Running head: Group Identification and Status

### The perceived value of team players:

## A longitudinal study of how group identification affects status in work groups

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#### Abstract

Theory and research on status attainment in work groups primarily focuses on members' abilities and characteristics that make them appear competent as predictors of their status in the group. We complement the abilities perspective with a social identity perspective by arguing that another important determinant of a member's status is based on the extent to which the member serves the group's interests. Specifically, we assert that a member's identification with the group affects performance on behalf of the group, which in turn affects other members' assessment of the member's status. We test this social identity perspective on status attainment by studying the influence of members' group identification on their performance and status in the group, while controlling for the members' abilities and status characteristics. In a three-wave longitudinal field study following 33 work groups during a six-month group project, we find that members' identification enhances their performance on behalf of the group, which in turn increases their status within the group. As such, our study advances insights in the determinants of status attainment in work groups and points to the relevance of the social identity approach for research on the antecedents of status in work groups.

Keywords: Status; Work Groups; Group identification; Performance; Abilities

# The perceived value of team players: A longitudinal study of how group identification affects status in work groups

With the increased structuring of work around work groups (e.g., teams, departments), there has been a corresponding surge in research on the factors that affect team functioning (Hollenbeck, Beersma, & Schouten, 2012). Status, which refers to the amount of respect, prominence, and esteem one has in the eyes of others (Anderson, John, Keltner, & Kring, 2001), has been identified as a factor that has a pervasive impact on the processes and performance of work groups (Anderson & Kennedy, 2012; Halevy, Chou, & Galinsky, 2011; van Dijk & van Engen, 2013). Members who are attributed high status have a disproportionate influence over the group compared to low-status group members (Wittenbaum & Bowman, 2005). Prior studies found, for example, that the highest-status group member spoke fifteen times more frequently than the lowest-ranking group member (Bales, Strodtbeck, Mills, & Roseborough, 1951), and that the top 30% of group members, in terms of status, dominated team discussions more than 75% of the time (Buzaglo & Wheelan, 1999). As a consequence, most decisions that shape group performance are either made by high-status group members (Wittenbaum & Bowman, 2005).

Given this impact of high-status group members on group processes and outcomes, an important question in research on status in work groups involves how members attain status (Bingham, Oldroyd, Thompson, Bednar, & Bunderson, 2014; Magee & Galinsky, 2008): what kind of members are allowed such a big influence? The consensus in the field seems to be that status is attributed based on the perceived value of the member to the group (Anderson & Kennedy, 2012). Most models and theories (e.g., expectation states theory, Berger, Conner, & Fisek, 1974; status characteristics theory, Berger, Cohen, & Zelditch, 1972) suggest that this perception of value

is based on attributions of a member's task-related abilities. As a consequence, research reveals a lot about the individual attributes (e.g., cultural background, tenure, personality) and behaviors (e.g., dominance, assertiveness) that affect a member's status in a work group by making him or her appear more competent (cf. Anderson et al., 2001; Anderson & Kilduff, 2009; Bendersky & Shah, 2012; 2013; Bunderson, 2003; Ridgeway, 1991).

We argue that this 'abilities perspective' on status attainment in work groups only tells part of the story, given that a member's abilities do not necessarily benefit the other group members. We therefore posit that the other part entails the extent to which a member uses his or her abilities to serve the group's interests, i.e. is a team player. Indeed, a highly skilled member may have much to offer to the group, but if that group member uses those skills to pursue individual gains, the other group members may refrain from granting that member much status. We therefore expect that not only (characteristics or behaviors that tend to be associated with) abilities, but also groupserving behaviors are rewarded with status. However, there is little theory that explains why groupserving behavior increases one's status. A limited number of studies found that group-serving behavior (e.g., generosity) increases a member's status, but these effects tend to be explained by arguments that a member's generosity signals that the member has something valuable to offer (e.g., Bendersky & Shah, 2012; Flynn, 2003; Willer, 2009). These studies thus also draw (implicitly) from the abilities perspective by arguing that contributions to the group provide a cue of the member's abilities.

Our aim is to advance theory and research on status attainment in work groups by complementing the abilities perspective with a perspective that emphasizes the importance of serving the group to receive status. Based on the social identity approach (Haslam, 2004; Tajfel & Turner, 1979; Turner, Hogg, Oakes, Reicher, & Wheterell, 1987), we argue that group serving

behavior is rooted in members' identification with the group. The more members identify with the group, the more the interests of the work group become part of their own, thus increasing members' willingness to perform on behalf of the group. We argue that a member's level of group identification thus affects the extent to which a member performs on behalf of the group; and that it is this performance on behalf of the group that signals to others whether or not a member serves the group, thereby increasing the member's status in the eyes of others. We test these predictions in a three-wave longitudinal field study of real-life work groups that worked on a task for six months. This allows us to test group identification as a predictor of status over time on top of ability and characteristics that tend to affect perceptions of ability (gender, cultural background, and leadership) as well as the mediating process involved (i.e. members' performance in the group).

In the following, we provide an overview of theory and research on status attainment in work groups. Then, we elaborate on the role of status and group identification in the social identity perspective, and we indicate how it complements the current abilities perspective on status attainment by asserting that group identification is an important determinant of a member's status.

#### **Status in Work Groups**

Following research indicating that members of work groups tend to differ in terms of status (e.g., Bales et al., 1951), expectation states theory was developed to provide an account of how such status differences emerge and persist over time (Berger et al., 1974). At its core, expectation states theory posits that a collective task and goal creates the necessity for members to anticipate the quality of a member's contributions (Correll & Ridgeway, 2003). When a member is anticipated to make a more valuable contribution, other members will attribute a higher status to

that member, defer more to him or her, and provide the member with more opportunities to participate.

Status characteristics theory (Berger et al., 1972) is a subset of expectation states theory and was developed to further explain how members anticipate the quality of a member's contributions. Specifically, status characteristics theory posits that a member's characteristics are used to infer the extent to which the member is (believed to be) competent at the task at hand (cf. Fiske, Cuddy, Glick, & Xu, 2002). The more the member's characteristics are thought to predict competence, the more others will expect the member to be able to make valuable contributions, and hence the higher the status attributed to that member. Numerous studies support status characteristics theory, showing that members' status rank in a work group is affected by their demographic characteristics such as gender, age, or cultural background (e.g., Brodbeck, Guillaume, & Lee, 2011; Chatman, Boisnier, Spataro, Anderson, & Berdahl., 2008), their jobrelated characteristics such as tenure or functional background (e.g., Bunderson, 2003; Chattopadhyay, Finn, & Ashkanasy, 2010), and their deep-level characteristics such as personality and ability (e.g., Bendersky & Shah, 2013; Neeley, 2013) when these characteristics are considered proxies of task-relevant abilities (van Dijk & van Engen, 2013).

As such, status characteristics theory has laid the foundation for an abilities perspective on status attainment (cf. Bingham et al., 2014), where the perception of a group member's task-related abilities determines his or her status. Other aspects of expectation states theory focused on predictors of a member's status other than the member's characteristics, such as behavior. However even with these other predictors, researchers still tend to explain these effects as effects on perceptions of the member's task-related abilities. For example, in a recent study based on two experiments, Cheng and colleagues (Cheng, Tracy, Foulsham, Kingstone, & Henrich, 2013) argue

and show that there are two different routes to attaining status. The first involves displays of dominance (the use of force and intimidation), the second displays of prestige (sharing and display of expertise). The main reason why both are believed to increase a member's status is because they enhance the extent to which the member is perceived as competent (cf. Anderson & Kilduff, 2009).

Interestingly, there are a few studies suggesting that not only behavioral signals of taskrelated ability, but also signals of group-serving behavior enhance a member's status in a group (cf. Hollander, 1958). Two experimental studies provide initial support for this idea: Ridgeway (1982) conducted an experiment in which confederates were trained to either display group- or self-oriented behavior. Her results indicated that group members showing group-oriented behavior were accorded higher status than group members showing self-oriented behavior. Willer (2009) conducted a series of experiments where group members had to decide how much money they would invest in the group or keep to themselves. His findings showed that group members accorded more status to members who invested more money in the group than to those who kept larger portions to themselves. Researchers however tend to draw from an exchange perspective in accounting for such findings by arguing that group-serving behaviors indicate that such members possess a unique value or characteristic. For example, Flynn (2003, p. 540) argued that generosity increases a person's status because it indicates that an individual "possesses a unique value or has provided something of unique value to the group" (cf. Bendersky & Shah, 2012). As such, the effect of group-serving behaviors on a member's status in a group is believed to be due to other members' attributions of his or her resources (Flynn, Reagans, Amanatullah, & Ames, 2006) – an explanation that corresponds with the abilities perspective. We posit that such an explanation focuses too strongly on abilities and lacks an in-depth theoretical understanding of why group members would reward members who are group-oriented. In the following, we use the social

identity approach to argue why group-serving behavior enhances a member's status independent of the member's abilities.

#### A Social Identity Perspective on Status Attainment

The social identity perspective posits that social identities derived from the groups one belongs to are an important part of people's self-concept (Tajfel & Turner, 1979; Turner et al., 1987). Most research on status within the social identity perspective focusses on the *status of groups*, indicating that group members seek a positive social identity by identifying with groups of high status (Brewer, Manzi, & Shaw, 1993; Ellemers, 1993; Ellemers, Doosje, van Knippenberg, & Wilke, 1992, Ellemers, Kortekaas, & Ouwerkerk, 1999; Hornsey, van Leeuwen, & Van Santen, 2003). While social identity research on the *status of members within a group* is scarce, we can draw from studies that investigate which group members are highly valued or respected and conversely, which group members are devalued or disrespected.

With regard to valued group members, the social identity approach to leadership indicates that one of the main characteristics of successful group leaders (defined as leaders who can influence other group members) is that "their actions must advance the interests of the in-group. It is fatal for leaders to be seen to be feathering their own nests, or, even worse, the nests of out-groups" (Haslam, Reicher, & Platow, 2011, p. xxii). Conversely, with regard to devalued group members, social identity research on the black sheep effect shows that ingroup members who display asocial behavior towards other members (e.g., students who never lend their notes to fellow students) or perform badly are evaluated negatively by their fellow group members; and they are evaluated even more negatively than outgroup members displaying the same behavior (Marques & Paez, 1994). These findings suggest that members who are committed to their group and behave in ways that benefit the group will be granted status by other group members, because such

behavior enhances the group's goals and status, which leads to a more positive social identity for all members. In the same line of thought, other social identity research has shown that disrespected group members sometimes use this process: they display their loyalty to the ingroup and increase their efforts on behalf of the group in the hope of gaining respect from fellow ingroup members (Noel, Wann, & Bransombe, 1995; Sleebos, Ellemers, & de Gilder, 2006).

Thus, based on social identity theory and research, we can state that being committed to the group's goals and performing on behalf of the group is rewarded with being a valued group member. The social identity approach also explicates which group members will most likely pursue the group's interest over their own: those who identify with the group. Members' identification with a group is defined as the extent to which they include the group in their selfconcept: the more strongly members identify with a group, the more this group will be part of their self-concept (Tropp & Wright, 2001). Group identification thus blurs the distinction between group and self, increasing the extent to which one perceives and experiences the group's goals and interests as one's own (Ashforth & Mael, 1989; van Knippenberg, 2000). As such, group identification decreases the extent to which a member pursues personal interests (self-orientation) and increases the extent to which a member performs on behalf of the group (group orientation). Indeed, members with low group identification may show noninvolvement to the group, pursue individual interests, decline opportunities to help the group or fellow group members, or even try to leave the group. In contrast, members with high group identification will be loyal to the group, help their group and fellow group members, and be motivated to improve their group as compared to other groups (Ellemers, Spears, & Doosje, 2002).

Connecting this research to studies on antecedents of status in work groups, we argue that there are two distinct ways in which group members can contribute to the group and in turn, gain

9

status. The first is the conventional abilities perspective on status attainment, where group members are accorded higher status when they (are perceived to) possess more unique task-relevant information or qualities. The second is displaying group-serving behavior by actually using one's competences and abilities on behalf of the group. Given that the social identity approach asserts that group identification is at the heart of group-serving behavior, we hypothesize that when controlling for ability and status characteristics (i.e. gender, cultural background, and leadership), members who identify more strongly with the work group receive a higher status in the group over time:

*Hypothesis 1: Controlling for ability and status characteristics, group identification enhances a member's status in the group over time.* 

#### Performance as a Mediator of the Relationship between Identification and Status

As argued from the social identity perspective, high identifiers show their commitment to the group's norms, values, and goals by displaying behavior that serves the group interests (Ashforth & Mael, 1989; Ellemers, Spears, & Doosje, 1997). We therefore argue that it is increased performance on behalf of the group that causes members with higher levels of identification (i.e., with a group orientation) to be attributed more status. In support of this reasoning, numerous studies have shown that members' identification with the group enhances their performance (Ellemers, de Gilder, & van den Heuvel, 1998) and productivity within the group (Worchel, Rothgerber, Day, Hart, & Butemeyer, 1998). Moreover, high identifiers are more likely to 'go the extra mile' beyond what is formally required of them (i.e., display Organization Citizenship Behavior or OCB; Ouwerkerk, Ellemers, & de Gilder, 1999; van Knippenberg & Ellemers, 2003). We expect that such a commitment to and performance on behalf of the group is favorably looked upon by fellow group members whose communal interests are served, and who therefore grant

more status to high identifiers. Consequently, we expect that performance on behalf of the group mediates the effect of group identification on status over time.

Hypothesis 2: The effect of group identification on status over time is mediated by performance on behalf of the group, such that group identification enhances a member's performance on behalf of the group, which in turn enhances status.

Figure 1 provides an overview of our predictions.

#### [INSERT FIGURE 1 ABOUT HERE]

#### **METHODS**

#### **Research Strategy**

We tested these hypotheses in a three-wave longitudinal field study following real life student groups as they worked together on a common goal for six months. This type of study has two main advantages. First, real-life groups provide a natural lab in which members interact frequently and for a longer period of time on a common task that is both meaningful and important to all members. This strengthens the ecological validity of our findings as compared to a predominance of studies that examine artificial experimental groups, where members briefly work together on a task that has relatively little importance or meaning to them (Moreland, Fetterman, Flagg, & Swanenburg, 2009). Given that members' identification with the group is likely to suffer from tasks and contexts that have little meaning (Dutton, Dukerich, & Harquail, 1994), artificial groups that meet briefly would be less suitable to put our hypotheses to the test. Second, with the longitudinal format of our study, we can investigate the influence of members' group identification on their status in the group and the mediating role of performance on behalf of the group *over time*. This temporal dimension allows us to draw stronger conclusions with regard to the effect of group identification on status as compared to cross-sectional surveys; and shifts research from a predominant empirical focus on 'group statics' to the study of 'group dynamics' (Cronin, Weingart, & Todorova, 2011).

#### **Study Procedure**

We followed 33 student work groups and their leaders during a six-month joint group project. During this project, work groups had to develop and build a technical device that could heat water by means of physical activity (e.g., rowing, pedaling) based on the theoretical principles of magnetic fields. The project was an important part of the students' curriculum and working as a group was formally reinforced by means of distributing grades on the group level. Groups were formed by a course tutor, who made sure every group member personally knew one other member in the group, but not the others. Participation to our study was voluntary and anonymous, and had no effect on course grades. Of all students, 97% agreed to participate and filled out an informed consent form. Participants filled out three questionnaires: one after 1.5 months of working together, a second after 4.5 months, and a third at the end of the project (but before groups received their grades). The time interval between the first and the second questionnaire was longer than the time interval between the second and the third questionnaire because during the first interval, the project was on hold for 1.5 months due to exams and holidays.

#### **Participants**

Participants were all engineering students at a Belgian university. Every group consisted of 5 to 7 (M = 6.24, SD = 0.71) first-year engineering students and a fourth-year engineering student leader who was appointed to help the groups during the project. Overall, 214 participants filled out the first questionnaire, 188 filled out the second, and 216 filled out the third. Group members had a mean age of 18.85 (SD = 1.12), 79.3% were male, and 45.7% had a cultural minority background (i.e., at least one of their parents was not born in Belgium). Group leaders had a mean age of 22.55 (SD = 1.92), 71.9% were male, and 48.5% had a cultural minority background.

#### Measures

*Group identification.* We used the 'inclusion of ingroup in the self' scale to measure identification with the group (Aron, Aron, & Smollan, 1992; Tropp & Wright, 2001) in wave 1. In this scale, participants indicate their identification with the group by choosing one of seven figures in which circles representing themselves and the group overlap to varying degrees. A stronger overlap indicates higher levels of group identification. This measure has been demonstrated to have good construct, concurrent, and discriminant validity, high degrees of test-retest reliability, and close, consistent relationships with other measures of group identification (Tropp & Wright, 2001).

*Performance on behalf of the group.* We measured members' individual performance on behalf of the group in wave 2 by means of three self-rated items: 'What was the quality of your contribution to this project?' (from 1 'Very poor' to 5 'Very good'), 'How satisfied are you with your own work for this project?' (from 1 'Not at all' to 5 'Very'), and 'If you had to grade your own work for this project, what would it be?' (ratings up to 20, divided by 4 to match the 5-point scales of the other items). A reliability analysis showed good consistency between the items ( $\alpha = .79$ ).

*Status in the group.* Following Ridgeway's (1982) study on the role of group orientation on a person's status, we measured members' status in the group in wave 3 by asking all members to rate every other member in the group on two items: 'How competent is this person in the tasks you have to deal with in this project?' and 'To what extent does this person influence the group?' from 1 (Not at all) to 5 (Very much). Both influence and competence have been shown to be indicators of status (e.g., Anderson et al., 2001; Bendersky & Hays, 2012; Bendersky & Shah, 2012; Magee & Galinsky, 2008) and the reliability score of .93 shows that the two items can be combined into one status scale. We calculated within group agreement indices  $r_{wg}$  (James, Demaree, & Wolf, 1984), which showed that scores could be aggregated at the group level ( $r_{wg3}$ : Md = 0.88, M = 0.82, SD = 0.17). Also, the intraclass coefficient (ICC(2) = 0.83) exceeds the standard requirements (Bliese, 2000; LeBreton & Senter, 2007), indicating sufficient within-group reliability.

Ability and status characteristics. We controlled for ability and status characteristics that have been shown to affect members' status in a group. We included individual abilities in our analyses since we argue that group identification and abilities are distinct predictors of status in a group. Individual ability was based on past performance in a task-relevant academic context. We asked work group leaders, whom are fourth-year engineering students, to report their overall grades received in the third year of their engineering studies. Since the content of the current group project was oriented towards engineering students, these grades are a relevant reflection of their ability in the current project. We asked work group members, who are first-year engineering students, to report their overall grades received on mathematics in the last year of high school. We chose mathematics, instead of overall grades, because high school students are also graded on their competence in topics such as biology, religion, or languages, which we believe are less relevant to the context of the current project. Grades were reported on a scale from 1 (0-10%) to 10 (91-100%). Gender was included as a variable because male group members may have a higher status rank than female members given the predominant belief that men are better at mathematics and science than women (e.g., Cvencek, Meltzoff, & Greenwald, 2011; Lane, Goh, & Driver-Linn, 2012; Nosek et al., 2009). Third, we included cultural background as a variable since cultural

minorities are often stereotyped as having lower intellectual and academic competence than cultural majorities (Aronson, Quinn, & Spencer, 1998; Steele & Aronson, 1995). Cultural minority members thus may have a lower status rank than cultural majority members. Last, leadership was included because leaders are likely to have a higher status rank in the group than members because they are in the fourth year of their engineering studies (as compared to members who were in their first year) and because they are assigned a leadership position, which may amplify the belief that they are better at the task at hand (Bunderson, 2003; Eisenhardt, 1989).

#### Analyses

To test our first hypothesis, we conducted a multilevel model (Hox, 2002) in SPSS (IBM Corp., 2013) that predicts members' status in wave 3 by their group identification in wave 1, controlled for abilities and status characteristics. Such a multilevel model takes the interdependence of our data (members nested in groups) into account by allowing the intercept and slopes to vary across groups. Since the slopes did not show significant variance across groups, we report the model with a random intercept and fixed slopes. We describe maximum likelihood (ML) estimations in the results section as these can be used with 30 or more groups. Analyses with restricted maximum likelihood estimations (REML), already robust with as little as 6 to 12 groups (Browne & Draper, 2000; Maas & Hox, 2004), fully replicate our results.

Our second hypothesis concerns performance on behalf of the group as a mediator in the effect of group identification on status. Given that members are nested in groups within our data, non-hierarchical methods for assessing mediation cannot be used as they lead to biased standard errors when the assumption of independence or observations is violated. Therefore, we first examined the effects of group identification in wave 1 on performance in wave 2 and of performance in wave 2 on status in wave 3 using multilevel models in SPSS. Then, we tested the

indirect effect by means of a multilevel structural equation model for assessing multilevel mediation (Preacher, Zyphur, & Zhang, 2010) in Mplus (Muthén & Muthén, 2010). This model estimates both within-group and between-group relations between group identification in wave 1, performance on behalf of the group in wave 2, and status in wave 3 as individual-level variables clustered within groups. 95% confidence intervals for the indirect mediation effects were calculated using the Monte Carlo method with 20000 repetitions (Selig & Preacher, 2008).

#### RESULTS

Table 1 provides an overview of the means, standard deviations, and correlations between all measures, as well as the percentage of variance situated at the group level for dependent variables. The correlations already show an interesting finding: members' abilities are unrelated to their identification with the group in wave 1 (r = .08 p = .257), which is in line with our argument that members' abilities and group identification are two distinct status cues.

#### [INSERT TABLE 1 ABOUT HERE]

#### **Group Identification Enhances Status over Time**

First, we tested our hypothesis 1 that group identification enhances status over time controlled for abilities, leadership, cultural background, and gender using multilevel analyses. As predicted, group members were attributed a higher status in their group in wave 3 when they identified more strongly with the work group in wave 1 (B = 0.08, SE = 0.03, t(199.43) = 2.35, p = .020). Moreover, group members had a higher status when their task abilities were higher, when they were in a leadership role, and when they had a cultural majority background; gender had no influence on status (for the full model, see Table 2 model 1). These results support our first hypothesis that while controlling for ability and status characteristics, members' group identification enhances their status in a work group.

#### [INSERT TABLE 2 ABOUT HERE]

# Performance on Behalf of the Group Mediates the Relation between Group Identification and Status

Next, we tested whether the effect of group identification in wave 1 on members' status in wave 3 was mediated by performance on behalf of the group in wave 2 (Hypothesis 2). Multilevel analyses indicated that group identification in wave 1 predicts performance on behalf of the group in wave 2 (B = 0.10, SE = 0.04, t(173.10) = 2.39, p = .018, pseudo R<sup>2</sup><sub>individual</sub> = .04; pseudo R<sup>2</sup><sub>group</sub> = .03) and that performance on behalf of the group in wave 2 significantly predicts status in wave 3 (B = 0.21, SE = 0.07, t(184.13) = 3.13, p = .002, pseudo R<sup>2</sup><sub>individual</sub> = .04; pseudo R<sup>2</sup><sub>group</sub> = .20).

We subsequently analyzed the indirect effect of group identification on status through performance on behalf of the group. Results of the multilevel structural equation model (for the full model, see model 1 in Table 3) again show that group members who identify more strongly with their group in wave 1 show better performance on behalf of the group in wave 2 (B = 0.30, SE = 0.11, t = 2.81, p = .005), which in turn enhances their status in the group in wave 3 (B = 0.36, SE = 0.12, t = 2.95, p = .003). As predicted, the within-group indirect effect of identification (wave 1) on status (wave 3) through performance on behalf of the group (wave 2) was significant (B =0.11, SE = 0.95, t = 2.10, p = .036, Monte Carlo CO [0.020, 0.235]).

Because of our sample size, a similar multilevel mediation model controlling for abilities and all other status characteristics lacked the power to converge. We therefore conducted two other analyses to test the mediating path with covariates: Firstly, when controlling for our most important control variable, i.e., members' abilities, the indirect effect of group identification in wave 1 on status in wave 3 through members' performance on behalf of the group in wave 2 remained present, although no longer significant by the .05 standard (B = 0.03, SE = 0.02, t = 1.86, p = .062, Monte Carlo CO [0.005, 0.064]; for the full model, see Table 3 model 2). Secondly, multilevel analyses revealed that the effect of group identification in wave 1 on status in wave 3 controlled for abilities and all other status characteristics (as reported in the analyses of our first hypothesis, Table 2 model 1) was no longer significant when controlling for performance on behalf of the group in wave 2 (B = 0.05, SE = 0.04, t(171.42) = 1.20, p = .234), while all other predictors of status (leadership, abilities and cultural background) remained significant. In this model, performance on behalf of the group in wave 2 also significantly predicted status (B = 0.14, SE = 0.07, t(171.35) = 2.10, p = .038; for the full model, see Table 2 model 2).

Together, these analyses support our second hypothesis that performance on behalf of the group mediates the effect of group identification on members' status in the group: the more members identify with their group, the better they aim to perform on behalf of the group, which in turn increases their status in the group.

#### [INSERT TABLE 3 ABOUT HERE]

#### DISCUSSION

Status reflects members' assessment of the extent to which other group members are valuable to the group's goals. Such assessments of status are important for group functioning, because a higher status causes a member to have more influence on decisions and outcomes (Magee & Galinsky, 2008; Wittenbaum & Bowman, 2005). But how do members attribute status in the absence of objective data on the value of members to the group? Theory and research has accumulated towards an abilities perspective, which suggests that members attribute status by focusing on cues (i.e. characteristics, behaviors) that signal a member's task-related abilities (Anderson et al., 2001; Anderson & Kilduff, 2009; Bendersky & Shah, 2012; 2013; Berger et al.,

1972; 1974; Bunderson, 2003; Ridgeway, 1991). Possessing the abilities to contribute to the group's goals however does not necessarily mean that one will actually use those abilities to help the group: if one is highly skilled but not committed to the group, it may be that group members pursue their own interests instead of those of the group (e.g., Bingham et al., 2014; Groysberg, Polzer, & Elfenbein, 2011). Consequently, the aim of our endeavor was to complement the abilities perspective with a perspective that emphasizes the importance of serving the group for status attainment.

We longitudinally showed that members' self-reported identification with their group significantly influences their status in the group as attributed by the other group members. This effect holds when controlling for members' abilities and characteristics known to affect status, i.e., cultural background, leadership position, and gender. Moreover, this effect is mediated by members' performance on behalf of the group: members who identify more strongly with their group over time show better performance on behalf of the group, which increases their status over time. Both the finding that group identification and abilities do not correlate, and the finding that the effect of group identification on status holds while controlling for abilities, corroborates our argument that group identification and abilities represent two distinct status cues. These findings are theoretically important as they complement the conventional abilities perspective on status attainment with a social identity perspective that emphasizes the importance of serving the group for attaining status in work groups.

#### Status as an Outcome of Abilities and Identification

In emphasizing the importance of group identification for status attainment, we do not wish to suggest that abilities are irrelevant. In line with the notion that status in work groups is to a large extent based on attributions of a member's task-relevant abilities (Berger et al., 1974), our findings

19

show that members' abilities influenced their status in the group. This makes sense, because a member with higher abilities can be of more value to the group than a member with lower abilities. In line with our arguments, however, we found that controlled for one's abilities, group identification predicts subsequent status; and it is a member's identification that predicts the extent to which a member uses his or her abilities to contribute to the group (cf. Ellemers et al., 1998; van Knippenberg, 2000). It is this element of being group oriented in order to serve the group's interests that is core to the social identity perspective on status attainment. The social identity approach posits that group members strive to achieve and maintain a positive social identity. The more successful a group is, the more positive one's social identity. As a consequence, members' contributions to the group's success are likely to be valued by the other group members, who grant status to the group members who performed on behalf of the group.

Taken together, our study suggests that abilities and identification are two parallel routes towards status attainment in work groups, with the highest status being attributed to members displaying high ability levels as well as high levels of group identification. Our study does not indicate that one takes precedence over another, given that abilities and identification seem to contribute about equally to a member's status. However, it is conceivable that in some settings one is more important than the other. For example, when long-term commitment is required, when the group's tasks are not very difficult, or when a group consists of many high-ability members, it may be that a member's status is determined more by his or her identification than his or her abilities.

The idea that status is determined by a member's identification with the group as well as his or her abilities calls for a reinterpretation of earlier findings on antecedents of status. For example, a number of studies (Flynn, 2003; Flynn et al., 2006; cf. Bendersky & Shah, 2012) have shown that members who give more favors to other group members than they receive from other group members have a higher status in their group. This effect has been explained by the argument that generosity signals that the member possesses or provides something of unique value to the group. Such an explanation corresponds with the conventional abilities perspective on status attainment in work groups. However, we contend that the effect of generosity on status may be better explained by our social identity perspective to status attainment: when members are generous to other members in their group, they signal their commitment to the group and their willingness to perform on behalf of the group. Because this is looked favorably upon by the other group members, it enhances their status in the group.

Our findings are also in line with research showing that stars of a team can be hated and be the source of conflicts (Bendersky & Hays, 2012; Groysberg et al., 2011): when a group member has the ability to provide a significant contribution to the group's success and thus contribute to the collective goals of the group, but fails to do so because he or she is more interested in his or her own goals instead of the group's goals, this can be a highly frustrating experience. The abilities perspective on status attainment does not explain why such highly able but uncommitted group members would not receive status or lose status, but our social identity perspective on status attainment suggests that self-oriented behavior may be a major antecedent of status conflicts (Bendersky & Hays, 2012), which could be an interesting route for follow-up research.

#### **Limitations and Future Directions**

In the present study, we show that group identification enhances a person's status, supporting our social identity approach to status in work groups. Along these lines, there may be more social factors that could affect a person's status. For example, it would be interesting to examine the effect of affiliation and friendship on a person's status. Warmth and competence are considered to be two distinct dimensions that people use to value other persons (Fiske et al., 2002).

The competence dimension corresponds with the abilities perspective on status attainment, but our social identity perspective suggests that status is also affected by attributions of warmth. Future studies could assess the effect of interaction quantity (e.g., frequency and duration) and quality (e.g., level of friendliness and proximity) on attributions of status. In a similar vein, other (anti-) social factors such as outgroup membership or non-normative behavior may be associated with lower status, not so much because they are associated with lower levels of abilities, but with lower levels of identification and group commitment.

In our study, members' *self-reported* group identification predicted their subsequent status in the group *as reported by the other members* in the group. In this way, our results cannot be attributed to common method bias or evaluative bias in members' experiences of the group. In future research, it would be interesting to investigate how other group members are able to estimate the group identification of other members. In the present study we argued and showed that a member's performance on behalf of the group serves as an indicator of the member's identification and thus affects his or her status. However, we call for studies to examine other cues that members use to assess a member's identification, such as sticking to the group when things are difficult or when things go wrong, or defending the group towards outgroups.

We studied members of real life work groups throughout the course of a project that was meaningful and important to them, increasing the ecological validity of our findings. A limitation of this sample, however, is that the sample size (n = 216) did not allow us to test a multilevel mediation structural equation model with all status characteristics included as control variables. Also, our sample was limited to newly founded teams. Our findings thus provide insight into status attainment for group members with a limited history of working together (i.e. six months). Replicating this study in larger samples and in permanent work groups is needed to verify that status is affected by group identification. On a related note, future research could test whether the status attribution process works the same for newcomers into an existing group as it does for all members in newly founded groups, because in the latter, most group members do not know each other. For example, it may be that status attributions of newcomers in existing work groups are based more upon a group's shared attribution process, of which a considerable part consists of sharing and discussing impressions. In addition, it would be interesting to test the relation between group identification, performance, and status in contexts that are not as highly educated. Given that all group members in our sample were engineering students who succeeded an entrance exam to start their engineering studies, they can all be considered rather high in abilities. In contexts where group members show a wider range of abilities, it could be examined whether group identification and performance by group members with very low abilities is still rewarded with higher status attributions.

#### **Practical Implications**

Our social identity perspective provides a dynamic understanding of status attainment and change, given that a person's level of group identification can change over time and, more importantly, can be enhanced. As such, group members' status in the group could be increased by enhancing group identification. For instance, group members have been shown to identify more strongly with their group when they are given the opportunity to make their own personal contribution to the group identity (Jans, Postmes, & van der Zee, 2012; Swaab, Postmes, & Spears, 2008), when they construct shared values as a group (Meeussen, Delvaux, & Phalet, 2013), or when their belief that the group's goals can be achieved through joint effort is strengthened (van Zomeren, Leach, & Spears, 2010).

Moreover, the group identification route to status could be an effective means to improve the status of members with lower abilities or members who are stereotypically believed to be lower in abilities. For instance, our findings indicated that members with a cultural minority background received a lower status in the group, even when controlling for their actual abilities. Meeussen, Otten, and Phalet (2014) showed that cultural minority members identify more strongly with their work group when cultural diversity is stressed as an added value to the group. Similarly, Nishii (2013) argues that inclusion eliminates status hierarchies and increases the likelihood that attributions of competence are based on individuating information instead of social category membership (cf. van Dijk, van Engen, & Paauwe, 2012). Therefore, managers would do well to establish an inclusive climate that values differences in their teams and organizations.

#### Conclusion

The state of the science on status attainment in work groups suggests that status is mainly attributed based on (perceptions of) a member's abilities. We complement the abilities perspective with a social identity perspective by arguing and showing that status is based on members' perception of the extent to which a member contributes to the group, and that performance on behalf of the group is affected by a member's identification. As such, our study invites research that further examines our social identity perspective on status attainment in work groups.

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# Tables

# Table 1

Means, standard deviations, and correlations between all measures; variance at group level for dependent variables

	M (SD)	1	2	3	4	5	6	% variance at group level
1. Leader (0 = member, 1 = leader)								
2. Gender (0 = male, 1 = female)		.06						
<ol><li>Cultural background (0 = minority, 1 = majority)</li></ol>		03	.02					
4. Individual ability	6.89 (1.17)	26***	.10	.09				
5. Identification with group wave 1	4.61 (1.17)	19**	01	03	.08			
6. Performance on behalf of the group wave 2	3.61 (0.65)	.20**	08	.11	12	.16*		$14.98^{+}$
7. Members' status in group wave 3	3.69 (0.63)	.12 <sup>+</sup>	.03	.21*	.21**	.17*	.24***	14.24 <sup>†</sup>

\*\*\* p < .001 \*\* p < .01 \* p < .05 \* p < .07

# Table 2

Predictors of members' status in wave 3 without (model 1) and with (model 2) performance on

behalf of the group as a mediator, multilevel models

	Model 1			Model 2				
	B(SE)	t(df)	р	B(SE)	t(df)	р		
Intercept	2.44 (0.30)	8.24 (200.23)	.000	1.95 (0.40)	4.87 (171.57)	.000		
Identification with group wave 1	0.08 (0.03)	2.35 (199.43)	.020	0.05 (0.04)	1.20 (171.42)	.234		
Individual ability	0.11 (0.04)	3.19 (201.00)	.002	0.13 (0.04)	3.47 (171.42)	.001		
Leader (0 = member, 1 = leader)	0.31 (0.11)	2.83 (176.78)	.005	0.24 (0.12)	2.01 (155.14)	.046		
Cultural background (0 = minority, 1 = majority)	0.18 (0.08)	2.38 (193.92)	.018	0.16 (0.08)	1.97 (165.08)	.051		
Gender (0 = male, 1 = female)	-0.01 (0.09)	-0.06 (196.68)	.950	0.02 (0.10)	0.18 (165.27)	.856		
Performance on behalf of the group wave 2				0.14 (0.07)	2.10 (171.35)	.038		
2	0.40			0.40				
Pseudo R <sup>2</sup> individual level	0.10			0.10				
Pseudo R <sup>2</sup> group level	0.30			0.35				

# Table 3

Results of the multilevel structural equation models testing the indirect effect of group identification (wave 1) on status (wave 3) through performance on behalf of the group (wave 2)

	Model 1			Model 2			
Effect	B (SE)	t	р	B (SE)	t	p	
Within group level							
Identification wave 1 on performance wave 2 (X $ ightarrow$ M)	0.30 (0.11)	2.81	.005	0.11 (0.04)	2.66	.008	
Performance wave 2 on status wave 3 (M $ ightarrow$ Y)	0.36 (0.12)	2.95	.003	0.27 (0.09)	2.96	.003	
Identification wave 1 on status wave 3 (M $ ightarrow$ Y with M)	0.03 (0.05)	3.33	.523	0.05 (0.04)	1.15	.251	
Abilities on status wave 3 (control)				0.11 (0.05)	2.38	.017	
Indirect effect (effect of interest)	0.11 (0.05)	2.10	.036	0.03 (0.02)	1.86	.062	
Between group level							
Identification wave 1 on performance wave 2 (X $ ightarrow$ M)	1.59 (1.66)	0.96	.339	-0.11 (0.57)	-0.19	.847	
Performance wave 2 on status wave 3 (M $ ightarrow$ Y)	-0.03 (0.03)	-1.01	.312	0.19 (0.41)	0.48	.634	
Identification wave 1 on status wave 3 (M $ ightarrow$ Y with M)	-0.08 (0.13)	-0.65	.518	0.18 (0.52)	0.35	.723	
Abilities on status wave 3 (control)				0.39 (0.40)	0.97	.333	
Indirect effect	-0.05 (0.07)	-0.67	.505	-0.02 (0.13)	-0.16	.876	
Monte Carlo confidence interval for effect of interest	[0.020	), 0.235	]	[0.005	5, 0.064	.]	

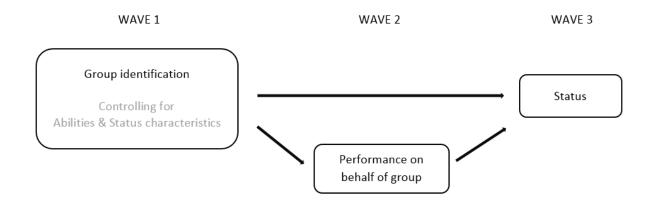


Figure 1. Overview of predictions