

What is your status portfolio? Higher status variance across groups increases interpersonal helping but decreases intrapersonal well-being

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ABSTRACT

Individuals belong to multiple groups across various domains of life, which in aggregate constitute a portfolio of potentially distinct levels of experienced status. We propose a two-factor model for assessing the effects of an individual's status portfolio, based on status average (mean status level across groups) and status variance (degree to which status varies across those groups). Five studies using samples in general-life and work-specific contexts reveal the importance of both status average and status variance, the latter of which has been largely unexplored by status researchers to date. Individuals experiencing higher status variance show greater perspective taking, which in turn increases interpersonal helping. However, higher status variance also increases anxiety, decreasing intrapersonal well-being. Our results provide evidence of the additional explanatory power of accounting for status variance alongside status average, and highlight the importance of considering individuals' aggregate experience of status across the multiple groups to which they belong.

1. Introduction

In modern society, people typically belong to multiple groups, across both personal and professional domains (O'Leary, Mortensen, & Woolley, 2011). For instance, a recent article reported that 95% of workers across various industries were members of multiple teams (Martin & Bal, 2015). Additionally, people often belong to many non-work groups, such as their nuclear family, friend groups, recreational sports teams, and others. Reflecting this reality, there is growing interest among teams researchers in documenting the prevalence and consequences of multiple team membership across a wide range of industries and occupations (Mortensen, Woolley, & O'Leary, 2007; O'Leary et al., 2011). Other emerging research also underscores the importance of developing a "coalitional psychology", the intuitive ways humans understand and navigate the many groups they experience in their daily lives (Cikara, 2020).

Each group an individual belongs to contains a distinct hierarchy, which determines the level of status the individual enjoys within that

group (e.g.: Anderson, John, Keltner, & Kring, 2001; Berger, Cohen, & Zelditch, 1972; Bunderson, 2003). As a result, individuals may experience different status levels across the different groups to which they belong (Bunderson, 2003; Ridgeway, 1987). We refer to the set of status levels that individuals experience across their groups as their "status portfolio." Most of the existing status research has not fully accounted for the experience of belonging to multiple groups, or the potential for an individual's status to vary from group to group. The prevailing approach to studying status involves focusing on a single status hierarchy within a group at a time (e.g.: Anderson et al., 2001; Pettit, Sivanathan, Gladstone, & Marr, 2013). In rare cases, researchers have examined the average of an individual's status across groups, but without accounting for potential variance (e.g.: Anderson, Kraus, Galinsky, & Keltner, 2012). We propose that, to fully understand the effects of status on individuals' behavior and outcomes, we must examine both their average status level and variance across their portfolio of groups. Accounting for individuals' status portfolio will allow us to theorize about how diverse experiences of status across groups may,

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in aggregate, affect people in ways that would not be identified or understood by observing each group in isolation.

Our proposed two-factor model of aggregate status across groups – which accounts for both average and variance – introduces the concept of *status variance*: the extent to which there is variability in one's status level across different groups. This model builds on a related literature in sociology that has examined “status inconsistency”, or the extent to which there are discrepancies in the value associated with individuals' status characteristics, such as education or income (e.g.: Berger, Norman, Balkwell, & Smith, 1992; Lenski, 1954; Van De Brake, Grow, & Dijkstra, 2017). We examine the effects of experiencing status variance (and average status) across groups on two fundamental outcomes that capture the interpersonal and intrapersonal nature of status and carry important organizational implications: interpersonal helping (e.g.: Doyle, Lount, Wilk, & Pettit, 2015; Flynn, Reagans, Amanatullah, & Ames, 2006; van der Vegt, Bunderson, & Oosterhof, 2006; Willer, 2009) and intrapersonal (or subjective) well-being (e.g.: Anderson et al., 2012; Huo, Binning, & Molina, 2010; Yu & Blader, 2020). Though we predict that higher status variance improves individuals' ability to understand others' perspectives and, as a result, increases helping behavior towards others, we expect the experience of higher status variance to also induce anxiety, and consequently decrease well-being. In putting forth this two-factor model of individuals' status portfolios, and conceptualizing and exploring the effects of status variance in particular, we bring attention to the previously overlooked aggregate experience of status across the multiple groups individuals belong to, thus contributing to the status and teams literatures.

1.1. The aggregate experience of Status: Status portfolio

Status is the relative level of respect, prominence, and esteem that an individual possesses in a group (Anderson et al., 2001). It is a defining characteristic of human interaction that emerges and persists in almost every form of social group (Anderson, Hildreth, & Howland, 2015; Berger et al., 1972; Magee & Galinsky, 2008; Ridgeway, 1982; Sidanius & Pratto, 1999). Status in groups is relative and contextually determined, such that greater status is afforded to those who are perceived to have more of the particular skills and characteristics that are most valued in that group's specific context (Anderson & Kilduff, 2009a, 2009b; Anderson et al., 2015; Berger et al., 1972; Ridgeway, 1982). Further, individuals' perceptions of their own status within a group guide their behavior and shape their interactions within that group (e.g.: Anderson, Srivastava, Beer, Spataro, & Chatman, 2006; Berger et al., 1972; Correll & Ridgeway, 2006).

The prevailing model underlying research on status has focused on individuals' status level in one group or hierarchy at a time—identifying the antecedents and consequences of having higher or lower status within a group (Blader & Chen, 2012; Flynn et al., 2006; Pettit & Lount, 2010; Yu & Blader, 2020). However, people typically belong to multiple groups across both personal and professional domains (O'Leary et al., 2011), and in each of these groups, they are attributed a certain status level, that may be similar across groups or not (Anderson et al., 2001; Berger et al., 1972; Bunderson, 2003; Ridgeway, 1987). Indeed, different groups may have different sets of goals, needs and tasks, and thus follow different criteria when assigning status. For example, while some work groups value older group members for their experience and wisdom, other groups may devalue them because they believe that age reduces working efficiency or creativity (North & Fiske, 2015). Additionally, to the extent that different groups are composed of different people, the set of peers relative to which an individual is compared also varies.

Thus, a critical question emerges: how are individuals (and those around them) affected by the similarity or dissimilarity in the status levels they experience across the multiple groups to which they belong? Answering this question requires going beyond the prevailing approach of considering each group's status hierarchy in isolation. We posit that a

more complete understanding of the consequences of status requires considering, both theoretically and empirically, individuals' status portfolio – the set of status levels individuals experience across the multiple groups to which they belong.

1.2. A two-factor model: status average and status variance

The two standard statistical dimensions for describing the distribution of data are average and variance. We thus propose that capturing individuals' aggregate experience of status across multiple groups requires accounting for two factors: status average (the mean of an individual's status levels across groups) and status variance (the degree to which an individual's status level varies across those groups). We expect status average and status variance to both have unique and independent explanatory value in understanding the consequences of status. Specifically, we expect the effects of status average on interpersonal and intrapersonal outcomes to replicate prior research on within-group status level (e.g.: Anderson et al., 2012; Blader & Chen, 2012; Doyle et al., 2015; Lount & Pettit, 2012, as has been the case in existing studies that account for status average across groups (Anderson et al., 2012). We thus devote our theorizing to the dimension of our two-factor model that is less studied: status variance.

While there is no direct parallel to status variance to draw on from existing within-group research, the sociological literature provides us with a similar construct that deals with another form of variability in status – status inconsistency (e.g.: Jackson, 1962; Lenski, 1954; Peter, March, & Du Prel, 2016; Zhang, 2008). Status inconsistency refers to the extent to which an individual or organization carries a dissimilar status rank across the attributes that are used to determine status within a system or group (Lenski, 1954; Stryker & Macke, 1978). An example of high inconsistency would be having a characteristic that is associated with high status (e.g. an advanced degree) and at the same time another characteristic that is associated with lower status (e.g. being from a stigmatized racial minority). In its earliest form, scholars focused largely on discrepancies between formal attributes like income and education (Lenski, 1954), shifting more recently to perceptual attributes like respect and liking (Van De Brake et al., 2017), or artistic and commercial success among Hollywood actors (Han & Pollock, 2021). While status inconsistency captures how one's status may differ across (typically two) attributes, it does not address the variability in the *experience* of having to constantly switch behaviors to conform to different status levels as people rotate across their multiple groups in their everyday lives. Having said that, we expect some of the intrapersonal consequences of status variance to be similar to the discomfort described by the status inconsistency literature, and we draw on and extend this work below when developing our specific hypotheses.

Another aspect we borrow from this status inconsistency literature is how to operationalize status variance. Most prior studies have assessed status inconsistency in regard to only two pre-defined status dimensions (e.g.: income vs. education; Lenski, 1954). Recent work though has clarified that there is assumed symmetry in the direction and strengths of inconsistency effects, meaning status inconsistency should be calculated as an absolute difference when two dimensions are being considered, or as a standard deviation (or variance) when more than two dimensions might be considered (Zhang, 2008). Based on this work, we operationalize status variance as the variance in an individual's status level scores across groups.

1.3. Intrapersonal and interpersonal effects of status

Social status, like other related constructs such as power or socioeconomic status, plays a key role in shaping individuals' psychological well-being because it fulfills fundamental human needs (Anderson et al., 2015; Magee & Galinsky, 2008). However, the specific needs status fulfills – the need for belongingness, relatedness, and respect – are particularly unique in that they involve relationships with others

(Baumeister & Leary, 1995; Ryan & Deci, 2000; Tay & Diener, 2011). This underscores one of the most distinguishing features of status: the fact that it derives from evaluations by others (Berger & Fisek, 1974; Berger et al., 1972; Magee & Galinsky, 2008; Ridgeway, 1982). Thus, unlike power for example, status-maintenance concerns motivate individuals to pay particular attention outward to others in the environment (Blader & Chen, 2012; Blau, 1964; Emerson, 1962; Flynn et al., 2006; Homans, 2009). As a result, status is not only a strong determinant of how individuals feel about themselves intrapersonally, but also of how they interact and relate to others interpersonally (Anderson et al., 2015; Baumeister & Leary, 1995; Blader & Chen, 2012; Magee & Galinsky, 2008; Yu & Blader, 2020).

An encompassing understanding of the effects of status should therefore consider both its interpersonal and intrapersonal consequences. Indeed, a substantial portion of status research has been dedicated to documenting both types of effects, generally finding that a high status level elicits positive interpersonal (Blader & Chen, 2012; Flynn et al., 2006; Hardy & Van Vugt, 2006; Willer, 2009) and intrapersonal (e.g.: Anderson et al., 2015; Blau, 1964; Henrich & Gil-White, 2001) effects. Interpersonally, evidence suggests that enjoying a higher status level increases interpersonal helping in groups such as advice giving (Flynn et al., 2006), generosity (Blader & Chen, 2012), perspective taking (Blader, Shirako, & Chen, 2016), and contributing to help the group achieve its collective goals (Willer, 2009). Intrapersonally, the literature has mostly centered around the positive relationship between status level and well-being (e.g., life satisfaction, self-esteem; Anderson et al., 2012; Gruenewald, Kemeny, & Aziz, 2006; Huo et al., 2010). This relationship has been observed in both field and experimental settings (Anderson et al., 2012; Yu & Blader, 2020) and appears to be widely applicable to organizational contexts (Kline & Boyd, 1991) and cultures or geographic regions (Tay & Diener, 2011).

In selecting the specific interpersonal and intrapersonal outcomes to examine, we relied on two criteria. First, we selected outcomes that have attracted substantial inquiry from status scholars, to enable us to connect to the existing literature and convincingly show how a consideration of status variance in addition to status average can extend what we currently know. Second, given that this is the first investigation of status portfolios and their variance, we considered it important to begin by exploring general effects, and thus selected outcomes that are context-general (that do not only operate within one group). This led us to focus on the following two fundamental outcomes for the purposes of this paper: interpersonal helping (Blader & Chen, 2012; Blader et al., 2016; Flynn et al., 2006; Gould, 2002), defined as task-related advice, support, and assistance given to one individual by another (van der Vegt et al., 2006); and intrapersonal wellbeing (Anderson et al., 2012, 2015; Gruenewald et al., 2006; Huo et al., 2010; Yu & Blader, 2020), defined as individuals' subjective assessment of their quality of life, namely their cognitive judgments of it (e.g., life satisfaction) (Diener, Emmons, Larsen, & Griffin, 1985) and self-esteem (people's subjective evaluation of their overall worth; Leary, 1999; Ridgeway, 1987).

1.4. Status variance increases interpersonal helping through perspective taking

Prior work has repeatedly identified helping as one of the primary interpersonal consequences of status (e.g.: Blader & Chen, 2012; Blader et al., 2016; Flynn et al., 2006; Gould, 2002; Willer, 2009). Interpersonal helping is particularly relevant and consequential for organizations, as it speaks to people's willingness to support group and organizational members, and has been shown to affect group functioning, performance, job involvement, turnover intentions, and career satisfaction (e.g.: Ehrhart, Bliese, & Thomas, 2006; Podsakoff, Whiting, Podsakoff, &

Blume, 2009; Yu, Greer, Halevy, & van Bunderen, 2019). Most of the evidence suggests individuals with a higher status level tend to provide more advice to help group-members (Flynn et al., 2006) and contribute more resources to help the group achieve its collective goals (Willer, 2009). We thus generally expect status average to increase interpersonal helping.

As for status variance, we predict that it will positively relate to individuals' overall tendency to engage in interpersonal helping, even after accounting for the effect of status average. Giving and receiving help, advice, and social support to others can operate as a basic source of social status conferrals (Flynn et al., 2006). Having been exposed to both sides of that process of interpersonal influence, individuals who experience higher status variance are thus likely to be particularly aware and appreciative of both the needs of other group members and how valuable interpersonal helping can be.

Specifically, we expect that experiencing status variance will increase individuals' perspective taking – their overall propensity to adopt or imagine others' feelings, concerns, and perceptions (Galinsky, Ku, & Wang, 2005; Galinsky, Magee, Inesi, & Gruenfeld, 2006) – and, consequently, encourage interpersonal helping, for the following reasons. First, individuals experiencing higher status variance will have regular exposure to, and experience with, a greater range of roles, expectations, treatments, and reactions from others in their interactions across their different groups. Status is experienced primarily via how an individual is treated by others (Blader & Yu, 2017). A high degree of status variance therefore means that the focal individual experiences different treatment across groups – ranging from feeling respected and deferred to in some groups, to feeling low levels of respect and influence, and being expected to defer to others, in other groups. We expect that this wide range of experiences and roles will make it easier to relate to and empathize with other individuals (Zhou, Majka, & Epley, 2017), increasing perspective taking (Galinsky et al., 2005; Galinsky, Wang, & Ku, 2008). Indeed, prior research has found that exposure to more flexible roles (Parker & Axtell, 2001) or various cultural contexts (Lee & Quintana, 2005) is positively related to perspective taking. Also, perspective taking is substantially strengthened when one actually experiences another person's situation, as opposed to merely attempting to imagine what that might be like (Zhou et al., 2017). This suggests that actually experiencing variance in one's status as one moves across groups should increase perspective taking.

Second, there may also be a motivational basis for a positive relationship between status variance and perspective taking. High status variance individuals have first-hand knowledge that the same person may be afforded more or less status according to the context and circumstances, such as who else is in the group. As a result, they should be more likely to recognize the role that others' opinions play in determining their status, and thus focus more of their attention on others (Blader & Chen, 2012). Additionally, status hierarchies create expectations and norms for individuals' behavior, and behavior inconsistent with one's conferred status can elicit disapproval and social sanctions (Anderson et al., 2006; Anderson, Ames, & Gosling, 2008). Given that others' expectations for their behavior will fluctuate as they move between their groups and corresponding different status levels, individuals with significant variance in their status portfolio may therefore need to be particularly attentive to others' feelings and perceptions, to help them adjust their behavior accordingly. In line with these ideas, a recent study on the effects of status changes found that individuals who experienced an unearned status gain (as a result of a language policy change) expressed higher levels of perspective taking and empathy concerns (Neeley & Dumas, 2016).

As perspective taking is necessary to understand how others' thoughts and feelings might be different from the self, it is considered a

key factor driving sympathy and empathy (Decety, Barta, Uzevovsky, & Knafo-Noam, 2016; Shih, Wang, Trahan Bucher, & Stotzer, 2009), which both foster prosocial behavior (Decety et al., 2016). Thus, we predict that the greater perspective taking enabled by status variance will increase individuals' overall tendency to engage in interpersonal helping. Indeed, empirical evidence has shown a positive link between perspective taking and helping behavior in both laboratory (Batson, Early, & Salvarani, 1997) and field settings (Tamnes et al., 2018), as well as other related prosocial behaviors such as trust and reciprocity toward both strangers (Fett et al., 2014) and friends (Guroglu, Van Den Bos, & Crone, 2014) in social dilemma games. The relationship between perspective taking and helping behavior has also been observed in organizational settings – for example, perspective-taking has been found to positively relate to employees' helping behavior towards both their own team members and external personnel (Parker & Axtell, 2001). In sum, we predict that:

Hypothesis 1 (H1): Status variance will positively relate to individuals' overall tendency to engage in interpersonal helping, accounting for status average.

Hypothesis 2 (H2): Perspective taking will mediate the relationship between status variance and interpersonal helping.

1.5. Status variance decreases intrapersonal Well-Being through anxiety

Subjective well-being is a fundamental intrapersonal outcome, and perhaps the one that has attracted the most attention from status scholars (Anderson et al., 2012, 2015; Yu & Blader, 2020). Intrapersonal well-being has also been linked to important organizational outcomes such as hiring and promotion, goal-setting, and job performance (e.g.: De Neve & Oswald, 2012; Judge & Bono, 2001; Wright & Cropanzano, 2000). Existing status research has generally found a positive effect of status on well-being, namely life satisfaction and self-esteem (Adler, Epel, Castellazzo, & Ickovics, 2000; Anderson et al., 2012, 2015; Yu & Blader, 2020). These positive relationships have been observed in both field and experimental settings (Anderson et al., 2012; Yu & Blader, 2020), and appear to be widely applicable to different organizational contexts, cultures and geographic regions (Kline & Boyd, 1991; Tay & Diener, 2011). We thus generally expect status average to be positively related to well-being.

However, we predict that the opposite will be true for status variance: the experience of status variance is apt to be an uncomfortable and psychologically challenging one for the focal individual, thus decreasing intrapersonal well-being. Specifically, we expect the experience of status variance to create an overall sense of anxiety – defined as “a state of distress and/or physiological arousal in reaction to stimuli including novel situations and the potential for undesirable outcomes” (Brooks & Schweitzer, 2011) – which will in turn decrease intrapersonal well-being (Avey, Wernsing, & Mhatre, 2011).

First, individuals whose status varies significantly across groups must adjust their expectations and behavior accordingly as they move between groups, lest they suffer the consequences of violating group expectations (Anderson et al., 2006, 2008). This requires cognitive effort, as these individuals need to constantly engage in self-monitoring and conscious information-processing to manage their behavior to meet others' differing expectations, triggering anxiety as to whether they are fully succeeding in doing so (Andersson, 2018).

Second, status is a strong determinant of individuals' self-concept, affecting self-esteem mental health, and self-respect (Anderson et al., 2012, 2015; Magee & Galinsky, 2008). Individuals look across the various status levels they enjoy in an attempt to form an assessment of how much overall status they have (Marr & Thau, 2013; Tyler & Lind, 1992). This sense-making process will be more complex and unclear for those experiencing status variance. If an individual feels highly respected and admired in one of their groups, but relatively disposable or anonymous in another, how do they form an overall sense of self? This subjective sense of doubt or instability about oneself (Van Den Bos,

2009) is likely to elicit anxiety (e.g.: Greco & Roger, 2003). Similarly, multiple identities have been associated with lower well-being when the identities are in conflict with each other and require different behaviors – as would be the case across status-variant groups (Brook, Garcia, & Fleming, 2008; Simon, 1995).

Indeed, prior research has found that internal inconsistency can have negative emotional and psychological consequences (Higgins, Klein, & Strauman, 1985), and cause anxiety as people try to make sense of their value and define who they are (Hogg, 2007; Zhang, 2008). This is highlighted by some of the work on status inconsistency (Peter et al., 2016; Zhang, 2008). For example, status inconsistency within someone's diffuse status characteristics (e.g., being a highly educated individual from a stigmatized racial minority) causes frustration and social isolation (Goffman, 1957) within those groups in which these characteristics are seen as inconsistent, as people tend to define themselves in terms of their higher status characteristics (e.g. being highly educated), but others in the group may treat them based on their lower status characteristics (e.g. belonging to a stigmatized racial minority). Applying these dynamics to the multi-team membership context, people experiencing status variance may wish to define themselves based on their status level in certain groups, but not on others, and they may feel anxious when they are unable to do so. An experienced surgeon, for example, who is used to being highly respected and admired in the operating room, may struggle when sitting on a hospital budget commission and realizing that reminding everyone else they are a surgeon doesn't result in the deference they were expecting.

Overall, we suggest that status variance is likely to induce anxiety, which in turn, diminishes intrapersonal well-being. Anxiety, particularly social anxiety, has been associated with lower quality of life in nearly every domain, including social, professional, and personal (Dryman, Gardner, Weeks, & Heimberg, 2016; Safren, Heimberg, Brown, & Holle, 1996). Compared to those who do not experience anxiety, individuals with a heightened level of anxiety have been found to have lower work performance (Mughal, Walsh, & Wilding, 1996), reduced relationship quality (Leach, Butterworth, Olesen, & Mackinnon, 2013), and even suicidal thoughts (Olatunji, Cisler, & Tolin, 2007). These challenges could overwhelmingly impair multiple aspects of people's quality of life, with a negative effect on life satisfaction (Dryman et al., 2016). We thus propose that experiencing greater anxiety will lead to lower subjective well-being. Therefore, we hypothesize:

Hypothesis 3 (H3): Status variance will negatively relate to intrapersonal well-being, accounting for status average.

Hypothesis 4 (H4): Anxiety will mediate the relationship between status variance and intrapersonal well-being.

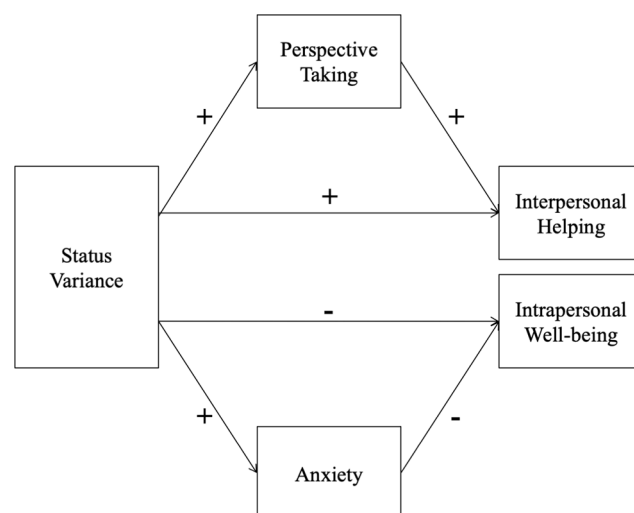


Fig. 1. Conceptual model.

Fig. 1 provides a conceptual model depicting the hypothesized relationships.

1.6. Premises for the effects of status variance

Our proposed theoretical model and hypotheses rely on a set of premises that are important to explicitly discuss. First, for status variance to affect individuals psychologically and behaviorally, it must refer to groups that are of at least some importance to the individual, so that their status experience in the context of those groups is relevant to their sense of self. We thus posit that an individual must belong to multiple groups that are at least minimally important to them for status variance to have any effects at all. Prior work has documented that various groups can serve as important sources of status, namely work groups, friends, and neighborhoods (Anderson et al., 2012). Groups that are more important to an individual are likely more salient and influential to a person's sense of self; we account for this empirically by weighing the contribution of each group to the status variance computation according to each group's relative importance (in Study 3), or exogenously instructing participants to consider groups that were equally important to them (in Studies 2a, 2b, and 4).

Second, even though we explicitly call attention to group importance in our experimental studies (Studies 2a, 2b, and 4), we do not expect the overall consequences of status variance on interpersonal helping and intrapersonal well-being to necessarily require individuals' mental calculation or awareness of their status variance (we test this in Study 3). Conscious awareness of status variance may intensify its effects, but we suggest it is not a necessary condition.

Third, when it comes to status variance and the interpersonal and intrapersonal consequences we are discussing, our proposed model is based largely on the degree to which one *experiences* status variance – i. e., the extent to which one perceives his or her status as being variable across groups. In this sense, although status itself is afforded by others (e.g.: Anderson et al., 2001; Blader & Chen, 2012), we posit that what determines whether individuals experience status variance is their perception of how much status they believe they have in each of their groups. This conceptualization of status as subjective to the individual experiencing it is consistent with recent work on status inconsistency that has also sought to shift the focus from audiences' perceptions to the perceptions of the social actors holding the inconsistent positions (Andersson, 2018; Han & Pollock, 2021; Wang & Jensen, 2019), and also with how it has been used in much of the existing within-group status literature (e.g. Anderson et al., 2012; Djurdjevic et al., 2017).

2. Overview of current research

We test our hypotheses across five studies using archival, survey, and experimental methods to assess the effects of status average and status variance on interpersonal helping and intrapersonal well-being, both in the context of general life and within work contexts. In Study 1, using a large archival sample of working adults, we examine the relationship between status variance and general interpersonal helping and well-being, after accounting for the effect of status average. In Study 2a, we experimentally manipulate status variance and status average to test the causal effect of status variance on general interpersonal helping through perspective taking, and in Study 2b we test its causal effect on general well-being through anxiety. In Study 3, we conduct a two-wave survey with a sample of full-time working adults working in multiple teams to test our entire set of hypotheses in a work context. Finally, in Study 4, we use a sample of full-time working adults with experience working in multiple teams, and experimentally manipulate status variance to again test our full set of hypotheses. To the extent possible and where available, we used multiple different measures for our variables of interest to show the robustness of our effects. Studies 2a, 2b, 3, and 4 were pre-registered. All data, syntax, pre-registrations, study materials, and supplementary results (SOM) can be found at <https://osf.io/ryvw6>

[/doi.org/10.1016/j.obhdp.2021.107300](https://doi.org/10.1016/j.obhdp.2021.107300) or [/www.sciencedirect.com/science/article/pii/S0149124121000616](https://www.sciencedirect.com/science/article/pii/S0149124121000616).

3. Study 1: Status variance from a U.S. Archival dataset

In Study 1, we examine the effect of status variance on interpersonal helping and on intrapersonal well-being in a representative, U.S. archival sample, to get a first sense of the real-world consequences of status variance¹. In this study, we use an expansive definition of “group” to encompass the different hierarchical contexts that provide status experiences that were available in this sample (i.e. neighborhood, work, society). Although “society” in particular is not a group, it still represents an arena in which individuals can have a sense of their standing, which might align, or conflict, with their experienced status in other contexts.

3.1. Method

Sample. We analyzed data from full-time working adults in the Midlife in the United States survey (MIDUS) conducted during 2002–2006. This survey contains measures of individuals' status across groups (e.g., neighborhood, work, and in society), in addition to measures of individuals' interpersonal helping behavior (i.e., hours spent on emotional support for others) and intrapersonal well-being (i.e., life satisfaction and self-esteem).

3.2. Measures

Status variance. MIDUS contains measures of individuals' status across three different broadly defined groups that are likely to be relevant to them: neighborhood, workplace, and society. The first is respondents' level of status in their local neighborhood (i.e., “where do you think you stand relative to others in your community”, from 1 = top to 10 = bottom, then reverse coded). Individuals' status in their neighborhood groups constitutes an important status experience (Anderson et al., 2012). The second is whether the respondent held a formal high status role (i.e., managerial position) at work (1 = yes, 0 = no). Holding a managerial position is a particularly key source of hierarchical status (e.g.: Aquino, Tripp, & Bies, 2001), and thus generally reflects one's status in the workplace (Rogers & Ashforth, 2017). The third dimension measures the extent to which the respondent's occupation is societally respected. The MIDUS provided a measure of occupational status based on a score developed by Hauser and Warren (1997), where a higher value indicates higher occupational status (e.g., cashiers = 21.41, English teachers = 62.72, Physicians = 80.53). This is a diffuse status characteristic that represents the status that an individual derives from a broader, collective category and has been considered an important cue by which others generally confer status to a focal person in social interactions in society (Berger & Fisek, 1974).

To calculate status variance, we took the standard deviation of the standardized values of these three measures. This is the approach that we use throughout to measure status variance, following the approach that has been recommended most recently for status inconsistency when considering more than two status dimensions (Zhang, 2008), and has also been used in the general work dealing with variance of individuals' psychological experience (e.g.: fragile self-esteem; Paradise & Kernis, 2002; Zeigler-Hill, 2006).

Status average. Respondents' status average was computed as the mean of the standardized score of the above three measures.

Interpersonal helping. The MIDUS participants were asked to

¹ We have also replicated the results from this study regarding intrapersonal well-being using data from the 2012 China Family Panel Studies (CFPS) (Xie & Hu, 2014), which are a set of nationally representative Chinese communities, families, and individuals conducted by the Institute of Social Science Survey of Peking University, China. We include these results in the SOM.

report “On average, about how many hours per month do you spend giving informal emotional support (such as comforting, listening to problems, or giving advice)” to each of the following people: spouse or partner, parents, in-laws, children, other family members, and anyone else (such as neighbors or people at church) (adapted from Chesley & Poppie, 2009). This variable captures the “support” dimension of interpersonal helping (van der Vegt et al., 2006), so we developed a composite score of interpersonal helping as the average aggregated hours supported to these different sets of others ($\alpha = 0.71$).

Intrapersonal well-being. The MIDUS included the two measures of intrapersonal well-being we were interested in: life satisfaction, measured with six items (e.g., satisfaction with life overall; on scales of 0 “the worst possible” to 10 “the best possible”; $\alpha = 0.65$) (Prenda & Lachman, 2001), and self-esteem, measured using 7-items from Rosenberg (1989) ($\alpha = 0.76$).

Controls. We controlled for variables that have been found related to status, interpersonal helping, and intrapersonal well-being. Specifically, this set of variables include: gender (1 = female, 0 = male) (Crocker, Luhtanen, Blaine, & Broadnax, 1994), age (Horley & Lavery, 1995), ethnicity (1 = white, 0 = others) (Crocker et al., 1994), education (1 = No school/some grade school to 12 = Professional degrees) (Ryff, 1989), household income (min = \$350, Max = \$300,000) with log transformation (Kahneman & Deaton, 2010), and marital status (1 = currently married, 0 = not currently married).

3.3. Results

Means, standard deviations, and correlations among all variables can be found in Table 1. Only full-time working respondents with valid values for all three status inputs as well as other variables were included in the sample of analysis ($N = 2,279$).

The results of the interpersonal helping and intrapersonal well-being regressions appear in Table 2. Models 1, 3 and 5 show the results of OLS regressions predicting each of the outcome variables based on status average and the control variables. Models 2, 4 and 6 show the results of each of those regressions after adding status variance, allowing us to identify the additional explanatory value of our main predictor of interest after accounting for the other variables, especially status average.

Interpersonal helping. As predicted in H1, we find that participants with greater status variance across groups reported spending significantly more hours providing support to others (Model 2: $b = 4.05$, $t(2270) = 2.83$, $p = .005$, 95% CI [1.24, 6.85], $\eta^2 = 0.004$). As for status average, contrary to what most of the existing literature finds for status level, status average showed a negative relationship with interpersonal helping (Model 2: $b = -3.05$, $t(2270) = 2.97$, $p = .003$, 95% CI [-5.06, -1.03], $\eta^2 = 0.004$). While hypothesizing about the effects of status average are not the focus of this paper, one possibility that could explain why these results are not consistent with the typical main effect of status level may be the moderating effect of some unobserved factors in the archival context. There is some evidence in the literature that the effect

of status level on interpersonal outcomes can be reversed under specific circumstances. For example, Hays and Blader (2016) found that when the status hierarchy is perceived as legitimate as opposed to illegitimate, there is less of a motivation to restore equity through one’s generosity, and as a result high status actually inflates individuals’ sense of deservingness and decreases their generosity. This is the only study in which we found this reversed effect of status average on interpersonal helping, which could reflect the potentially more legitimate or less mutable nature of the status hierarchy in the groups accounted for in this study (perceived status in the local neighborhood, holding a managerial position at work, and respect their occupation garners in society) than in the groups accounted for in the other studies (e.g.: perceived degree of respect, prestige, and admiration in work teams). Nevertheless, the effects of status variance on interpersonal helping remain consistent throughout, suggesting they are independent of whether the effect of status average is positive or negative.

Intrapersonal well-being. As predicted in H3, we also find that participants with greater status variance across groups reported significantly lower life satisfaction (Model 4: $b = -0.16$, $t(2270) = -2.85$, $p = .004$, 95% CI [-0.28, -0.05], $\eta^2 = 0.004$). Similarly, status variance was negatively related to participants’ self-esteem (Model 6: $b = -0.30$, $t(2270) = -5.63$, $p < .001$, 95% CI [-0.41, -0.20], $\eta^2 = 0.01$). As for status average, its effect on intrapersonal well-being were consistent with the prior status literature – status average had a positive relationship with life satisfaction (Model 4: $b = 0.48$, $t(2270) = 11.51$, $p < .001$, 95% CI [0.40, 0.56], $\eta^2 = 0.06$) and self-esteem (Model 6: $b = 0.59$, $t(2270) = 15.32$, $p < .001$, 95% CI [0.51, 0.66], $\eta^2 = 0.09$).

3.4. Discussion

In this archival study, with a large nationally representative sample in the United States, we found that participants who experience greater status variance report significantly more interpersonal helping, measured in terms of hours spent providing emotional support to others. We also found, though, that those who experience greater status variance report significantly lower life satisfaction and self-esteem. These results confirm both H1 – that status variance positively relates to interpersonal helping, and H3 – that status variance negatively predicts intrapersonal well-being. Critically, the effects of status variance were significant after accounting for the effect of status average, suggesting that our understanding of the consequences of status would indeed be incomplete without accounting for status variance.

4. Study 2a and 2b: Experimental evidence of the effects of status variance

Study 2a extends the prior study by experimentally manipulating status variance to test its causal effect on interpersonal helping, as well as the mediating role of perspective taking, thus testing both H1 and H2. Similarly, Study 2b experimentally manipulates status variance to test

Table 1
Means, standard deviations, and correlations among variables in Study 1.

Variables	Mean	S.D.	1	2	3	4	5	6	7	8	9	10
1 Status variance	0.00	0.65	–									
2 Status average	0.81	0.41	0.42**	–								
3 Interpersonal helping	12.26	25.69	0.00	–0.11**	–							
4 Life satisfaction	5.44	1.02	0.06**	0.30**	0.01	–						
5 Self-esteem	7.52	1.11	0.04†	0.33**	–0.02	0.48**	–					
6 Female	0.50	0.50	–0.07**	–0.18**	0.10**	0.00	–0.08**	–				
7 Age	51.28	9.73	0.03	0.05*	–0.08**	0.17**	0.15**	–0.05*	–			
8 White	0.92	0.28	–0.05	0.03	–0.01	0.06**	0.00	–0.02	0.05*	–		
9 Married	0.73	0.44	–0.02	0.09**	0.09**	0.17**	0.10**	–0.13**	–0.04	0.08**	–	
10 Education	7.69	2.47	0.26**	0.46**	–0.11**	0.10**	0.12**	–0.08**	–0.06**	0.01	–0.02	–
11 Income	11.12	0.80	0.12**	0.35**	–0.04†	0.24**	0.13**	–0.14**	–0.16**	0.07**	0.37**	0.31**

$N = 2,279$. † $p < 0.1$; * $p < 0.05$; ** $p < 0.01$.

Table 2
OLS regressions results for Study 1.

Variables	Interpersonal helping				Life satisfaction				Self-esteem			
	Model 1		Model 2		Model 3		Model 4		Model 5		Model 6	
	<i>b</i>	<i>se</i>	<i>b</i>	<i>se</i>	<i>b</i>	<i>se</i>	<i>b</i>	<i>se</i>	<i>b</i>	<i>se</i>	<i>b</i>	<i>se</i>
Status variance			4.05**	(1.43)			−0.16**	(0.06)			−0.30**	(0.05)
Status average	−2.04*	(0.96)	−3.05**	(1.03)	0.44**	(0.04)	0.48**	(0.04)	0.51**	(0.04)	0.59**	(0.04)
Female	4.48**	(1.08)	4.50**	(1.08)	0.19**	(0.04)	0.19**	(0.04)	−0.00	(0.04)	−0.00	(0.04)
Age	−0.21**	(0.06)	−0.21**	(0.06)	0.02**	(0.00)	0.02**	(0.00)	0.02**	(0.00)	0.02**	(0.00)
White	−0.67	(1.93)	−0.35	(1.93)	0.09	(0.08)	0.08	(0.08)	−0.08	(0.07)	−0.10	(0.07)
Married	7.05**	(1.30)	7.22**	(1.30)	0.27**	(0.05)	0.26**	(0.05)	0.15**	(0.05)	0.14**	(0.05)
Education	−0.69**	(0.25)	−0.75**	(0.25)	−0.02†	(0.01)	−0.02†	(0.01)	−0.01	(0.01)	−0.01	(0.01)
Income	−1.49†	(0.79)	−1.44†	(0.79)	0.23**	(0.03)	0.22**	(0.03)	0.03	(0.03)	0.02	(0.03)
Constant	38.31**	(9.45)	34.62**	(9.52)	3.67**	(0.38)	3.82**	(0.38)	4.41**	(0.35)	4.68**	(0.36)
R ²	0.041		0.044		0.162		0.165		0.137		0.149	
Adjusted R ²	0.038		0.041		0.159		0.162		0.134		0.146	
Model comparison Chi ² test			8.04**				8.14**				31.65**	

N = 2,279. † $p < 0.1$; * $p < 0.05$; ** $p < 0.01$.

its causal effect on intrapersonal well-being and the mediating role of anxiety, thus testing H3 and H4. In both studies, we also manipulate the status level across groups to allow us to detect the independent explanatory value of status variance after accounting for the effect of status average. Further, it also allows us to test for potential interactional effects between status average and status variance, which would indicate if status variance has greater (or lesser) effects among individuals with higher (or lower) status average.

4.1. Study 2a: Method

Participants. We recruited 700 participants through Amazon's Mechanical Turk to complete our 10-minute survey for \$1.00. Three participants failed the attention check or didn't answer the manipulation question, and thirty-eight failed to write comprehensible answers to our essay question. These pre-registered exclusions left a final sample of 659 participants (52.2% female, $M_{\text{age}} = 39.2$ years). Our results remain the same without exclusions.

Design and Procedure. This study features a 2 (status variance: yes, no) \times 3 (status average: high, medium, and low) between-subjects design plus a control condition with no manipulation. We manipulated both status variance and status average to test whether our proposed effects of status variance hold consistently at different levels of status average.

Participants were instructed that they would be asked to imagine a scenario in which they belong to several different groups across their personal and professional lives. To prepare them for the scenario, we gave them a list of some examples of groups that people may belong to (e.g., online marketing group, nuclear family, soccer team, etc.). We also provided them with a brief explanation of what constitutes a status hierarchy in a group, defining status as “the relative level of respect, prestige, and admiration that someone has in the eyes of others” in each group.

Manipulation. For all conditions, participants were told to imagine they belong to six different groups, all of which are equally important to them. Then, participants in the six experimental conditions were shown a figure depicting six group hierarchies, with their positions in each of these hierarchies indicated (see visual stimuli for all conditions in Appendix A). For example, in the “no status variance / high status average” condition, participants saw that they enjoyed the same degree of high status across all six groups. In contrast, in the “status variance / high status average” condition, participants saw that their status position varied across the six groups – though the average of the various status positions was equivalent to that of the “no status variance / high status average” condition. After viewing the picture, participants were asked to write a few sentences to describe how they would feel experiencing their

assigned scenario. In the control condition, participants were asked to come up with a name for each of the six groups, without any reference to the groups' hierarchy or their status in each group.

4.2. Measures

Perspective taking. We measured participants' perspective taking via two behavioral tasks developed by Yip and Schweitzer (2019): the “chess task” (measure 1) and the “photo task” (measure 2). In both tasks participants are instructed to answer questions about a photo. Those questions can either be answered from the point of view of the person pictured in each of the photos (which involves taking the perspective of the person in the photo), or that of the participant (which does not involve engaging in perspective taking). We coded participants' answers as a 1 if they provided the perspective-taking answer, and a 0 if they did not. We analyzed the results from the two tasks as separate measures of perspective taking.

Interpersonal helping. We assessed participants' interpersonal helping with two measures drawn from an advice-giving task that align with the definition of interpersonal helping we are using, as they capture the amount and quality of “task-related advice” participants provide to others (van der Vegt et al., 2006): a behavioral measure of *effort* in providing advice to others, and an evaluation of the *quality* of that advice by the external raters for whom the advice was intended. First, to reduce demand effects, participants were told the main study was completed, and the researchers would like to collect study materials for an unrelated project. Participants were then asked to provide advice to new MTurkers who have just registered on the platform and will be performing their first HITs (tasks for money). They were told that their advice will be shared with real MTurkers who can benefit from their experience (adapted from Zhang & North, 2020). There was no extra tangible incentive for performing this task, so participants' willingness to put effort into giving advice, namely by writing more extensive pieces of advice, captures the extent to which they voluntarily provided support and assistance to others (Trobst, 2000). We counted the number of words participants wrote in this task as reflecting the effort they devoted to interpersonal helping (Stallard, 1974; Yeomans et al., 2018). We subsequently log transformed the word count measure to account for the skewed nature of the data ($M = 3.30$, $SD = 0.84$). All results remain consistent if using the raw count measure instead.

Second, in order to capture whether the advice provided was indeed task-related (van der Vegt et al., 2006) and helpful (Trobst, 2000), we sought to evaluate the quality of the advice given by the study participants by recruiting raters for whom the advice was meant for in the first place – new MTurkers who were performing some of their first HITs on MTurk. We used an adapted version of the consensual assessment

technique (Amabile, 1982) in which raters are presented with a set of randomly selected pieces of advice (Milkman, Rogers, & Bazerman, 2010; Zhang & North, 2020). We had a total of 676 pieces of advice to be rated (20 participants opted not to provide any advice) and so, given that large number, it would be impossible for the same raters to evaluate all of them. We determined we could reasonably expect each rater to evaluate a set of 20 pieces of advice in approximately 15 min. To have 3 different raters evaluate each piece of advice, we would need a total of 102 raters. We used Cloud Research's pre-screening filters to recruit 102 participants who had previously completed <100 HITS. Participants were paid \$1.50 for their participation. The raters were first told that they would be shown a set of 20 different pieces of advice written by other MTurkers and intended to help new MTurkers such as themselves. They were then randomly assigned 20 pieces of advice to read and asked to rate each of them in regard to how relevant, useful, helpful and valuable they found each to be (1 = "not at all"; 5 = "very"). We observed sufficient interrater reliability (average $\alpha = 0.86$) and internal reliability ($\alpha = 0.96$) of these ratings, and thus calculated the interpersonal helping quality measure as the average of these four ratings across the respective three coders.

4.3. Study 2a Results

The means for each condition can be found in Fig. 2. In testing H1 and H2 we are most interested in the variance vs. no variance contrast, so we attributed to each participant a "status variance" (1 = yes, 0 = no) and "status average" (3 = high, 2 = medium, 1 = low) score, depending on their condition. We then used these variables to perform OLS and Logistic regression analyses on helping and perspective taking. Additional analyses including the control condition revealed identical effects (for details, see SOM p. 2).

Interpersonal helping. Consistent with H1, there was a significant positive effect of status variance on interpersonal helping (effort: $b = 0.13$, $t(550) = 2.13$, 95% CI [0.01, 0.25], $p = .03$, $\eta^2 = 0.01$; quality: $b = 0.14$, $t(550) = 2.58$, 95% CI [0.03, 0.25], $p = .01$, $\eta^2 = 0.01$). Status

average did not have a significant main effect on interpersonal helping (effort: $b = -0.002$, $t(550) = -0.04$, 95% CI [-0.08, 0.07], $p = .97$, $\eta^2 < 0.001$; quality: $b = 0.02$, $t(550) = 0.55$, 95% CI [-0.05, 0.09], $p = .58$, $\eta^2 < 0.001$). Of note, the effect of status variance on quality rating of the advice remains significant even when controlling for effort (i.e. number of words) ($b = 0.11$, $t(549) = 2.09$, 95% CI [0.01, 0.22], $p = .037$, $\eta^2 = 0.01$). The interaction between status variance and status average was not significant (effort: $b = -0.03$, $t(549) = -0.46$, 95% CI [-0.18, 0.11], $p = .65$, $\eta^2 < 0.001$; quality: $b = 0.12$, $t(549) = 1.76$, 95% CI [-0.01, 0.25], $p = .08$, $\eta^2 = 0.01$), suggesting that the positive effect of status variance on interpersonal helping does not vary depending on whether one has higher or lower status average across groups.

Perspective taking. Consistent with our prediction, there was a significant positive effect of status variance on both perspective taking measures (PT – Measure 1, *Odds ratio* = 1.45, $z = 2.08$, 95% CI [1.02, 2.05], $p = .038$; PT – Measure 2, *Odds ratio* = 1.58, $z = 2.46$, 95% CI [1.10, 2.27], $p = .01$). Status average did not have a significant main effect on perspective-taking (PT – Measure 1, *Odds ratio* = 0.97, $z = -0.31$, 95% CI [0.78, 1.20], $p = .76$; PT – Measure 2, *Odds ratio* = 0.95, $z = -0.44$, 95% CI [0.76, 1.19], $p = .66$). The interaction between status variance and status average was not significant for either perspective taking measure (PT – Measure 1, *Odds ratio* = 1.03, $z = 0.15$, 95% CI [0.67, 1.59], $p = .88$; PT – Measure 2, *Odds ratio* = 1.22, $z = 0.87$, 95% CI [0.78, 1.92], $p = .39$), suggesting that the positive effect of status variance on perspective taking does not vary depending on whether one has higher or lower status average across groups.

Indirect effects. We next tested the predicted indirect effects of status variance on interpersonal helping via perspective taking (Fig. 3). Bootstrapping analysis with 5,000 resamples revealed that both measures of perspective taking mediated the indirect effects of status variance on both interpersonal helping outcomes (PT – Measure 1: effort: 95%CI [0.001, 0.04]; quality: 95%CI [0.002, 0.04]); (PT – Measure 2: effort: 95%CI [0.01, 0.06]; quality: 95%CI [0.001, 0.03]), controlling for the effect of status average, supporting H2.

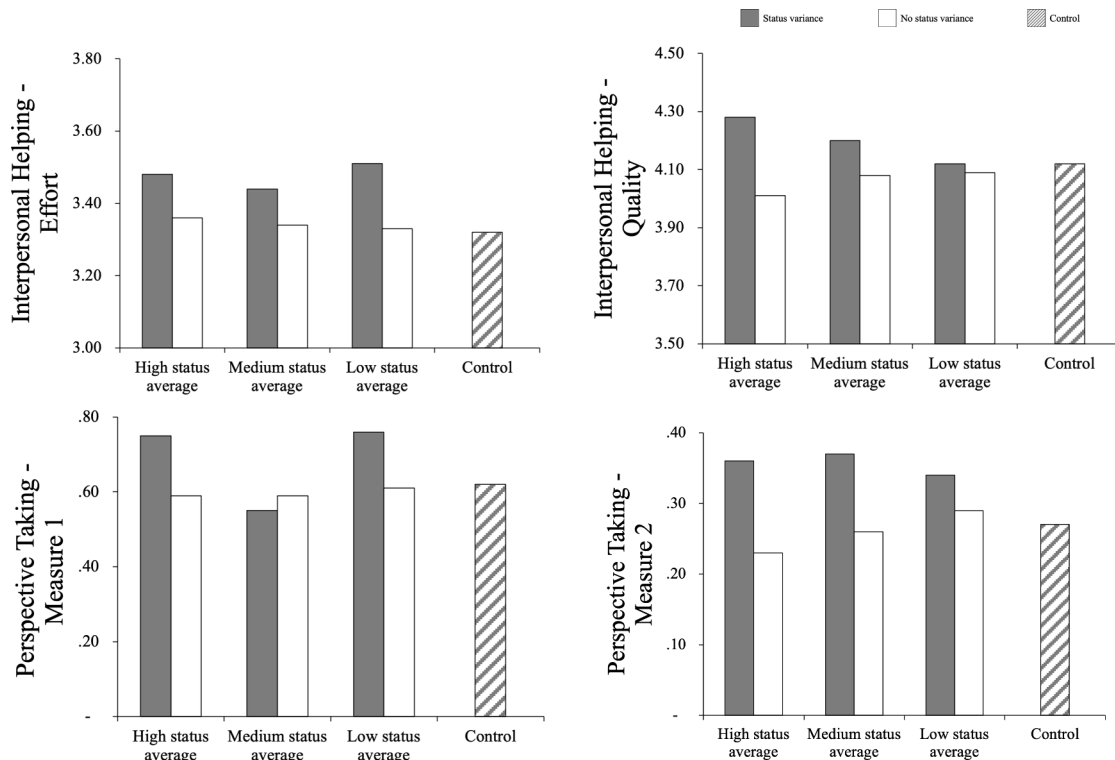


Fig. 2. Means across experimental conditions in Study 2a.

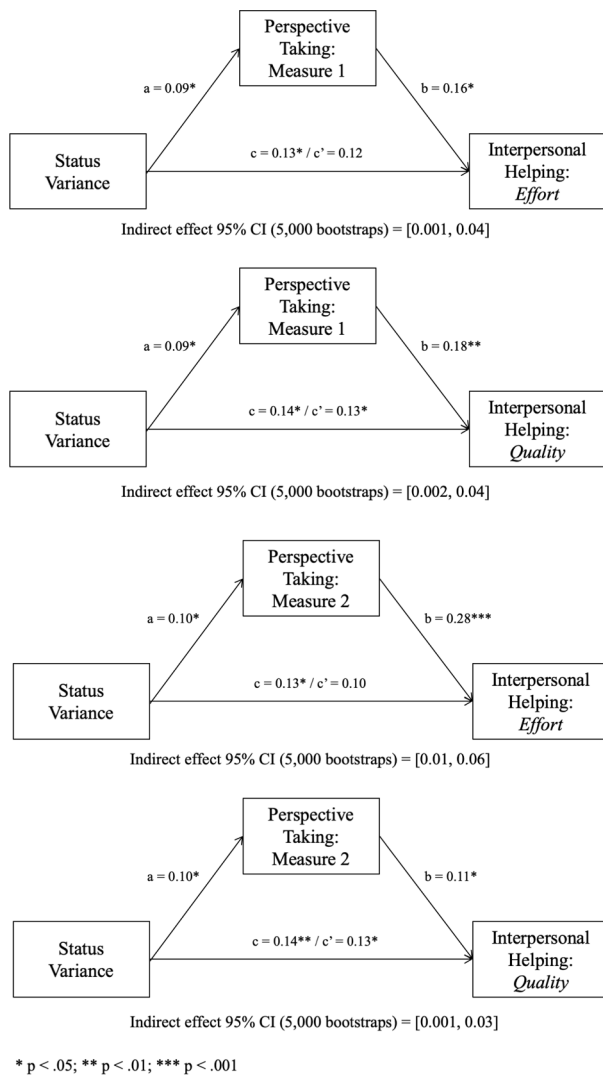


Fig. 3. Mediation results from Study 2a.

4.4. Study 2b: Methods

Participants. We recruited 700 participants through Amazon's Mechanical Turk who had not previously completed one of our studies to complete our 10-minute survey for \$1.00. Thirty-seven participants failed the attention check or did not answer the manipulation question. These pre-registered exclusions left a final sample of 663 participants (53% female, $M_{age} = 36.8$ years). Our results remain the same without exclusions.

Design and Procedure. As in Study 2a, participants were told that they would be asked to imagine a scenario in which they belong to several different groups across their personal and professional lives, and they were provided a brief explanation of status hierarchy in groups.

Manipulation. We adopted a similar procedure as in Study 2a to create the six manipulation conditions (2 [status variance: yes, no] \times 3 [status average: high, medium, low]), plus the control condition.

4.5. Measures

Anxiety. Similar to other studies measuring anxiety (Brooks & Schweitzer, 2011; Gino, Brooks, & Schweitzer, 2012; Rosen et al., 2020), participants were asked to rate to what extent imagining the assigned scenario made them feel anxious, stressed, and worried, on scales of 1 "not at all" to 7 "a great deal" ($\alpha = 0.95$).

Intrapersonal well-being. Participants were asked to imagine themselves in the assigned situation and indicate their agreement on the ten-item Rosenberg self-esteem scale (RSE) (Rosenberg, 1965); e.g., "I would take a positive attitude toward myself", $\alpha = 0.93$ and five-item Satisfaction with Life Scale (SWLS; Diener et al., 1985; e.g., "I would be satisfied with my life"; $\alpha = 0.93$).

4.6. Study 2b Results

The means for each condition can be found in Fig. 4. We calculated the status variance and status average measures as in Study 2a, and with them performed OLS regression analyses on the predicted outcomes to test H3 and H4. Additional analyses including the control condition revealed identical effects (for details, see SOM p. 3–4).

Intrapersonal well-being. Consistent with H3, there was a significant negative effect of status variance on intrapersonal well-being (life satisfaction: $b = -0.39$, $t(564) = -3.53$, 95% CI $[-0.61, -0.17]$, $p < .001$, $\eta^2 = 0.02$; self-esteem: $b = -0.37$, $t(564) = -3.54$, 95% CI $[-0.57, -0.16]$, $p < .001$, $\eta^2 = 0.02$). Status average had a significant positive effect on both well-being outcomes (life satisfaction: $b = 0.95$, $t(564) = 13.86$, 95% CI $[0.81, 1.08]$, $p < .001$, $\eta^2 = 0.25$; self-esteem: $b = 0.94$, $t(564) = 14.75$, 95% CI $[0.82, 1.07]$, $p < .001$, $\eta^2 = 0.28$). The interaction between status variance and status average was not significant (life satisfaction: $b = -0.06$, $t(563) = -0.45$, 95% CI $[-0.33, 0.21]$, $p = .65$, $\eta^2 < 0.001$; self-esteem: $b = 0.07$, $t(563) = 0.57$, 95% CI $[-0.18, 0.32]$, $p = .57$, $\eta^2 < 0.001$), suggesting that the negative effect of status variance on intrapersonal well-being does not vary depending on whether one has higher or lower status average across groups.

Anxiety. Consistent with our prediction, there was a significant positive effect of status variance on anxiety ($b = 0.40$, $t(564) = 3.19$, 95% CI $[0.15, 0.64]$, $p = .002$, $\eta^2 = 0.02$). As for status average, it had a significant negative effect on anxiety ($b = -0.61$, $t(564) = -7.97$, 95% CI $[-0.76, -0.46]$, $p < .001$, $\eta^2 = 0.10$). The interaction between status variance and status average was not significant ($b = -0.02$, $t(563) = -0.15$, 95% CI $[-0.33, 0.28]$, $p = .88$, $\eta^2 < 0.001$), suggesting that the positive effect of status variance on anxiety does not vary depending on whether one has higher or lower status average across groups.

Indirect effects. We next tested the predicted indirect effects of status variance on interpersonal helping via anxiety, as depicted in the mediation models in Fig. 5. Bootstrapping analysis with 5,000 resamples revealed that anxiety mediated the indirect effects of status variance on both intrapersonal well-being outcomes (life satisfaction: 95%CI $[-0.24, -0.05]$; self-esteem: 95%CI $[-0.34, -0.08]$), controlling for the effect of status average. Taken together, these results provide support for H4.

4.7. Study 2a and 2b Discussion

Overall, the results of Studies 2a and 2b extend our findings from Study 1. Through a scenario experiment, we found that participants asked to imagine experiencing status variance across their groups exhibited greater perspective taking, and as a result provided greater interpersonal helping to others, than those asked to imagine experiencing no status variance. Additionally, we also found that those participants who were asked to imagine experiencing status variance reported elevated anxiety, and consequently lower levels of intrapersonal well-being, than those asked to imagine experiencing no status variance.

The results from the first three studies are consistent with our theory: employing both correlational and experimental designs, we find evidence that status variance predicts the degree of interpersonal helping individuals provide to others, as well as their intrapersonal well-being. These effects are significant when controlling for status average, but are not moderated by it, suggesting that the effects of status variance on these outcomes do not vary depending on whether one has higher or lower status average across groups. A limitation of these studies is the fact the interpersonal and intrapersonal mediators and outcomes were

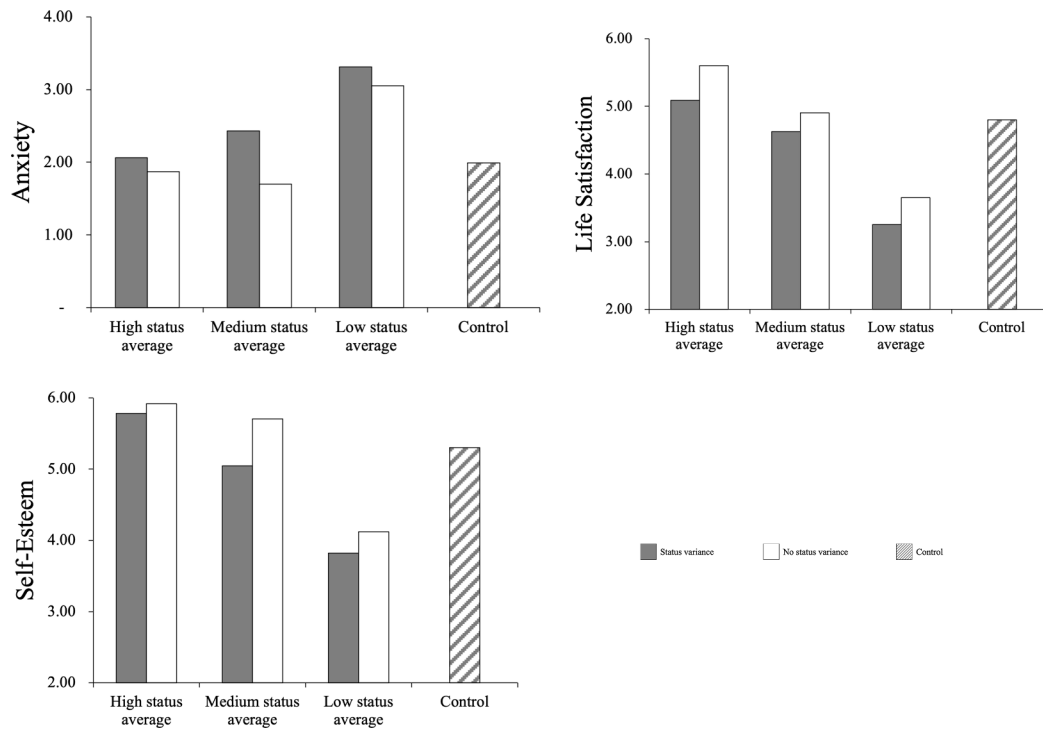


Fig. 4. Means across experimental conditions in Study 2b.

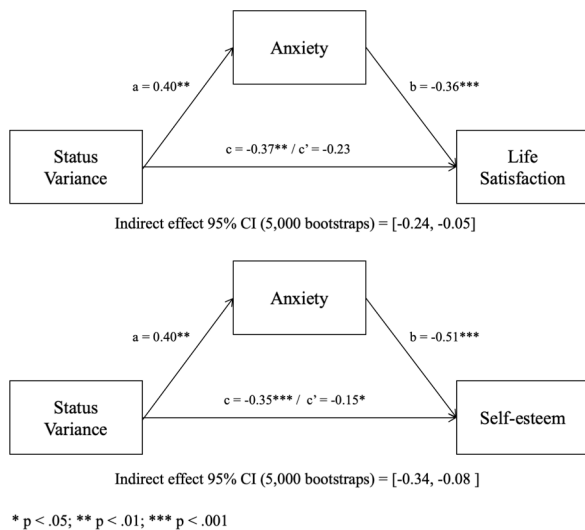


Fig. 5. Mediation results from Study 2b.

collected separately, limiting our ability to test the entire model at once or explore potential cross-mediation effects. We address this limitation next in Studies 3 and 4.

5. Study 3: Status variance from a sample of adults working in multiple teams

In Study 3, we sought to test the applicability of the entire set of Hypotheses 1–4 and to do so specifically in work contexts with individuals who work across multiple teams. Additionally, we wanted to design a study that addressed two important considerations that the previous studies were unable to answer. The first was to ensure the relationship between status variance and the remaining variables is not dependent on the experimentally manipulated salience of status in participants' mind. To do so, we designed Study 3 as a two-part study

(with one week in between the two surveys) to measure the independent variable separately from the mediators and outcome measures. The second was to refine our operationalization of status variance by accounting for the possibility that not all groups are equally relevant in determining how a person defines and thinks about themselves (Jetten, Branscombe, Schmitt, & Spears, 2001; Roccas, 2003). Status inconsistency scholars have faced a similar dilemma, recognizing that some status dimensions may matter more than others in determining an individual's overall status within a social system, and consequently recommend weighing those dimensions by importance in calculating status inconsistency (Zelditch & Anderson, 1966). Because the same principle can be applied in the case of status variance, we asked participants to rate how important each team was to them, and subsequently used those as weights to calculate weighted measures of status variance and status average. This way, the status levels in teams that are more important to the participants weigh more heavily in determining their status variance and status average than the status levels in teams that are less important.

5.1. Method

Participants. We recruited 500 full-time employed participants through Prolific to complete a first 10-minute survey for \$2.00 and then sent a second survey to these participants a week later to complete our second 5-minute survey for an additional \$2.00. Participants recruited through Prolific have been found to be more diverse as well as more naïve than participants recruited through Amazon's Mechanical Turk (Peer, Brandimarte, Samat, & Acquisti, 2017), and we were able to set up pre-screening filters to recruit only full-time working participants who work across multiple teams. Of the 500 participants who completed the first survey, 472 of them also completed the second survey. We excluded participants who did not meet our pre-registration criteria (18 participants failed the attention check, and a further two reported less than three teams they work in). The final sample of 452 participants (45.8% female, $M_{age} = 35.2$ years) were recruited from both the United Kingdom (79.1%) and the United States (20.9%).

Design and Procedure. At the beginning of Survey 1, participants

were given a list of example teams someone might belong to at work and were asked on the following page to name and provide a brief description of between three to six work teams to which they belong. Participants reported an average of 3.92 teams ($SD = 1.11$). They subsequently rated their perceived status in each team and provided information about the team's relative importance to them (1 "not at all important" to 5 "extremely important"). Survey 1 also included control variables. Approximately one week after completing Survey 1, participants were sent a link to complete Survey 2, which included our mediating (perspective taking and anxiety) and dependent variables (helping and well-being). Unless otherwise stated, item responses were on scales of 1 "not at all" to 7 "a great deal".

5.2. Measures

Weighted status variance and weighted status average. We first assessed participants' perceived status in each of the teams they identified by asking them to indicate how much respect, prestige, and admiration (e.g., Anderson et al., 2001) they felt they had relative to the other members in each team (average $\alpha = 0.86$). We calculated participants' status level within each team as the average of these three items (e.g., Anderson et al., 2001). We then calculated each team's weight by dividing the importance score the participant gave each team by the maximum score (i.e.: a team that was rated a 5 on importance was given a $5/5 = 1$ relative weight, while a team that was rated a 2 on importance was given a $2/5$ relative weight). We subsequently calculated each participant's weighted status average by accounting for each team's status in proportion to its relative weight. Similarly, we calculated each participant's status variance by accounting for the contribution of each team towards the variance in proportion to its relative weight.

Perspective taking. We used a four-item measure of perspective taking at work developed by Grant and Berry (2011). A sample item is "[a]t work, I regularly seek to understand others' viewpoints" ($\alpha = 0.88$).

Interpersonal helping. We used a seven-item self-report measure of helping behaviors at work from Williams and Anderson (1991). A sample item is "help others who have heavy work-loads" ($\alpha = 0.83$).

Anxiety. We used the same three-item measure of anxiety from Study 2b, but specifically asked participants to rate the extent to which they feel each of the emotions at work ($\alpha = 0.90$).

Intrapersonal well-being. To parallel our other studies, we measured well-being with scales adapted to work contexts. Job satisfaction was measured with three-items from Hackman and Oldham (1975) Job Diagnostic Survey ($\alpha = 0.91$). For state self-esteem at work we used a six-item measure developed by Heatherington and Polivy (1991) and asked participants to "think about how things are going at work" as they indicated agreement with statements such as "I feel as smart as others," ($\alpha = 0.89$).

Controls. Similar to Study 1, we controlled for variables that have been found to relate to status, interpersonal helping, and intrapersonal well-being, namely gender (female = 1, male = 0), age, and marital status (married = 1, not married = 0), education, and income. For participants in the UK, education was from 1 = no qualifications to 6 = Level 4 or above [first or higher degree, professional qualifications, or other equivalent] and income was from 1 = Less than £10,000 to 12 = £150,000 or more. For participants in the US, education was from 1 = less than high school degree to 8 = professional degree and income was from 1 = Less than \$10,000 to 12 = \$150,000 or more. Even though these values for education and income are not strictly equivalent, we standardized and combined these categories for the purpose of analysis. Additionally, in all models we controlled for the number of teams each participant reported in all models, as the status variance calculation is directly affected by the number of teams contributing to it.

5.3. Results

Table 3 provides the means, standard deviations, and correlations among all variables. Participants who did not complete all measures on their demographic information, and had missing values in the control variables were not accounted for in the regressions ($N = 12$).

The results of the regressions we ran to test Hypotheses 1–4 appear in Table 4. Models 1, 3 and 5 show the results of OLS regressions predicting each of the outcome variables based on just status average and the control variables. Models 2, 4 and 6 show the results of each of those regressions after adding status variance.

Interpersonal helping. As predicted in H1, we found that participants with greater status variance across work teams reported providing significantly more interpersonal helping to others at work (Model 2: $b = 0.26$, $t(430) = 3.04$, $p = .002$, 95% CI [0.09, 0.43], $\eta^2 = 0.02$). As for status average, its effects on interpersonal helping were consistent with the existing literature for status level – status average had a positive effect on interpersonal helping (Model 2: $b = 0.21$, $t(430) = 2.98$, $p = .003$, 95% CI [0.07, 0.35], $\eta^2 = 0.02$).

Intrapersonal well-being. In partial support of H3, we found that participants with greater status variance indicated significantly lower job satisfaction (Model 4: $b = -0.28$, $t(430) = -2.41$, $p = .02$, 95% CI [-0.50, -0.05], $\eta^2 = 0.01$), while the effect on self-esteem was directionally as predicted, but not significant (Model 6: $b = -0.15$, $t(430) = -1.54$, $p = .13$, 95% CI [-0.35, 0.04], $\eta^2 = 0.01$). The effects of status average on intrapersonal well-being were also consistent with the existing literature on status level – status average was positively related to both job satisfaction (Model 6: $b = 0.54$, $t(430) = 5.66$, $p < .001$, 95% CI [0.35, 0.73], $\eta^2 = 0.07$) and work self-esteem (Model 8: $b = 0.51$, $t(430) = 6.08$, $p < .001$, 95% CI [0.34, 0.67], $\eta^2 = 0.08$).

Indirect effects. We next tested both predicted indirect effects of status variance in a full model including the hypothesized relationships simultaneously, as depicted in the mediation model in Fig. 6. Bootstrapping analysis with 5,000 resamples revealed that perspective taking mediated the indirect effect of status variance on interpersonal helping (95% CI [0.04, 0.26]), supporting H2. At the same time, anxiety mediated the indirect effect of status variance on job satisfaction (95% CI [-0.14, -0.003]) and work self-esteem (95% CI [-0.16, -0.004]), supporting H4.

Robustness checks. Having both mediators and both sets of outcome variables in the same study allowed us to test whether our mediator variables cross-mediated the dependent variable we did not specifically hypothesize about. We find that perspective taking mediated the relationship between status variance and job satisfaction (95% CI [0.01, 0.10]). To confirm that the mediating path formally hypothesized in H4 persisted even when accounting for the mediating effect of perspective taking, we tested for the indirect effects of status variance on job satisfaction through both anxiety and perspective taking in the same model. Bootstrapping analysis with 5,000 resamples revealed that both variables significantly mediated the effect of status variance at the same time (anxiety: 95% CI [-0.14, -0.004]; perspective taking: 95% CI [0.14, 0.115]). Interestingly, the fact that perspective taking mediated the effect of status variance on job satisfaction positively suggests that the negative mediating role of anxiety could be even stronger if it weren't for perspective taking partly counter-balancing for the negative effect of anxiety. For the other two cross-mediations, we found that perspective taking did not mediate the relationship between status variance and work self-esteem (95% CI [-0.06, 0.01]), and anxiety did not mediate the relationship between status variance and helping (95% CI [-0.01, 0.02]).

5.4. Discussion

The findings of Study 3 generally corroborate our earlier results in a work-specific context. We found that individuals reporting greater status variance across the different teams in which they work reported being more likely to engage in helping behaviors at work, with perspective

Table 3
Means, standard deviations, and correlations among variables in Study 3.

Variable	M	S.D.	1	2	3	4	5	6	7	8	9	10	11	12	1
1 Weighted status variance	0.50	0.56	–												
2 Weighted status average	3.74	0.67	–0.15**	–											
3 Perspective taking	5.06	1.15	0.10*	0.15**	–										
4 Interpersonal helping	5.27	1.02	0.11*	0.14**	0.61**	–									
5 Anxiety	3.49	1.51	0.12**	–0.25**	0.05	0.02	–								
6 Job satisfaction	5.15	1.41	–0.17**	0.29**	0.16**	0.19**	–0.37**	–							
7 Work self esteem	5.25	1.22	–0.14**	0.30**	0.01	0.07	0.03	0.07	–						
8 Number of groups	3.92	1.11	0.09	0.05	0.01	0.08	0.12**	0.02	–0.02	–					
9 Female	0.46	0.50	–0.09*	0.03	0.08	0.12**	0.18**	0.02	0.01	0.01	–				
10 Age	35.24	9.78	–0.09*	0.06	0.08	0.05	–0.18**	0.13**	0.18**	0.09*	–0.04	–			
11 White	0.83	0.38	0.01	–0.02	0.07	0.00	0.03	0.13**	0.06	0.11*	–0.07	0.17**	–		
12 Married	0.56	0.50	–0.03	0.12*	0.02	0.03	–0.14**	0.15**	0.11*	0.07	–0.16**	0.34**	0.11*	–	
13 Education	5.33	1.13	–0.05	0.03	0.10*	0.05	0.02	0.04	0.06	–0.02	0.21**	0.02	0.00	0.02	–
14 Income	5.22	2.16	0.03	0.01	0.05	0.00	–0.07	0.03	0.06	0.02	0.02	0.20**	0.05	0.34**	0.32**

N = 440. † p < 0.1; * p < 0.05; ** p < 0.01.

taking mediating this relationship. Additionally, we found partial evidence that status variance is negatively related to well-being at work – it did so in regard to job satisfaction, but not to work self-esteem. Since the relationship between status variance and self-esteem was significant in all other studies, and directionally the same in this one, we interpret this inconsistent result with caution. Lastly, we did find that anxiety mediated the effect of status variance on both job satisfaction and work self-esteem.

The two-part study design provides evidence that the relationship between status variance and subsequent mediators (perspective taking and anxiety at work) and outcomes (interpersonal helping and well-being at work) is not dependent on the salience of status in participants' mind as status was likely not as salient when participants completed survey 2. Finally, in this study we were able to account for the relative importance that each team represented to the participants in calculating their status variance and status average. If participants reported having a lower (or higher) status level in a particular team, but considered that team to be relatively unimportant to them compared to others, then their status variance score was lower than it would have been if they considered that particular team to be very important. Taken together, the results from Study 3 provide evidence of both the interpersonal benefits at work and the intrapersonal harm of experiencing status variance across the multiple teams individuals work in.

6. Study 4: Manipulating status variance in a sample of adults working in multiple teams

In Study 4, we sought to extend our prior findings and test the full set of Hypotheses 1–4 in a single experiment and also include, where possible, additional work-related behavioral measures of our variables of interest. We tested our hypotheses with a sample of full-time working adults with experience working in multiple teams.

6.1. Method

Participants. We recruited 300 full-time employed participants through Prolific to complete a 20-minute survey for \$3.50, setting up pre-screening filters to recruit only full-time workers who work across multiple teams. We excluded participants who did not meet our pre-registration criteria (29 participants failed the attention check, a further 30 spent <8 min completing the survey, and an additional two expressed suspicion that the partner for the interpersonal helping task was fake). The final sample of 239 participants (37% female, $M_{\text{age}} = 35.2$ years) was recruited from both the United Kingdom (60.3%) and the United States (39.7%).

Design and Procedure. This study had three conditions: status variance, no status variance (with status average at the same medium level in both conditions), and control. Following a similar paradigm to Studies 2a–2b, participants were asked to imagine a scenario. This time though, they were instructed to imagine their work involves working across six different projects, each with a different team of people, but all teams equally important to them both in terms of time commitment and relevance for their performance and career progression.

Participants were first shown the manipulation scenario corresponding to their condition (the only part of the survey that varied per condition), followed by the anxiety and intrapersonal well-being measures as described below. They were then told they would be interacting through chat with another participant taking the study at the same time as them who had also been exposed to a version of the scenario. They were instructed to imagine their interaction partner was a colleague from the work context described earlier (without referencing any particular team). The next screen showed them a waiting pinwheel for a few seconds, after which they were told that they would have to wait to be paired up with their interaction partner, and in the meantime there was a warm-up task for them to complete. The warm-up task was our measure of perspective taking, as described below. Following the

Table 4
OLS regressions results for Study 3.

Variable	Interpersonal helping				Job satisfaction				Work self-esteem			
	Model 1		Model 2		Model 3		Model 4		Model 5		Model 6	
	b	se	b	se	b	se	b	se	b	se	b	se
Weighted status variance			0.26**	(0.09)			−0.28*	(0.11)			−0.15	(0.10)
Weighted status average	0.18*	(0.07)	0.21**	(0.07)	0.57**	(0.09)	0.54**	(0.10)	0.53**	(0.08)	0.51**	(0.08)
Number of groups	0.05	(0.04)	0.04	(0.04)	0.04	(0.06)	0.05	(0.06)	−0.05	(0.05)	−0.05	(0.05)
Female	0.28**	(0.10)	0.31**	(0.10)	0.09	(0.13)	0.06	(0.13)	−0.15	(0.11)	−0.16	(0.12)
Age	0.00	(0.01)	0.00	(0.01)	0.01	(0.01)	0.01	(0.01)	0.02**	(0.01)	0.02**	(0.01)
White	0.01	(0.13)	0.01	(0.13)	0.43*	(0.17)	0.43*	(0.17)	0.12	(0.15)	0.12	(0.15)
Married	0.05	(0.11)	0.06	(0.11)	0.26+	(0.15)	0.25+	(0.14)	0.05	(0.13)	0.04	(0.13)
Education	0.03	(0.05)	0.03	(0.04)	0.05	(0.06)	0.05	(0.06)	0.07	(0.05)	0.07	(0.05)
Income	−0.01	(0.02)	−0.02	(0.02)	−0.02	(0.03)	−0.02	(0.03)	−0.00	(0.03)	0.00	(0.03)
Constant	4.10**	(0.41)	3.84**	(0.42)	1.83**	(0.55)	2.11**	(0.56)	2.40**	(0.48)	2.56**	(0.49)
R2	0.043		0.064		0.122		0.134		0.125		0.130	
Adjusted R2	0.026		0.044		0.106		0.116		0.109		0.112	
Model comparison Chi2 test			9.37**				5.91*				2.41	

N = 440. † p < 0.1; * p < 0.05; ** p < 0.01.

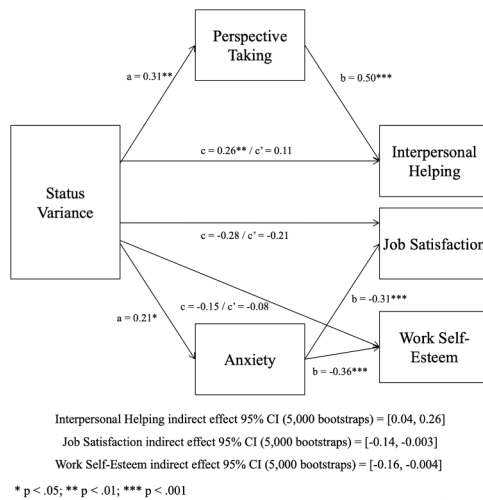


Fig. 6. Mediation results from Study 3.

perspective taking task, participants were told their interaction partner was now available, and had sent them a chat message. Based on the presumed chat message, participants were then asked the questions that form our interpersonal helping measures, also described below. The survey ended with a set of demographic questions.

Manipulation. We used the same hierarchical depiction material we had used in Studies 2a and 2b for the status variance and status consistency conditions. We kept status average constant at the medium level in both conditions in this study, and thus used only the “Status variance / medium status average” figure from Appendix A for the “status variance” condition, and the “No status variance / medium status average” figure for the “no status variance” condition. Below their respective figure, participants were instructed to write a few sentences to describe how they imagine would feel experiencing their assigned scenario. In the control condition, participants were instructed to come up with a name for each of the six different teams, without any reference to the teams’ hierarchy or their status in each team.

6.2. Measures

Perspective taking. We measured perspective taking with a similar but alternative behavioral task from that used in Study 2a, developed by Tversky and Hard (2009). Participants were shown a photograph of a man standing behind a desk with a bottle and book in front of him. They

were asked several questions about the image, including whether the book was to the left or to the right the bottle (we counterbalanced the order in which the two responses were presented). Respondents are considered to be engaging in perspective taking when they answer the relative position of the objects from the perspective of the person in the picture (in this case, the left side answer, coded “1”) as opposed to their own perspective (the right side answer, coded “0”), which results in a binary, behavioral measure of perspective taking ($M = 0.29$, $SD = 0.46$).

Interpersonal helping. We adapted a procedure developed by Swaab, Phillips, and Schaerer (2016) to measure interpersonal helping by testing participants’ willingness to assist their presumed partner in the study scenario, capturing the “assistance to others” dimension of interpersonal helping (van der Vegt et al., 2006). Participants were shown a chat message from their presumed interaction partner: “Hi. My task is taking so long, will you help me? I have t count how many a’s and i’s in a text. I still have 6 paragraph left”. Participants were instructed to reply whether or not they were willing to help (Yes, No), and if they replied yes, the following screen asked them to indicate how many paragraphs they would help with (1–6). Participants were then presented with as many paragraphs as they had indicated they were willing to help with, and asked to complete the task accordingly. All participants completed the task for as many paragraphs as they had indicated, so the amount of help each expressed in this case reflected subsequent behavior. We calculated “willingness to help” based on the binary Yes (1) vs. No (0) response ($M = 0.80$, $SD = 0.40$), and “amount of help” as a count variable based on the number of paragraphs, with 0 if they selected No to the “willingness to help” question ($M = 2.67$, $SD = 1.85$).

Anxiety. We used the same three-item measure of anxiety used in Study 2b ($\alpha = 0.94$).

Intrapersonal well-being. We used the same two scales from Study 3 – job satisfaction ($\alpha = 0.91$) and state self-esteem at work ($\alpha = 0.79$) – asking participants to indicate their agreement with each statement while imagining themselves in the described work scenario.

6.3. Results

The means for each condition on the outcome variables can be found in Fig. 7. We performed OLS, Logistic and Poisson regression analyses comparing the effects of the two experimental conditions on the predicted outcomes to test H1–H4, because our main interest is in contrasting status variance vs. no status. Additional analyses including the control condition revealed identical effects (for details, see SOM p. 5–6).

Interpersonal helping. As predicted in H1, participants in the status variance condition were significantly more willing to help their presumed interaction partner than those in the no status variance condition

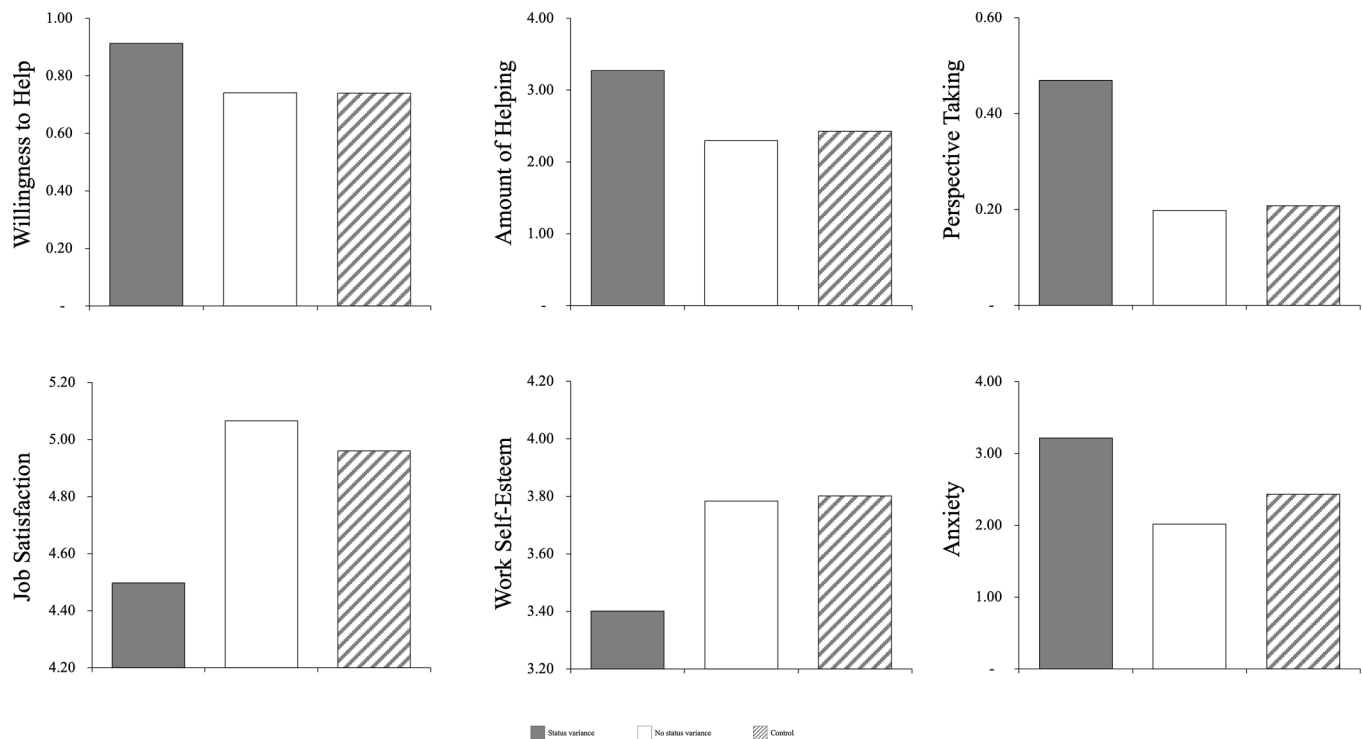


Fig. 7. Means across experimental conditions in Study 4.

(Odds ratio = 3.7, $z = 2.79$, $p = .005$, 95% CI [1.47, 9.29]). Furthermore, participants in the status variance condition also helped their partner significantly more than participants in the no status variance condition ($b = 0.35$, $z = -3.70$, $p < .001$, 95% CI [0.17, 0.54]).

Intrapersonal well-being. Consistent with H3, participants in the status variance condition reported significantly lower levels of job satisfaction at work ($b = -0.57$, $t(160) = -3.14$, $p = .001$, 95% CI [-0.92, -0.21], $\eta^2 = 0.06$). Furthermore, participants in the status variance condition also reported significantly lower levels of work self-esteem ($b = -0.38$, $t(160) = -3.00$, $p = .003$, 95% CI [-0.63, -0.13], $\eta^2 = 0.05$).

Indirect effects. We tested all four predicted indirect effects of status variance in a full model including all variables and hypothesized relationships simultaneously, as depicted in the mediation model in Fig. 8. Bootstrapping analysis with 5,000 resamples revealed that perspective taking mediated the indirect effect of status variance on both willingness

to help (95% CI [0.01, 0.09]) and also amount of help (95% CI [0.13, 0.60]), supporting H2. Additionally, anxiety also mediated the indirect effect of status variance on job satisfaction (95% CI [-0.57, -0.19]) and work self-esteem (95% CI [-0.45, -0.19]), supporting H4.

Robustness checks. Similar to Study 3, having both mediators and all outcome variables in the same study allowed us to test whether our mediator variables cross-mediated the dependent variables we did not specifically hypothesize about. This time, none of the cross-mediation indirect effects were significant: perspective taking did not mediate the effect of status variance on job satisfaction (95% CI [-0.05, 0.16]) nor on work self-esteem (95% CI [-0.02, 0.12]); and anxiety did not mediate the effect of status variance on willingness to help (95% CI [-0.14, 0.19]) nor on amount of help (95% CI [-0.13, 0.25]).

6.4. Discussion

The findings of Study 4 offer experimental evidence of the causal effect of status variance on interpersonal helping and intrapersonal well-being in the context of work, as well as of the mediating role played by perspective taking and anxiety, respectively. They also complement the results in the other studies, offering alternative measures of our variables of interest, namely behavioral measures wherever possible. Taken together, these results provide further evidence in support of Hypotheses 1–4 within a single study.

7. General Discussion

This research is among the first to examine the inter and intrapersonal implications of status variance in individuals' portfolios. We posit that accounting for individuals' aggregate experience of status across groups (their status portfolio) allows us to identify and understand the consequences of status, particularly in regards to organizationally-relevant outcomes, in ways that couldn't be understood by following the prevailing approach of focusing on a single group hierarchy. We advance a two-factor model for theorizing how individuals experience and respond to their status portfolio, proposing that both the average

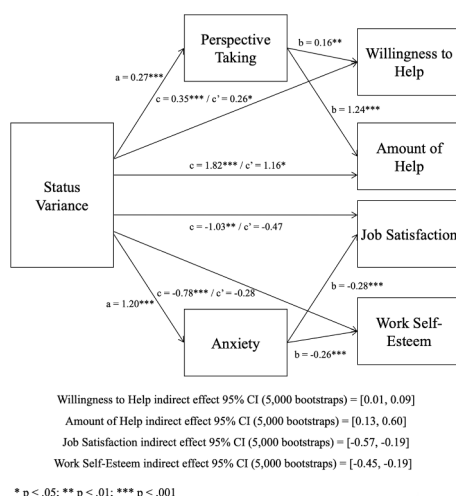


Fig. 8. Mediation results from Study 4.

and variance of the multiple status levels individuals experience across groups each have unique and independent consequences. Across five studies using survey and experimental methods, we find that greater status variance is associated with increased interpersonal helping (mediated by increased perspective taking) but decreased intrapersonal well-being (mediated by increased anxiety). These results suggest that it may be advantageous for organizations to have individuals who experience status variance, as they are more likely to engage in perspective taking and interpersonal helping, which are both beneficial to those around them. However, these interpersonal benefits come at an intrapersonal cost to the individual who experiences greater status variance, as they are likely to suffer from greater anxiety and lower intrapersonal well-being. Ultimately, this poses a conundrum for both individuals and organizations – people may be motivated to avoid status variance given its intrapersonal cost, but by doing so they may inadvertently hinder interpersonal helping.

7.1. Theoretical implications

Our work brings attention to individuals' status portfolio – the various status levels they experience across the multiple groups to which they belong – proposing a two-factor model to understand its consequences, and introducing the concept of status variance. In doing so, we make several contributions to the status and teams literatures. First, we extend the majority of studies on status and prior work on status inconsistency by examining the aggregate experience of status across the multiple groups individuals belong to, which better reflects the modern experience of multi-team membership (Mortensen et al., 2007; O'Leary et al., 2011). In doing so, we allow for general consequences of the aggregate experience of status to be appropriately identified and understood, which couldn't be done when observing each group in isolation. For example, the presumed benefit to well-being from joining a group where someone enjoys high status may actually not be as high as previously expected, if doing so increases their status variance across groups. Conversely, while the extant literature would suggest that joining a group in which someone has low status would decrease interpersonal helping, this may not be the case if doing so increases the person's status variance overall.

Second, we revise the assumption that a single aggregate measure of one's status (e.g., status average) is sufficient to explain the psychological or behavioral consequences of status (Anderson et al., 2012), introducing the concept of status variance. Even though status average explains a great deal of outcome variance, our findings provide evidence of the additional explanatory power that status variance provides, highlighting the multifaceted nature of status and showing that its effects are more complex than prior research suggests. Specifically, our findings with respect to the double-edged effect of status variance on interpersonal helping and intrapersonal well-being uncover critical tradeoffs between outcomes that matter to both individuals and organizations (Judge & Bono, 2001; Podsakoff et al., 2009; Yu et al., 2019).

Third, we connect the status and multiple team membership literatures. Although prior work has acknowledged that individuals often belong to multiple groups simultaneously (Mortensen et al., 2007; O'Leary et al., 2011), there is limited research on how status may be affected by multiple group membership, and in particular how it may influence individuals' interactions with others and their well-being. O'Leary and colleagues (2011) propose that multi-team membership brings benefits, such as increased variety of information and amount of information exchange, as well as costs, such as decreased ability to use new information and to integrate across members. They propose that these costs increase as individuals belong to more teams and/or a greater variety of teams. Our findings suggest that status differences may be part of that variety, and as such are an important factor in considering the consequences of multiple team membership. In addition to knowledge variety creating problems, variety in how team members are valued could negatively affect productivity, if the individual anxiety and well-

being costs outweigh the benefits of interpersonal helping.

7.2. Practical implications

The current findings also carry a number of practical implications. For individuals, they may be wise to recognize the potential negative impact that joining new groups may have on their anxiety and intrapersonal well-being, if doing so increases their status variance. At the same time, it may be useful for individuals who do experience status variance to recognize value in it, and understand how important and beneficial it may be to others around them. Exploring interventions may identify ways individuals can increase their awareness and manage the challenges they would otherwise experience from status variance. For managers, it may be worth exploring opportunities to create status variance for employees, namely by assigning them to multiple teams, rotating them through various job functions, or having higher status individuals fill relatively low status roles on occasion. Importantly, managers ought to be aware of and appreciate the individual costs that workers may experience from this status variance, and closely monitor the situation, as it could lead workers to feel less competent and satisfied at work.

Lastly, our findings may also be particularly relevant for leadership in organizational contexts. More specifically, if there is a concern about bringing greater diversity to positions of leadership, it may be critical to take into consideration the fact that minorities traditionally experience lower status in some social groups and society at large. These individuals may bring valuable and unique perspectives to these roles – in part due precisely to the fact they experience greater status variance – but they may also struggle more psychologically when occupying higher status positions. It is an unfortunate paradox that those who could potentially be better team-players, by engaging in greater perspective taking and interpersonal helping, are more likely to doubt themselves and suffer lower well-being. Relatedly, our findings also suggest that leaders who are accustomed to having high status across all domains may benefit from an occasional experience of lower status. For example, corporate community-building activities where organizational leaders occupy lower status roles may offer benefits beyond the intended team-building outcomes – the leaders themselves may gain greater propensity to engage in perspective taking and interpersonal helping as a result.

7.3. Limitations and directions for future research

Our methods are limited by several factors that offer fruitful directions for future research. First, we chose to analyze the consequences of status variance by focusing on two specific dependent variables: helping at the interpersonal level and well-being at the intrapersonal level. We selected these particular outcomes because they are core to the unique nature of status, could be hypothesized and tested in general contexts and not solely within the context of a specific group, and are also relevant to organizations. However, future research could consider how status variance influences other cognitive and decision-making outcomes. For example, high variance may increase mental flexibility, thus promoting creativity, as has been shown to be the case of multiculturals (Leung, Maddux, Galinsky, & Chiu, 2008).

Relatedly, our research focused on overall psychological (well-being) and behavioral outcomes (interpersonal helping), rather than outcomes within a specific group (e.g., satisfaction about a specific group or helping coworkers from a specific team). As increased interpersonal helping and decreased intrapersonal well-being due to status variance were observed as general consequences, they are likely to affect, at least to some extent, how individuals feel and relate to others in all kinds of contexts, including the groups to which they belong. However, the effects may be stronger or weaker in some specific groups depending, for example, on the individual's status in that group and how "deviant" that level is compared to their average or the status level they are most used to. Future research should consider how status variance influences

outcomes (e.g.: helping or satisfaction, but also turnover or performance) at the *specific* group level. Additionally, investigating the effects of status variance at the specific group level may also enable researchers to detect whether status variance is affected by status spillover effects—for example, status variance may be weakened or strengthened if spillovers operate to attenuate or exacerbate the contrast in status experienced across groups (Reschke, Azoulay, & Stuart, 2018).

Second, although hypothesizing about the effects of status average was not the focus of this paper, we expected its effects to generally mimic those the existing literature has associated with status level, but we did not find that to be the case for the interpersonal outcomes in two of our studies (Studies 1 and 2a). One possible explanation may be that interpersonal helping and perspective taking within the context of a specific group do not generalize to the general contexts we tested – i.e. although individuals are motivated to be attuned to the other group members who determine their status within the group (Blader & Chen, 2012), this motivation is no longer present in the case of non-group-specific others who don't play that role. Future research might investigate this and other potential moderators in order to better understand the consequences of status average across groups. As for status variance, it may be fruitful to investigate whether psychological and personality traits exacerbate or attenuate its experience and consequences. Self-monitoring may be an interesting moderator to explore. On one hand, high self-monitors are particularly attuned to their social standing and others' expectations (Flynn et al., 2006), which may intensify the experience of contrast in status levels between groups; but on the other hand, their ability and willingness to regulate their behavior to accommodate social situations (Gangestad & Snyder, 2000) may also make high self-monitors more agile in adjusting between different status levels, allowing them to do so with fewer psychological costs.

Third, in our studies, we find relatively small effect sizes for the effects of status variance after accounting for status average. Study 1 (archival data) and Study 3 (survey data) generally show the smallest effect sizes, which is to be expected based on the nature of these data—greater “noise” is inherent to archival settings (Seltman, 2014), and correlations in the field are generally smaller than those in experimental work (Bosco, Aguinis, Singh, Field, & Pierce, 2015). However small, we find consistent results across archival, field, and experimental data settings, suggesting replicability of our findings. Further, the relatively smaller effect sizes of status variance are consistent with our expectations that status average provides strong explanatory power, but status variance provides additional nuance that improves our understanding of the effects of status, particularly considering the various sources of status that each person has.

Lastly, in our conceptualization of status across groups as a two-factor model, we take into account average and variance as the two standard dimensions for accounting for the distribution of data. A third dimension often used to describe a distribution is skewness, which captures the extent to which the data is or not symmetrically distributed around the mean. We opted not to include this dimension in our model with the intent of establishing the fundamental role of status variance first and foremost. However, once the role of status variance has been acknowledged and accounted for, it may indeed be fruitful to explore the additional role of status skewness. Indeed, an individual's “status portfolio” may present a variety of skewness configurations, such as having status distributed similarly both above and below the average status level, or having the majority of groups with a status level slightly below

the average and then a smaller number of groups with a status level substantially above the average status level. These different degrees of skewness in status across groups may further influence how individuals experience their status across groups, beyond status average and even status variance.

7.4. Conclusion

This work demonstrates the importance of considering individuals' multiple experiences of status across the various groups to which they belong. In particular, it provides evidence that the degree to which individuals experience variance in their status across groups is a significant input to how they interact with others and think about themselves – even after accounting for what could be predicted by their average status across groups. While much work has been devoted to understanding the many different antecedents and consequences of having higher or lower status in a particular group, more work must reflect the reality that individuals often belong to and work across multiple groups at the same time, which may interact in meaningful ways. While status variance facilitates perspective taking and interpersonal helping, it comes at a cost for the individual, increasing anxiety and lowering intrapersonal well-being. The double-edged effects of status variance point to the complex yet promising exercise of uncovering how individuals' full experience of status across the multiple groups to which they belong influences them psychologically and socially in their everyday life.

CRedit authorship contribution statement

Catarina R. Fernandes: Conceptualization, Methodology, Validation, Formal analysis, Investigation, Resources, Writing - original draft, Project administration. **Siyu Yu:** Conceptualization, Methodology, Validation, Formal analysis, Investigation, Resources, Writing - original draft. **Taeya M. Howell:** Conceptualization, Methodology, Validation, Formal analysis, Investigation, Resources, Writing - original draft. **Alison Wood Brooks:** Conceptualization, Methodology, Resources, Writing - review & editing. **Gavin J. Kilduff:** Conceptualization, Methodology, Resources, Writing - review & editing. **Nathan C. Pettit:** Conceptualization, Methodology, Resources, Writing - review & editing.

Declaration of Competing Interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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Appendix A. Manipulation materials for Study 2a

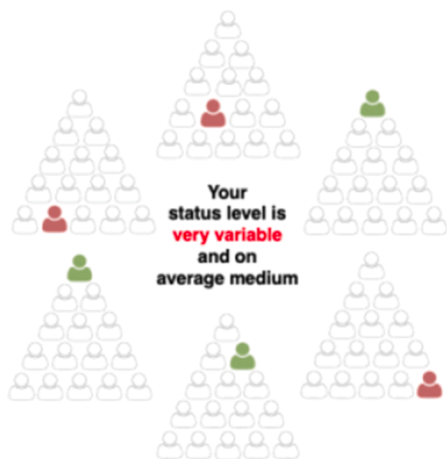
Imagine you belong to six different groups, all of which are equally important to you. Recall that these groups would include groups like your work colleagues, your friends outside of work, your family, and other organizations, communities, and clubs you belong to. Below is a depiction of how much status you have in each of those groups – at the top of each group are those who are most respected, prestigious and admired in the group; at the bottom are those who are least so:



Status variance / high status average



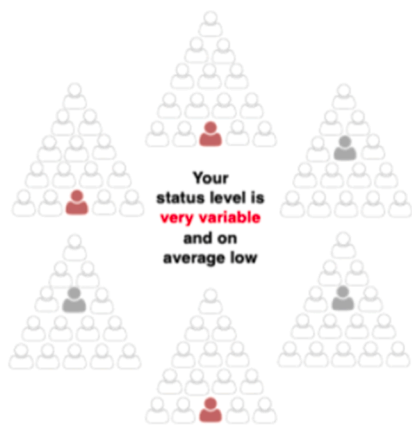
No status variance / high status average



Status variance / medium status average



No status variance / medium status average



Status variance / low status average



No status variance / low status average

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