threat, \(F(1, 80) = 6.41, p = .01, \eta^2 = .08\). When group membership was unstable, participants indicated feeling significantly more threatened by the newcomer \((M = 2.88, SD = 1.33)\) than when group membership was stable \((M = 2.24, SD = 0.94)\). Hypothesis 3b proposed that members with an unstable group position are particularly critical of newcomers because of self-related concerns. Simple mediation (Hayes, 2012; 5,000 resamples) indeed confirmed that the direct effect estimate of group membership instability was no longer significant \(-.43, CI 95\% [−1.12, .24]\), while there was a significant indirect effect estimate through self-related concerns \(-.21, CI 95\% [−.59, −.007]\).

**Discussion**

The results from Study 2 must be interpreted with caution because group membership instability did not yield fully significant effects on all our dependent measures. However, the findings do suggest that group membership instability influences actual task behavior and are generally in line with our hypotheses. First, there was clear evidence that an unstable membership primarily raises self-related concerns rather than lowering feelings of group commitment (Hypothesis 1). Moreover, we found partial evidence that because of these concerns, members with an unstable position invested in proposing personal contributions (Hypothesis 2) even if these did not benefit the group’s performance (Hypothesis 4). This behavior occurred not only on a divergent brainstorming task where this may seem a sensible strategy, but also emerged on a convergent judgment task where this arguably reduces the group’s ability to agree on an optimal joint solution (Guilford, 1967). Finally, because of the self-related concerns raised by membership instability, participants tended to evaluate the newcomer negatively and seemed to experience threat due to their presence (Hypothesis 3).

**General Discussion**

**Theoretical Implications**

This research makes two distinct theoretical contributions. First, prior research has not examined whether the experience of group membership instability due to structural group changes can cause within-group variations in task behavior, impacting on the evaluations of other members and newcomers in particular. Knowledge about such intragroup differentiation is critical and leads us to nuance the assumption that numerical group flexibility will enhance group productivity (Pfeffer & Baron, 1988). We demonstrate that these group-level benefits are not realized when membership instability causes individual group members to lose sight of the group’s collective interests and undermines the acceptance of newcomers.

Second, the current work implies that self-related—rather than collective—concerns drive people’s responses to structural group changes. Study 1 revealed that group membership instability leads people to focus on their personal task contributions because of such concerns. Study 2 shows that this may lead people to display dysfunctional task behavior when working on a convergent task in which high-quality solutions have already been provided by a newcomer. The results remind us that individual efforts made to secure or improve one’s position in the group do not necessarily benefit the group and can even jeopardize the achievement of group goals.
Future Research Directions

Our predictions are largely supported across two studies conducted with diverging participant samples in different contexts, and across two types of group tasks. Moreover, we were able to isolate the causal effects of group membership instability from those of individual and group performance differences, and examine their impact on perceptions of other group members as well as actual task behavior. Despite the merits of this experimental approach, we acknowledge the boundary conditions of this work that merit further investigation.

First, we ensured that we could distinguish the effects of the stability of group membership from other factors that can induce feelings of insecurity in a work group. Yet, it would be worthwhile to examine in future research whether and how such alternative sources of perceived security mitigate or exacerbate the consequences of group membership instability on newcomer acceptance and task contributions. For example, even when one’s membership is objectively unstable due to ongoing relocation policies, as is the case in our studies, someone may still subjectively consider the likelihood of remaining in the group relatively high on the basis of the amount of status received by others, or prior performance feedback received. Indeed, prior research (Lount & Pettit, 2012) has revealed that people in higher status positions tend to expect social rewards from others—a standard of behavior that is commensurate with their status (Hysum, 2009). Established status position may thus cause people to develop benevolence expectations about the trustworthiness of others towards them. These expectations are especially important for newcomer acceptance (Hornsey et al., 2007).

Moreover, our current research paradigm did not allow us to test the impact of different types of task contributions in sustained group collaborations. Nevertheless, there may be added value in exploring the consequences of group membership instability in more interactive settings and/or over a longer period of time. Someone’s initial tendency to accept or reject contributions offered by the newcomer may, for example, also be influenced over time by the responses shown by others in the group, by responses observed from the group’s leader, or even by the way that the newcomer presents him or herself to the group and tries to influence the existing team members (Levine & Choi, 2011; Rink et al., 2013). Likewise, even though we found that group commitment and individual task efforts are initially maintained, more chronic exposure to an unstable position may well discourage group members from trying to remain valued and included in the group, resulting in a loss of individual motivation or group commitment over time (Williams, 2007).

Practical Implications

At a more practical level, the present data speak to management that thinks of structural group changes as an organizational strength. In spite of the fact that structural group changes may seem an attractive solution to the continual demands on organizations and can boost individual effort initially, our findings suggest that the experience of membership instability may well have disadvantages. This is particularly likely when individual employees need to work together with others on collaborative tasks (Moreland & Argote, 2003). The preoccupation of group members with maintaining their own position may seem unproblematic (or perhaps even desirable) to the extent that this motivates them to highlight their own contributions to the task or increases their efforts to perform well. Nevertheless, the present data suggest that there also is a downside to this effect, as it may prevent people from recognizing or acknowledging valuable task contributions made by others. Moreover, as already pointed out, it may well be that over time, or when the initial efforts to preserve one’s position in the group seem unsuccessful, eventually group commitment also suffers, and employees run the risk of losing their task motivation altogether.

Second, organizations tend to impose structural group changes upon members without offering them a more favorable group alternative (Ashford et al., 1989). As a result these members
become preoccupied with self-related concerns. It is therefore crucial that management provides some form of long-term continuity of career prospects, through educational programs or other developmental opportunities to the afflicted members, so that group membership loss is better aligned with potential gains in other, self-related domains (Tversky & Kahneman, 1992).

**Conclusion**

We present two studies suggesting that group membership instability heightens self-related concerns, and therefore increases individual efforts, but undermines the groups’ potential to accept newcomers or to accommodate high-quality contributions. Thus, paradoxically, the provision of an alternative source of security to group members may be an important precondition for effecting structural changes in work groups without performance loss.

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**Notes**

1. We also checked whether participants believed that their group position depended on their social standing or on personal performance. Moreover, we included questions to capture perceived group alternatives and perceived newcomer loyalty to the group. We did not observe significant results on these measures. The findings are available upon request from the first author.

2. We also created the impression that all members (including the newcomer) of a group were of the same gender, to rule out that the effects obtained were due to gender differences.

3. We also assessed whether group membership instability affected people's general self-esteem and affective state, their group identification, their regulatory work strategies, and their leader evaluations. There were no differences between experimental conditions on these variables. It can thus be ruled out that the behavioral effects we observed were due to these factors. The findings are available upon request from the first author.

4. These fell into five categories; (a) Intensify contact with students, (b) Let students gain practical experience, (c) Increase collaborations among teachers/faculties, (c) Offer better facilities, and (5) Increase the quality of teachers.

5. Four participants argued that the study load should depend on the master program (some programs should increase their study load, whereas other should decrease it).

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