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My Boss Is Younger, Less Educated, and Shorter Tenured: When and Why Status (In)Congruence Influences Promotion System Justification

Huisi (Jessica) Li¹, Xiaoyu (Christina) Wang², Michele Williams³, Ya-Ru Chen⁴, and Joel Brockner⁵

Department of Management and Organization, University of Washington

Department of Organization Management, Tongji University

Department of Management and Entrepreneurship, Iowa University

Department of Management and Organization, Cornell University

Department of Management, Columbia University

Supervisors are usually older, more educated, and longer tenured than their subordinates, a situation known as status congruence. However, subordinates are increasingly experiencing *status incongruence*, in which their supervisors lack these traditional status markers. We examine how status congruence versus incongruence interacts with subordinates' judgments of their supervisors' competence to influence subordinates' perceptions of the promotion system. Grounded in system justification theory, we predicted and found that when the supervisor was relatively less competent, status congruence led to perceptions of greater promotion system fairness (Study 1) and promotion system acceptance (Study 2), particularly under conditions known to heighten system justification motivation (a low sense of power in Study 1 and low system escapability in Study 2). Moreover, to triangulate on the role of system justification, we created an implicit measure of the construct and showed in two additional studies (3a and 3b) that participants engaged in more system justification under conditions in which our theoretical rationale suggested they would. Theoretical and practical implications are discussed.

Keywords: status incongruence, system justification, power, fairness, supervisor competence

Supplemental materials: https://doi.org/10.1037/apl0001086.supp

Subordinates usually find their supervisors to be older, more educated, and of longer tenure than themselves, a situation known as status congruence. However, a large percentage of the working population is increasingly experiencing status incongruence, in which the status markers (e.g., age, education, and organizational tenure) traditionally associated with supervisory and subordinate positions are reversed (Triana et al., 2017). Take age, for example; in 2020, 40% of U.S. workers had a younger boss, up from 38% in 2014 and 34% in 2012 (CareerBuilder, 2014), whereas managers, with an average age of 45, were younger than 50% of their direct reports (Governing.com, 2012). This trend toward status incongruence is only increasing, as companies rely less on seniority-based promotions in their efforts to emphasize performance and to prevent stagnant hierarchies (Chiang & Birtch, 2007). As status incongruence becomes increasingly pervasive, it behooves us to understand its effects.

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Correspondence concerning this article should be addressed to Xiaoyu (Christina) Wang, Department of Organization Management, Tongji University, No. 1500 Siping Road, Shanghai 210093, China. Email: xiaoyuwang@tongji.edu.cn

One plausible consequence of status incongruence is that subordinates will view their organization's promotion system as unfair. If certain status markers are often linked to higher positions, then when this is not the case, employees may perceive unfairness. We focus on examining subordinates' fairness perceptions of their organization's promotion system for two reasons. First, the promotion system is often the vehicle through which formal organizational hierarchies are created. Second, perceptions of promotion system fairness may be quite consequential. As reflected in the organizational justice literature (e.g., Greenberg & Colquitt, 2005), employees' fairness perceptions have a pervasive influence on their work attitudes and behaviors.

Examining how status (in)congruence¹ impacts subordinates' fairness perceptions of their organization's promotion system is not only practically important but also theoretically worthwhile. It challenges two widely held assumptions in the status literature. First, decades of status research have focused on identifying the status markers that help people rise to the top of a hierarchy (Berger et al., 1972, 1977; Li et al., 2016; Mehra et al., 2001; Wagner & Berger, 1993). Prior research typically demonstrates that certain status markers (being older, more educated, and longer tenured) lead to higher positions. However, this is not in keeping with reality as status *in*congruence becomes increasingly prevalent.

Second, previous status research has conceptualized status markers as influencing others' perceptions of an individual's competence; indeed, perceived competence is a mediator of why status markers lead to higher positions (e.g., Bitterly et al., 2017; Kennedy et al.,

¹ Status (in)congruence refers to the variable of congruence versus incongruence, whereas status incongruence or congruence refers to a particular level of the variable.

2013; Li et al., 2016). We argue that this causal link between status markers and perceived competence may be true in lab settings or in initial encounters in which people lack reliable performance information. However, this link is likely to fade over time (Bunderson, 2003); as subordinates and their supervisors have more interaction with each other, subordinates gain more diagnostic information about supervisors' competence (e.g., supervisors' actual behavior and performance) and do not necessarily merely rely on the supervisors' status markers to judge their competence. We suggest amending the viewpoint that status markers and perceived competence are highly (and causally) linked. Accordingly, this article disentangles the effects of status (in)congruence and supervisor competence and, more specifically, examines their joint and interactive influence on promotion system fairness perceptions. We ask for more competent supervisors, whether status (in)congruence still matters, and for less competent supervisors, whether status congruence induces subordinates to perceive greater fairness.

We ground our predictions in system justification theory (Jost & Banaji, 1994). We expect that when subordinates view the supervisor as competent, they are likely to perceive the promotion system to be fair, regardless of the supervisor's status markers. This is because people hold beliefs about meritocracy that lead them to view capable individuals as deserving of high positions (Clayton & Tangri, 1989; Winkelman & Crosby, 1994). However, when the supervisor is less competent and thus subordinates must confront the possibility that the system is flawed, their system justification motives may be activated. They may use the supervisor's status markers as bases for system justification and thus perceive greater fairness (compared to when the supervisor lacks status markers). We propose that status (in)congruence has a stronger effect on fairness perceptions when supervisor competence is lower.

To evaluate the system justification mechanism, we examine whether this proposed interaction between status (in)congruence and supervisor competence is stronger under conditions known to heighten people's system justification motivation—namely, when subordinates lack organizational power and when they cannot escape from their organizations (Proudfoot & Kay, 2014). Moreover, in other studies, we develop an implicit measure for system justification, a motivated reasoning process that is difficult to directly assess with survey items. Using the word fragment completion paradigm, we contribute a new and implicit measure to the system justification literature.

Secondarily, we seek to contribute to the organizational justice literature. Previous work on judgments of outcome and process fairness, dating back to Adams's (1965) equity theory and subsequent work on procedural and interpersonal fairness (Bies & Shapiro, 1987; Lind & Tyler, 1988), has taken more of an information processing and nonmotivated reasoning approach, in which researchers have examined attributes of outcomes or processes that influence fairness judgments. In contrast, we propose a motivated reasoning process that predicts when and why employees may come to see even a flawed system as more fair (or at least less unfair).

Theory and Hypotheses

System Justification Theory

System justification theory posits that individuals have a motivated tendency to view the systems in which they are embedded as fair and legitimate. This motive may lead them to rationalize unfair

aspects of their systems. Intriguingly, system justification may occur even when a system is obviously flawed and therefore engaging in it may not be in the perceivers' long-term interest. People justify their systems because doing so can have a soothing "palliative function" (Jost & Hunyady, 2003), insofar as it helps them to avoid the psychological threat resulting from acknowledging that they are embedded in a flawed, unfair system (Jost & Hunyady, 2005). Most of the work on system justification focuses on people's tendency to justify their sociopolitical systems and how this tendency perpetuates social—economic inequality (Jost et al., 2004; Kay & Zanna, 2009). However, much less research has explored the role of system justification in organizational contexts (Proudfoot & Kay, 2014).

The Interactive Influence of Status (In)Congruence and Supervisor Competence on Perceptions of Promotion System Fairness

When supervisors have high competence, subordinates are likely to view their organization's promotion system as fair, regardless of their supervisors' status (in)congruence. When supervisors are relatively competent, it supports meritocracy, in which capable individuals are rewarded (e.g., with higher positions), thereby signifying that the system is fair (Clayton & Tangri, 1989).

In contrast, when the supervisor is seen as less competent, subordinates face the possibility of a flawed system, which creates a psychological predicament. If they were to acknowledge the system that they are embedded in as flawed, they would experience psychological threats and anxiety. Motivated to avoid this discomfort, subordinates seek positive information about the system (Johnson & Fujita, 2012) to justify, defend, and rationalize the status quo. We argue that, when the less competent supervisor possesses status markers (e.g., education, age, and tenure), subordinates can use these status markers to justify the supervisor's position in the hierarchy and, as a result, perceive their promotion system as more fair (or at least less unfair) than when the supervisor does not have these markers.

However, when a supervisor is both less competent and statusincongruent, subordinates may find it very difficult to justify the system. Although subordinates would still want to avoid the threat of acknowledging an unfair system, supervisors' status markers as a potential basis for system justification are *not* present. Based on the above reasoning, we predict the following:

Hypothesis 1: Supervisor competence and status (in)congruence will interact to predict subordinates' perceptions of promotion system fairness, such that when supervisor competence is lower, the positive relationship between status congruence and subordinates' perception of promotion system fairness will be stronger, relative to when supervisor competence is higher.

Evaluating the System Justification Mechanism via Tests of Moderation

The psychological processes of system justification can occur outside of people's awareness. Moreover, if people admitted to justifying a flawed system, its soothing and palliative function may be compromised. Thus, directly measuring system justification as a mediator with survey items might have reactive effects (Spencer et al., 2005). Accordingly, we chose to test the system justification explanation by examining whether factors that are known to influence

people's tendencies to engage in system justification moderate the predicted interactive effect of status (in)congruence and supervisor competence. Using the moderation-of-process design (Spencer et al., 2005), we seek to shed light on *why* the interaction in Hypothesis 1 occurs by identifying *when* it is more versus less likely to occur. We examined two moderating factors that influence the system justification mindset (Proudfoot & Kay, 2014): sense of power (in Study 1) and system escapability (in Study 2). Figure 1 shows the model.

Power as a Moderator of System Justification Processes (Study 1)

We examine whether power, which is hypothesized to be inversely related to how much people engage in system justification, has a moderating impact on the interactive effect of status (in)congruence and supervisor competence on subordinates' perceived fairness. Power is defined as control over valued resources in social relations (Magee & Galinsky, 2008). Note that we refer to power as subordinates' sense of power, not in a structural sense (e.g., one's rank in an organizational structure). It also involves control over and independence from others in obtaining important outcomes (Galinsky et al., 2008). Research shows that diminished power and increased dependence heighten people's system justification motive (Kay & Friesen, 2011). In one experiment (Kay et al., 2008), participants in the low-power condition were more likely to resist system change in favor of the status quo of their systems. Thus, if system justification is the psychological process that accounts for the interaction predicted in Hypothesis 1, then we should find that, among subordinates with lower power (whose system justification tendencies are stronger), the interaction should be more pronounced.

Hypothesis 2a: Subordinates' power will moderate the interaction effect of status (in)congruence and supervisor competence set forth in Hypothesis 1, such that when subordinates' power is lower, the interaction will be more pronounced.

System Escapability as a Moderator of System Justification Processes (Study 2)

In their analysis of the antecedents of system justification tendencies, Proudfoot and Kay (2014) also posited that system escapability is inversely related to system-justifying tendencies. When people have few exit opportunities, they increasingly defend

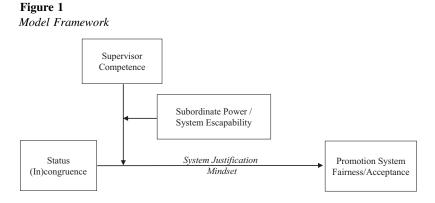
their systems (Laurin et al., 2010). This occurs because, when people cannot escape from that system, it is psychologically threatening to admit to the system's flaws, thus their desire to accept and support the system increases (Proudfoot & Kay, 2014). Research shows that, when people were informed of a scarcity (vs. an abundance) of alternative employment opportunities, they were more likely to ignore or deny organizational inefficiency (Proudfoot et al., 2015). Thus, if system justification is the psychological process that accounts for the interaction predicted in Hypothesis 1, then we should find that, among subordinates with less ability to escape from the system (whose system justification tendencies are stronger), the interaction should be more pronounced.

Hypothesis 2b: Subordinates' system escapability will moderate the interaction effect of status (in)congruence and supervisor competence set forth in Hypothesis 1, such that when subordinates' system escapability is lower, the interaction will be more pronounced.

Hypotheses 2a and 2b also allow us to evaluate an alternative explanation offered by equity theory (Adams, 1965). Following the input—outcome logic of equity theory, it can be argued that subordinates view both supervisors' status markers (i.e., age, education, and tenure) and competence as inputs that led to their becoming supervisors. Hence, in contrast to the *motivated* reasoning inherent in system justification theory, equity theory offers a more *logical* reasoning process that predicts fairness perceptions. However, only system justification theory posits that the interaction in Hypothesis 1 will be stronger under conditions known to heighten the system justification motive: having lower power (Hypothesis 2a, tested in Study 1) and being less able to escape from the system (Hypothesis 2b, tested in Study 2).

Overview of Studies

Study 1, which surveyed employees in Chinese organizations, evaluated whether participants' sense of power moderated the interactive effect of status (in)congruence and supervisor competence on subordinates' perceptions of promotion system fairness. In Study 2, with a U.S. sample from the finance industry, we manipulated status (in)congruence, supervisory competence, and system escapability, then measured promotion system acceptance. In Study 2, we also measured perceived equity to evaluate whether equity theory offered a viable alternative explanation. Moreover, we



conducted Studies 3a and 3b to evaluate the role of system justification in a different way than in Studies 1 and 2. We developed an implicit measure consisting of a word fragment completion task. We evaluated whether participants showed a stronger system justification mindset under the conditions suggested by our theorizing. To the extent that converging results emerge across different research methodologies and cultural samples, we gain increased confidence in our findings' validity and generalizability.

Transparency and Openness

We describe our sampling plans, procedures of data collection, data exclusions (if any), and measures of all studies in the article. We adhered to the *Journal of Applied Psychology* methodological checklist. Data were analyzed using IBM SPSS Statistics (Version 22.0). The data and syntax of all studies, the preregistration of Study 3a (the other studies were not preregistered), and the data transparency table are available on the Open Science Framework at https://osf.io/e7nkr/?view_only=357781af3f8d40afa51169a4e3aa9997. Institutional review board protocol was exempted by Cornell University (No. 1708007388) because no personal identifiers were collected.

Study 1

Study 1 tested whether status (in)congruence and supervisor competence interact to influence employees' perceptions of promotion system fairness. In addition, we examined whether experiencing lower levels of power in one's organization, a factor known to make people more likely to engage in system justification, strengthened this interaction.

Method

Participants and Procedure

Executive Master of Business Administration students at a large university in Eastern China provided the contact information of their companies' human resource managers.² These human resource managers from 40 different companies provided surveys to 800 full-time employees and 160 of their supervisors, along with a cover letter explaining the study's purpose, assuring confidentiality and voluntary participation. Participants worked in chemistry and energy (42.4%), high technology (18.2%), manufacturing (33.3%), and biomedical/ pharmaceutical (6.2%) industries. Because there were missing values for their job positions, we were unable to calculate the percentage of each type of job. Examples of job positions include accountants, sales, administrators, and engineers. Participants sealed their completed questionnaires in envelopes, which were collected by the human resource managers, who matched surveys by supervisors with their subordinates and mailed them to the researchers. The data that we used in this study were part of a larger data set, available upon request.³ The subordinate questionnaire included questions about their demographics (e.g., gender, age, education, and organizational tenure), perceptions of supervisor competence, their own power, and promotion system fairness. Supervisors provided their demographic information. We received completed questionnaires from 457 employees and their 70 supervisors with a response rate of 57.13% and 43.75%, respectively. Because we needed demographic information to calculate status congruence, we deleted the surveys with missing values for age, education, or organizational tenure (103 subordinates and 11 supervisors).

Our final sample included a total of 354 subordinate surveys and 59 matching supervisor surveys. The subordinates were, on average, 32.19 years old (SD = 7.37), and 60.5% were male. A total of 19.5% of the subordinates had a high school degree, 40.1% had an associate degree, 36.4% had a bachelor's degree, and 4.0% had a master's degree. They had an average organizational tenure of 4.57 years (SD = 5.70). The supervisors were, on average, 37.43 years old (SD = 6.45), and 76.3% were male. A total of 13.8% of the supervisors had a high school degree, 43.2% had an associate degree, 33.9% had a bachelor's degree, 4.5% had a master's degree, and 4.5% had a doctoral degree. They had an average organizational tenure of 4.99 years (SD = 4.86). All participants were Asian.

The survey was administered in Chinese. The translation of the original English version of the questionnaire into Chinese followed Brislin's back-translation procedure (1980). Specifically, in the first stage, the bilingual translator translated the English version of the survey into Chinese. The translated version was then translated into English by another bilingual translator, then back into Chinese and back into English once again. Any inconsistencies were resolved through a discussion to ensure accurate and precise translation (Werner & Campbell, 1970). Before administering the surveys, we edited them based on feedback from six Chinese management scholars and 20 employees in various industries to ensure the surveys' clarity and relevance to the work context.

Measures

Status (In)Congruence

Both supervisors' and subordinates' ages were measured as continuous variables between ages 20 and 60 using eight age bands (e.g., 26–30, 31–35, etc.). We suspected that some participants might prefer not to report their exact age, thus we used the narrow age bands to minimize potential nonresponses to this question while retaining as much accuracy as possible. The education levels of both supervisors and subordinates were measured by questions regarding their highest educational degree received and coded into sequential categorical variables. The organizational tenure of both supervisors and subordinates was measured as a continuous number in months (rather than years) to achieve higher accuracy. Then, following Triana et al. (2017), Perry et al. (1999), and Jarmon (1976), we compared each of the supervisor attributes (age, education, and organizational tenure) with each of the subordinate attributes. If the supervisor had greater (i.e., status-congruent) attributes than the employee, we dummycoded that as 1 (i.e., status congruence); otherwise, we dummycoded it as 0 (i.e., status incongruence). This way, we created three indicators of status (in)congruence (age, education, and organizational tenure). We then summed these three categorical indicators to create an overall measure of status (in)congruence, ranging from 0 (most incongruent) to 3 (most congruent).

² The data were part of a larger data collection effort. Xi et al. (2018) and Wang et al. (2022) used the same data collection, portions of which were published in Chinese journals.

³ This data collection was targeting as many participants as possible within the organizations of these Executive Master of Business Administration students. Post hoc power analysis using G*Power 3.1 (Faul et al., 2009) indicated that the analytical power of our regression models at the .05 level was strong (>0.95).

Supervisor Competence

We measured subordinates' perceptions of their supervisor's competence using four items adjusted from Mayer and Davis's (1999) scale (e.g., "Top management is very capable of performing its job"). A sample item was "My supervisor is very capable of performing his/her job." In all measures, unless otherwise noted, responses were made along a 7-point scale ($1 = strongly \ disagree$ to $7 = strongly \ agree$), $\alpha = .96$.

Power

We measured subordinates' power as the extent to which they saw themselves as having control over valued resources (Magee & Galinsky, 2008). We used three items adjusted from Anderson et al.'s (2012) scale (e.g., "I think I have a great deal of power"). Our sample item was "In my organization, I think I have a great deal of power"; $\alpha = .89$.

Promotion System Fairness

We measured this construct with three items adjusted from McEnrue's (1989) scale (e.g., "promotion decisions are made fairly here"). A sample item was "The promotion system in my organization is fair"; $\alpha = .96$.

Control Variables

We controlled for gender, age, education level, and organizational tenure of supervisors and subordinates. We included these controls to show the effect of status (in)congruence above and beyond the effects of the various status markers of the supervisors and the subordinates. Thus, we highlight the effect of the *relative comparison* of the supervisors' and subordinates' status markers, rather than the effects of the absolute levels of their status markers. Results without the control variables are similar to those with them and are reported in the online Supplemental Materials, Table S1.

Results

Table 1 presents the means, standard deviations, and correlations. Status (in)congruence and supervisor competence were not correlated (r=.01,p=.847). This might have been because the average length of tenure of subordinates and supervisors was 4–5 years, which may have given subordinates ample time to use more diagnostic information about their supervisors to make inferences about their supervisors' competence (Bunderson, 2003). In any event, the lack of relationship between competence and status (in)congruence demonstrated that subordinates formed perceptions of their supervisors' competence separately from status (in)congruence.

We first assessed the fit of the measurement model with confirmatory factor analysis. The fit of the measurement model (Model 1 in Table 2), which included supervisor competence, subordinate power, and promotion system fairness as three factors, was acceptable: $\chi^2(32, N=354)=87.50$, comparative fit index (CFI) = .985, root-mean-square error of approximation (RMSEA) = .070, standardized root-mean-square residual (SRMR) = .041, and the standardized loadings of all indicators on their specific constructs were significant at the .001 level. The alternative models (Models 2–5) exhibited a significantly poorer fit than Model 1.

Promotion System Fairness

Model 3 in Table 3 revealed support for the *two-way* interaction of status (in)congruence and supervisor competence (B = -.26, p < .001, $\Delta R^2 = .03$), F(1, 341) = 14.36. Simple slope analyses showed that status congruence was positively related to promotion system fairness perceptions when supervisor competence was lower, that is, 1 *SD* below the mean (B = .43, SE = 0.15, p = .004), but not when supervisor competence was higher, that is, 1 *SD* above the mean (B = -.16, SE = 0.15, p = .305), supporting Hypothesis 1.

Model 4 showed a significant *three-way* interaction effect among status (in)congruence, supervisor competence, and subordinate power (B=.10, p=.021) on perceived promotion system fairness, supporting Hypothesis 2a. This three-way interaction explained an additional 1% of the variance, $\Delta R^2 = .01$, F(1, 338) = 5.37, p=.020. The two-way interaction between status (in)congruence and supervisors' competence was significant when subordinates' power was lower (1 SD below the mean; B=-.41, SE=0.10, p<.001), but not when it was higher (1 SD above the mean; B=-.07, SE=0.10, p=.466). More specifically, as shown in Figure 2, among lower power subordinates, status congruence was positively related to perceived promotion system fairness when supervisor competence was lower (B=.82, SE=0.20, p<.001), but not when supervisor competence was higher (B=-.12, SE=0.20, p=.556).

Supplemental Analyses (See Online Supplemental Material, for Detailed Results)

We conducted regression analyses to examine whether supervisor competence interacted with the (in)congruence of each status marker (i.e., age, education, and tenure) to predict promotion system fairness. In addition, we ran the same analyses as above using *continuous* (as opposed to dichotomized) congruence variables that captured the differences in the subordinate's and the supervisor's age, education, and tenure. Using these continuous variables, we found that the effects of two-way interactions produced results similar to those when using dichotomized variables (dichotomized measures, age: B = -.15, SE = 0.06, p = .015, education: B = -.16, SE = 0.06, p = .007, and tenure: B = -.10, SE = 0.06, p = .091, see Supplemental Table S2; continuous measures, age: B = -.08, SE = 0.04, p = .027, education: B = -.14, SE = 0.06, p = .021, and tenure: B = -.00, SE = 0.00, p = .021.061, see Supplemental Table S3). We also compared the results of all three-way interactions and found comparable results across the continuous and dichotomized measures (dichotomized measures, age: B = .05, SE = 0.04, p = .168, education: B = .08, SE = .080.04, p = .053, and tenure: B = .02, SE = 0.04, p = .576, see Supplemental Table S4; continuous measures, age: B = .03, SE = 0.03, p = .257, education: B = .08, SE = 0.04, p = .048, and tenure: B = .00, SE = 0.00, p = .450, see Supplemental Table S5).

Discussion

The findings of Study 1 provide support for the predicted interactive effects of status (in)congruence and supervisor competence on promotion system fairness (Hypothesis 1). Moreover, we find support for the system justification explanation by showing that a lower sense of power was associated with a stronger interactive effect of status (in)congruence and supervisor competence on promotion system fairness (Hypothesis 2a). These results cannot be accounted for by

Means, Standard Deviations, a Coefficients, and Intercorrelations Between Scales for Study 1

			(0.89)			(0.89) 0.18** (0.96) 0.02 -0.19** -0.06 0.04
		(96'0)		(0.89)	(0.89) 0.18***	(0.89) 0.18*** 0.02
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	-0.24**		-0.24** 0.30** 0.04	-0.24** 0.30** -0.03 0.04 -0.05	-0.24** 0.30** -0.03 0.04 -0.05	-0.24** 0.30** -0.03 0.04 -0.05 0.06
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ī		<u> </u>	(SI	as) nths) eess	bands) on months) ence fairness × Supervis	o. Supervisor age (in bands) 7. Supervisor education 8. Supervisor tenure (months) 9. Status congruence 10. Supervisor competence 11. Subordinate power 12. Promotion system fairness 13. Status Congruence × Supervisor Competence 14. Status Congruence × Supervisor Competence Competence × Supervisor Competence × Supervisor

Note. N=354. Numbers in the parentheses are Cronbach's α coefficients for each scale. M and SD are raw values. ^a Dummy-coded variable: 1= male, 2= female. ^b Dummy-coded variable: 0= incongruence, 1= congruence. * p<0.05. ** p<0.01 (two-tailed).

 Table 2

 Confirmatory Factor Analysis of Measurement Models in Study 1

Model	Description	$\chi^2(df)$	$\Delta\chi^2$	CFI	RMSEA	SRMR
Model 1	Three factors: supervisor competence, promotion system fairness, and power	87.50 (32)***		.985	.070	.041
Model 2	Two factors: combine supervisor competence and promotion system fairness into one factor	1113.54 (34)***	1026.04***	.699	.299	.158
Model 3	Two factors: combine supervisor competence and power into one factor	827.87 (34)***	740.37***	.778	.257	.172
Model 4	Two factors: combine promotion system fairness and power into one factor	1327.21 (34)***	1239.71***	.639	.328	.257
Model 5	One factor	1842.30 (35)***	1754.80***	.495	.382	.222

Note. N = 354. In determining the adjusted $\Delta \chi^2$, all alternative models were compared with Model 1. CFI = comparative fit index; RMSEA = root-mean-square error of approximation; SRMR = standardized root-mean-square residual.

*** p < .001 (two-tailed).

equity theory, which would not explain why the interactive relationship between status (in)congruence and supervisors' competence was stronger among employees with lower power.

Study 2

In this study, we sought to provide converging evidence for the system justification mechanism by examining whether another known elicitor of the system justification motive, *system escapability*, moderated the interaction between status (in)congruence and supervisor competence, thereby yielding a three-way interaction (Hypothesis 2b). Note that we did not retest the role of subordinate power (Hypothesis 2a) in this study.

Moreover, the dependent variable in Study 2 was a strong correlate of promotion system fairness: promotion system acceptance. It reflects

employees' perception that their promotion system does not need to be changed. We used a different dependent variable as a further test for converging evidence for the system justification mechanism. (Nevertheless, we also assessed promotion system fairness and found similar patterns as those found for promotion system acceptance, as reported in the results in the online Supplemental Materials, Figure S1.)

Moreover, we directly measured *perceived equity* to further evaluate whether equity theory provides an alternative explanation. Because system escapability influences people's need to justify their system but should not affect their perceptions of equity based on the supervisor's status markers and competence, we predict that promotion system acceptance, but not perceived equity, should be influenced by the three-way interaction between status (in)congruence, supervisor competence, and system escapability.

Table 3Linear Regression Analyses Predicting Promotion System Fairness in Study 1

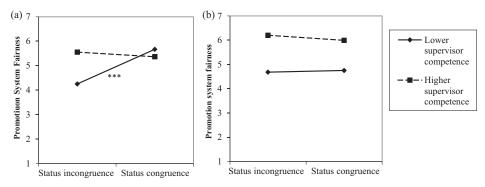
Variable	Model 1	Model 2	Model 3	Model 4
Controls				
Subordinate gender $(1 = M, 2 = F)$	-0.06 (0.17)	-0.14(0.15)	-0.14(0.14)	-0.12(0.14)
Subordinate age	-0.17 (0.06)**	-0.06(0.07)	-0.04(0.07)	-0.06(0.07)
Subordinate education	-0.15 (0.11)	-0.12(0.11)	-0.11 (0.11)	-0.14 (0.10)
Subordinate tenure (in months)	0.00 (0.00)	0.00 (0.00)	-0.00(0.00)	-0.00(0.00)
Supervisor gender $(1 = M, 2 = F)$	$-0.46 (0.19)^*$	$-0.39 (0.17)^*$	$-0.39 (0.17)^*$	$-0.35 (0.17)^*$
Supervisor age	-0.10 (0.07)	-0.10(0.06)	-0.10(0.06)	-0.10 (0.06)
Supervisor education	-0.05(0.09)	-0.09(0.10)	-0.06 (0.10)	-0.07 (0.10)
Supervisor tenure (in months)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)
Main effects				
Status congruence ^a		0.15 (0.13)	0.14 (0.13)	0.15 (0.13)
Supervisor competence		$0.58 (0.06)^{***}$	$0.57 (0.06)^{***}$	$0.59 (0.06)^{***}$
Subordinate power		0.17 (0.04)***	$0.18 (0.04)^{***}$	0.18 (0.04)***
Interactions				
Status Congruence × Supervisor Comp	etence (H1)		$-0.26 (0.07)^{***}$	$-0.24 (0.07)^{***}$
Status Congruence × Power				$-0.12 (0.05)^*$
Supervisor Competence × Power				0.01 (0.04)
Status Congruence × Supervisor Comp	$etence \times Power (H2a)$			$0.10 (0.04)^*$
R^2	0.06	0.28	0.31	0.33
ΔR^2	0.06**	0.22***	0.03***	0.01*b
F change (df)	2.56 (8, 345)	34.68 (3, 342)	14.36 (1, 341)	5.37 (1, 338)

Note. N = 354. H1 = Hypothesis 1; H2a = Hypothesis 2a.

^a Dummy-coded variable: 0 = incongruence and 1 = congruence. Unstandardized regression coefficients are presented. Numbers in parentheses are standard errors. ^b Denotes the incremental variance of the three-way interaction term only. We report the hypothesistesting models without the controls in the online Supplemental Materials.

p < 0.05. ** p < 0.01. *** p < 0.001 (two-tailed).

Figure 2
Three-Way Interactive Effect of Status (In)Congruence, Supervisor Competence, and Subordinate Power on Promotion System Fairness (Study 1)



Note. (a) When subordinate power is lower. (b) When subordinate power is higher. $^{***}p < 0.001$ (two-tailed).

Whereas Study 1 was high in ecological validity in that results emerged from field surveys, Study 2 was high in internal validity because we manipulated the independent variables. To the extent that conceptually analogous results emerge across Studies 1 and 2 with their complementary methodological strengths, we gain greater confidence in the findings.

Method

Participants and Design

We recruited a total of 411 full-time and part-time employees in the United States via Prolific. To take part, they needed to be 25–60 years old, working in finance and business-related professions, and employed by an organization with more than five levels of formal hierarchical ranks. The participants were, on average, 34.54 years old (SD = 8.10), and 52.6% were male. A total of 7.5% of the participants had graduated from high school or the equivalent, 5.4% had an associate degree, 53.5% had a bachelor's degree, and 33.6% had a graduate degree. Their average organizational tenure was 6.33 years (SD = 5.80).

Study 2 consisted of a 2 (status congruence vs. incongruence) \times 2 (supervisor competence: high vs. low) \times 2 (system escapability: high vs. low) between-subject design. We instructed participants to carefully read the following scenario and imagine how they would feel and what they would think if they were in this situation. The gender of the supervisor was counterbalanced within all eight experimental conditions. The supervisor's gender did not affect our results.

• KBC was founded in 1896 in Massachusetts. KBC provides financial services, including credit cards, mortgages, personal loans, commercial loans, and lines of credit. As a hierarchical organization, KBC's headquarters are in New York City, and it has a total of 348 branches in the United States. You are one of the bank tellers at KBC. At your branch, you are responsible for providing account services to customers by receiving deposits and loan payments, issuing savings withdrawals, and answering questions in person or on the telephone. Chris is your supervisor. At the branch, Chris communicates the policies and programs from the bank's top management. In addition, Chris sets your job

goals, action plans, and timelines. Chris is also responsible for evaluating your performance.

Status (In)Congruence

Participants first reported their actual age and education level. We asked them to assume that their tenure at KBC (i.e., their current organization in the scenario) was 4 years. Then, we informed them of Chris's age, education, and tenure. Participants in the *status congruence* condition were informed that Chris was older and more educated and had a longer tenure at KBC. In the *status incongruence* condition, they were informed that Chris was younger and less educated and had a shorter tenure at KBC. Specifically, participants in the status congruence (incongruence) condition read the following:

- Chris's age: Participant's age + 5 years (Participant's age 5 years).
- Chris's education: one level higher than the participant, for example, graduate degree as compared to bachelor's degree (one level lower than the participant, e.g., associate degree as compared to bachelor's degree).
- Chris's tenure at KBC: 6 (2) years.

System Escapability

We operationalized system escapability by varying the number of employment alternatives that participants were led to believe they had. Participants in the high (low) escapability condition read the following:

⁴ We collected 469 observations but noticed duplicate IP addresses, for which we only kept the first response from each IP address and excluded the 58 redundant responses that followed. Again, we used G^* Power to estimate the sample size needed to obtain sufficient analytical power with α = .05 and $1 - \beta = .95$ (Faul et al., 2009). Under the assumptions of medium effect size (f = .25; Cohen, 1988), the needed N was 357; our N was 411.

⁵ For participants with the lowest level of education (high school, N = 33) or the highest level of education (graduate degree, N = 148), we informed participants that Chris had the same degree as they had, which made our test of hypothesis more conservative.

• The economy is booming (declining); hence, there is a very strong (weak) labor market. Many (almost no) banks in your city are recruiting bank tellers. Your competence and professional knowledge as a bank teller are in high (low) demand in the banking labor market. If you quit your job at KBC, your professional credentials will (not) make it easy for you to get a new or better job at a different bank.

Supervisor Competence

Participants in the high (low) supervisor competence condition read the following information:

• Chris is well (not highly) qualified to supervise. He/she succeeds (fails) in his/her work more often than other branch managers in the bank. The projects that he/she leads never (sometimes) have problems, and his/her performance is seen as excellent (mediocre) by managers in KBC. As a branch manager, Chris has a lot of (does not have great) expertise and applies (periodically cannot apply) his/her knowledge to the work that needs to be done.

Promotion System Acceptance

Based on previous work (Johnson & Fujita, 2012), we created three items to measure the extent to which people accept the status quo of the promotion system. The three items were as follows: "In general, KBC's (the company's) promotion system operates as it should," "The organization's promotion system does not need to be radically restructured," and "I do not feel a desire to change the promotion system of KBC (the company)"; $\alpha = .91$.

Perceived Equity

The first two items were adjusted from the scale of perception of equity (Ployhart & Ryan, 1998; e.g., "Given my ability and experience,

I was not evaluated correctly by this selection decision"). Our sample item was "Given Chris's (the supervisor's) competence and characteristics (i.e., age, education, and tenure), it is fair that he/she holds the position of the supervisor." We also added three more items that reflected the input–outcome logic of equity theory. A sample item was "Chris deserves the rank he/she occupies, given his/her competence and credentials (e.g., age, education, and tenure)"; $\alpha = .98$.

Manipulation Checks

For the manipulation check of *status congruence*, we asked participants to evaluate the extent to which they agreed with the following statements ($1 = strongly \ disagree$ to $7 = strongly \ agree$): "Chris is older than me," "Chris has an equivalent or a higher level of education than me," and "Chris has a longer tenure than me at KBC"; $\alpha = .98$. For the manipulation check of *supervisor competence*, participants rated two statements (e.g., "Chris is very capable of performing his or her job"; r = .99, p < .001). For the manipulation check of *system escapability*, participants rated two statements (e.g., "It is hard for you to find a new job at similar banks"; r = .99, p < .001).

Results

Table 4 presents the means, standard deviations, and correlations. For the manipulation checks, participants in the status congruence condition (M = 6.60, SD = 0.69) reported higher status congruence than those in the status incongruence condition (M = 1.38, SD = 0.78), F(1, 409) = 5196.58, p < .001, $\eta_p^2 = .93$. Participants in the high supervisor competence condition (M = 6.30, SD = 1.04) reported higher supervisor competence than those in the low supervisor competence condition (M = 1.80, SD = 1.03), F(1, 409) = 1958.08, p < .001, $\eta_p^2 = .83$. Participants in the high system escapability condition (M = 6.64, SD = 0.85) reported greater employment alternatives than those in the low system escapability condition (M = 1.51, SD = 0.82), F(1, 409) = 3880.40, p < .001,

Table 4 *Means, Standard Deviations, αs Coefficients, and Intercorrelations Between Scales for Studies 2, 3a, and 3b*

Variable	M(SD)	1	2	3	4	5	6	7
Study 2 ($N = 411$)								
1. Status congruence ^a	a	_						
2. Supervisor competence ^b	b	-0.00						
3. System escapability ^b	b	0.03	-0.04					
4. Promotion system acceptance	3.74 (1.57)	0.28**	0.47**	-0.05	(0.91)			
5. Perceived equity	3.64 (2.00)	0.34**	0.70**	-0.04	0.74**	(0.98)		
6. Status Congruence × Supervisor	-0.00(0.25)	-0.02	0.00	0.05	-0.02	0.11*		
Competence								
7. Status Congruence × Supervisor	0.00 (0.12)	-0.04	0.03	-0.01	0.09	0.06	-0.02	_
Competence × System Escapability								
Study 3a ($N = 212$)								
1. System justification manipulation ^c	c							
System justification word completion	2.43 (1.28)	0.14*	_					
3. Filler word completion	0.62 (0.75)	-0.02	0.07	_				
Study 3b ($N = 181$)								
1. Status (in)congruence ^a	a	_						
2. System justification word completion	2.48 (1.25)	0.15*	_					
3. Filler word completion	0.80 (0.81)	0.03	0.06	0.03				

Note. The numbers in parentheses are Cronbach's α coefficients for each scale. M and SD are raw values.

*p < 0.05. **p < 0.01 (two-tailed).

 $^{^{}a}0 = \text{incongruence}, 1 = \text{congruence}.$ $^{b}0 = \text{low}, 1 = \text{high}.$ $^{c}0 = \text{control}, 1 = \text{system justification}.$

 $\eta_p^2 = .91$. Thus, all three independent variables were successfully manipulated. In addition, we conducted full factorial 2 (status congruence vs. incongruence) \times 2 (supervisor competence: high vs. low) \times 2 (system escapability: high vs. low) analyses of variance on all three manipulation checks. We did not find any significant three-way interactions, two-way interactions, or "cross-over" main effects on our manipulation checks (see online Supplemental Material, Table S6), confirming that the manipulations were orthogonal.

Promotion System Acceptance

As in Study 1, the main effects of status (in)congruence, F(1, 409) = 33.75, p < .001, $\eta_p^2 = .08$, and supervisor competence, F(1, 409) = 117.43, p < .001, $\eta_p^2 = .22$, on promotion system acceptance were significant in the expected direction; unlike in Study 1, their interaction effect was not, F(1, 407) = 0.27, p = .605.

Of greater theoretical importance, however, the three-way interaction among status (in)congruence, supervisor competence, and system escapability was significant, F(1, 403) = 4.34, p = .038, $\eta_p^2 =$.01. As shown in Figure 3 (top panel), when system escapability was low, the interaction between status (in)congruence and supervisor competence was stronger, $F(1, 194) = 3.18, p = .076, \eta_p^2 = .02$, than when system escapability was high, F(1, 209) = 1.30, p = .255, supporting Hypothesis 2b. Specifically, when participants had low system escapability, the relationship between status congruence and perceived promotion system acceptance was stronger (more positive) when supervisor competence was lower, F(1, 95) = 24.58, p <.001, $\eta_p^2 = .21$, than when supervisor competence was higher, F(1,99) = 3.35, p = .070, $\eta_p^2 = .03$, whereas when participants had high system escapability, status congruence was positively related to perceived promotion system acceptance both when supervisor competence was high, F(1, 99) = 18.06, p < .001, $\eta_p^2 = .15$, and when it was low, F(1, 110) = 8.07, p = .005, $\eta_p^2 = .07$.

Perceived Equity

As might be expected, status congruence, F(1, 409) = 53.69, p <.001, $\eta_p^2 = .12$, and supervisor competence, F(1, 409) = 398.09, p <.001, $\eta_p^2 = .49$, were positively related to perceived equity. The twoway interaction effect between status (in)congruence and supervisor competence on perceived equity was significant, F(1, 407) = 12.36, p < .001, $\eta_p^2 = .03$. However, the nature of this two-way interaction differed from that set forth by system justification theory (Hypothesis 1). More specifically, status (in)congruence had a stronger positive effect on perceived equity when supervisor competence was high, F(1, 200) = 90.96, p < .001, $\eta_p^2 = .31$, rather than low, $F(1, 207) = 37.18, p < .001, \eta_p^2 = .15$; system justification theory posits the opposite for predicting promotion system acceptance. The result pattern on perceived equity is in line with the input-outcome logic of equity theory (Adams, 1965), based on which we could argue that subordinates view supervisors' status markers (i.e., age, education, and tenure) and competence as inputs that led to their becoming supervisors. Also, it suggests that, rather than an additive effect, supervisors' status markers and competence have a multiplicative effect. In other words, when predicting perceived equity, the effect of one (supervisor competence) amplifies the effect of the other (e.g., supervisor status markers).

In addition, as shown in Figure 3 (bottom panel), the *three*-way interaction effect of status (in)congruence, supervisor competence,

and system escapability on perceived equity was not significant, F(1,403) = 2.57, p = .110. This was in line with our argument that not being able to escape from the system heightens the need for the motivated reasoning process of system justification but *not* for the nonmotivated reasoning process of equity evaluation. In other words, we expected that the three-way interaction on promotion system acceptance should be significant as predicted by system justification theory, but the same three-way interaction should not be a significant determinant of equity perceptions, and this is exactly what we found.

Discussion

In sum, Study 2 lends further support to the system justification explanation of our findings and further rules out equity theory as an alternative explanation. Surprisingly, the two-way interaction effect between status (in)congruence and supervisory competence (on promotion system acceptance) was not significant. This could be because Study 1's participants were completing surveys about their actual organizations, whereas Study 2's participants were imagining themselves as members of the organization in the vignette, with half of them in the high system escapability condition. In Study 2, it might only have been the subset of participants in the low system escapability condition that experienced a high level of the need to justify their systems. This may explain why, in Study 2, the two-way interaction between status (in)congruence and supervisor competence was not significant but the three-way interaction was.

Study 3a

The major purpose of Study 3a (and Study 3b to follow) was to test for converging evidence on the system justification thinking hypothesized to account for the results of the previous studies. While in Studies 1 and 2, we provided evidence with the use of moderator variables (i.e., sense of power and system escapability), in Study 3a, we evaluated the role of system justification in a different way. More specifically, we developed an implicit measure of system justification consisting of a word fragment completion task (Chong et al., 2017; Johnson et al., 2010; Johnson & Lord, 2010; Johnson & Steinman, 2009; Koopman et al., 2013).

In an initial effort to test for the system justification mechanism while simultaneously evaluating the construct validity of the measure, we randomly assigned participants to either the *system justification* condition or the *control* condition. All participants then did the word fragment completion task. It was expected that (and evidence of construct validity would be demonstrated if) participants would engage in more system justification thinking and thus complete more justification-related word fragment questions in the system justification condition than in the control condition.

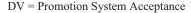
Sample and Procedure

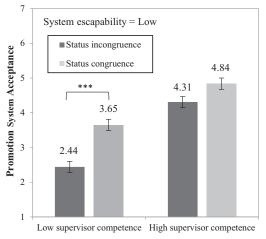
We recruited 212^6 native speakers of English aged 25–50, who had full-time jobs, from Prolific. Participants were, on average, 36.30 years old (SD = 6.35), and 62.7% were male. A total of 17.9%

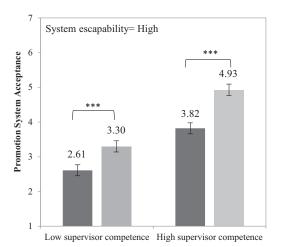
⁶ We collected 217 observations but noticed duplicate IP addresses, for which we only kept the first response from each IP address and excluded the five redundant responses that followed.

Figure 3

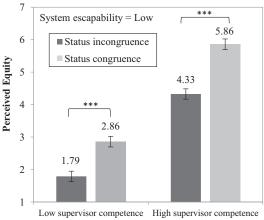
Three-Way Interaction of Status (In)Congruence, Supervisor Competence, and System Escapability on Promotion System Acceptance and Perceived Equity (Study 2) With Standard Errors Bars

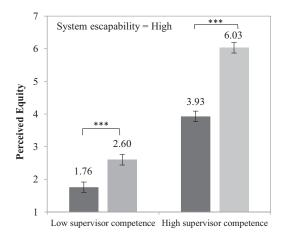






DV = Perceived Equity





graduated from high school, 11.8% had an associate degree, 48.1% had a bachelor's degree, and 22.2% had a graduate degree. Their average organizational tenure was 6.80 years (SD = 5.66).

In line with previous work (Chong et al., 2017; Johnson et al., 2010; Johnson & Lord, 2010; Johnson & Steinman, 2009; Koopman et al., 2013), participants were given the following instructions for a word fragment completion task.

Responses must be given quickly. You have several seconds to answer each question. You should neither deliberate over a long time nor change your response once you have provided it. (Each page will auto-advance after 15 seconds.)

Example 1: _ pple. Answer 1: apple

Example 2: c _ _. Answer 2: cup

Participants completed three practice questions: (a) te _ _ (team, teen, etc.), (b) gro_ _ (group, groom, etc.), and (c)_ _ _ey (money, alley, etc.). After that, participants reported their demographic information including age, gender, education, race, and organizational tenure.

Next, we manipulated system justification by randomly assigning participants to either the system justification condition or a control condition. In the *control condition*, participants read: "Please describe your supervisor and a routine conversation/meeting between you and your supervisor recently. Please write 2–4 sentences about it."

In the system justification condition, participants read the following.

Imagine that your organization is promoting someone to be your new supervisor. The person being promoted has a reputation of being much less competent than your previous supervisor. At first, you are not happy with this state of affairs. However, the new supervisor is older, more educated, and has a longer tenure in the company than you. After thinking about it more, these characteristics that the leader has made it reasonable that your organization has promoted him/her to be your leader. To what extent do you think this situation is reasonable? Please drag the slider below to indicate a number from 0 (not at all) to 100 (a great deal). Please write 2–4 sentences to explain why you chose the number above.

^{***} p < 0.001 (two-tailed).

 $^{^{7}}M = 58.82, SD = 25.89.$

We expected this scenario to trigger people's tendencies to engage in thinking pertaining to justifying the organization's promotion system. Provided that participants had a system-justifying mindset, they should come up with more justification-related words on the word completion task (compared to participants in the control condition) irrespective of whether or not they convinced themselves that the promotion system was justifiable or fair (i.e., selected a high number on the slider).

Measures

Participants completed the word completion task for four filler words and six justification-related words, the display order of which was randomized.

System Justification Word Completion

Participants answered six word completion questions: (a) _ _ _tify (justify, testify, etc.), (b) defe _ _ _ (defense/defends, defeats, etc.), (c) _ eason (reason, season, etc.), (d) _ _ _ tice (justice, lattice, etc.), (e) ju _ _ (just, jump, etc.), and (f) _ ight (right, night, etc.). For justification-related answers (i.e., justify, defense/defends, reason, justice, just, and right), $M_{\rm justification-related\ words} = 2.43$, SD = 1.28.

We came up with these six words based on multiple pretests. We first conducted a word generation study, in which we asked 30 native speakers of English to write down 20 words that came to mind when they thought about justification. Specifically, we first defined justification for them,

Justification: The action of proving or showing something to be just, right, or reasonable. For example, it could be about a state of affairs initially viewed as uncomfortable or unfair that people have come to terms with and/or provided a good reason for.

Then, we asked, "What words come to mind when you think of 'justification'? Please write down 20 words that are associated with justification." Next, we created a list of word completion questions, using the highest frequency words generated in the previous pilot study. Following previous work (Johnson et al., 2010; Johnson & Steinman, 2009), we only retained the questions for which 15%–85% of participants wrote the justification-related words.

Filler Word Completion

Participants completed three filler potentially work-related word completion questions, which were (a) j_ _ (job, jog, etc.), (b) com____ (company, comfort, etc.), and (c) wo _ _ (work, worm, etc.). For work-related answers (i.e., job, company, and work), $M_{\text{work-related words}} = 0.62$, SD = 0.75.

Results and Discussion

Table 4 presents the means, standard deviations, and correlations.

System Justification Word Completion

As predicted, participants in the system justification condition (M = 2.62, SD = 1.43, N = 104) wrote more justification-related words than those in the control condition (M = 2.26, SD = 1.10, N = 108), t(210) = 2.03, p = .043, Cohen's d = 0.28. This result suggests that our implicit measure of system justification using the word

completion task indeed reflected the extent to which the participants engaged in system justification.

Filler Word Completion

The numbers of work-related words reported in the system justification condition (M = 0.61, SD = 0.78, N = 104) and those in the control condition (M = 0.64, SD = 0.73, N = 108) were not significantly different, t(210) = -0.32, p = .750.

Study 3b

The results of Study 3a simultaneously provide evidence (a) that participants engaged in more system justification thinking under the condition that our theorizing suggested that they would and (b) for the construct validity of the implicit measure of system justification. Study 3b aimed to provide additional evidence for the role of system justification using the same implicit measure, by evaluating whether participants engaged in more system-justifying thinking under conditions that our theory-based reasoning suggested that they would. However, this was done in a procedurally different way than in Study 3a. More specifically, all participants were told that (a) the boss was relatively low in competence and (b) they had low system escapability, given that these were conditions that elicited system justification according to our theoretical reasoning and that were supported by our previous studies. We experimentally manipulated status (in)congruence, such that half of the participants were led to believe that their boss was older, more educated, and longer tenured than they were (in the status congruence condition), whereas the remaining half were led to believe that their boss was younger, less educated, and shorter tenured than they were (in the status incongruence condition). Participants were expected to show a greater tendency to engage in system justification, as measured by their responses to the word completion task, in the status congruence condition than in the status incongruence condition.

Sample and Procedure

We recruited 195 native speakers of English aged 25–60, who had full-time jobs, from Prolific. Among them, 14 (7.2%) failed the attention/comprehension check and were excluded from our analysis. The remaining 181 participants were, on average, 34.49 years old (SD=6.83), and 48.1% were male. A total of 21.0% graduated from high school, 8.3% had an associate degree, 45.3% had a bachelor's degree, and 25.4% had a graduate degree.

First, participants read the same instructions for the word completion task as those used in Study 3a. One participant did not pass the comprehension check and was excluded from the final sample. Participants practiced with the three word completion questions as those used in Study 3a. Next, they reported their demographic information including age, gender, education, race, and organizational tenure. After that, they read the same scenario as used in Study 2 about working for a commercial bank and having Chris as their supervisor. The gender of the supervisor was counterbalanced within both experimental conditions.

⁸ We conducted exploratory analysis on the open-ended responses of the participants. Please see the online Supplemental Materials for details.

For all participants, the scenario also included information about them having low system escapability. All participants also read about their supervisor Chris having low competence:

Your supervisor, Chris is not that highly qualified to supervise. He fails at the work that he tries to do more often than other branch managers in the bank. The projects that he leads sometimes have problems, and his performance generally is seen as mediocre by managers in KBC. As a branch manager, Chris does not have great expertise and from time to time cannot apply his knowledge to the work that needs to be done.

Next, we manipulated *status* (in)congruence in the same way that we did in Study 2.

Attention Check Questions

Participants answered six attention check questions: (a) Chris is your _____ (direct subordinate or supervisor), (b) Chris is very capable of performing his/her job (yes or no), (c) It is hard for you to find a new job at similar banks (yes or no), (d) Chris is older than you (yes or no), (e) Chris has a higher or the same education level than you (yes or no), and (f) Chris has a longer tenure in KBC than you (yes or no). We excluded the 13 participants (6.7%) who failed any attention checks.

Measures

System Justification Word Completion

Participants completed the six word completion items that we used in Study 3a. $M_{\text{justification-related words}} = 2.48$, SD = 1.25.

Filler Word Completion

Participants completed three filler word completion items that we used in Study 3a. $M_{\text{work-related words}} = 0.80$, SD = 0.81.

Manipulation Check of Status Congruence

We asked participants to evaluate the extent to which they agreed with the following statements (1 = strongly disagree to 7 = strongly agree): "Chris is older than me," "Chris has an equivalent or a higher level of education than me," and "Chris has a longer tenure than me at KBC"; $\alpha = .96$.

Results and Discussion

Table 4 presents the means, standard deviations, and correlations. For the manipulation check of status congruence, participants in the status congruence condition (M = 6.39, SD = 0.84) reported higher status congruence than those in the status incongruence condition (M = 1.34, SD = 0.60), t(179) = 46.41, p < .001, Cohen's d = 6.94. Thus, the independent variable was successfully manipulated.

System Justification

Participants in the status congruence condition (M = 2.66, SD = 1.19, N = 92) entered more justification-related words than those in the status incongruence condition (M = 2.28, SD = 1.30, N = 89), t(179) = 2.07, p = .040, Cohen's d = 0.31. Thus, we found that

status congruence had a positive effect on the system justification mindset.

Filler Word Completion

As expected, whether participants' answers were work-related (i.e., job, company, work) did not differ across conditions, t(179) = 0.42, p = .673; status congruence: M = 0.83, SD = 0.81, N = 92; status incongruence: M = 0.78, SD = 0.80, N = 89.

In summary, Study 3b complements the results of Study 3a by showing that participants engaged in more system justification thinking on an implicit measure, under the conditions in which theory and our prior studies suggested they should have.

General Discussion

Taken together, the results of all four studies lend strong support for the system justification explanation of why status (in)congruence is more impactful when supervisors are seen as less competent. Because lacking power (Kay et al., 2008) and lacking system escapability (Proudfoot et al., 2015) enhance people's need to justify their systems, the interactive relationship between status (in)congruence and supervisors' competence was stronger among subordinates with lower power (in Study 1) or fewer employment alternatives (in Study 2). Moreover, Studies 3a and 3b showed, on a new implicit measure of system justification, that people had more of a system justification mindset under the conditions in which our theoretical rationale suggested that they would. The converging results across the four studies, using different methods, provide strong support for the generalizability and robustness of the findings and for the system justification explanation hypothesized to account for them.

Theoretical Implications

The findings have implications for the literatures on status, organizational justice, and system justification. First, we contribute to status research. A vast amount of previous research has found that status markers (such as greater age, education, and tenure) lead to the assignment of individuals to higher status positions in the work-place. However, changes in the contemporary workplace suggest that this is increasingly not the case. Given the growing trend of status incongruence, in which the traditional status markers (e.g., age, education, and tenure) associated with supervisors' and subordinates' roles are reversed (Triana et al., 2017), this article examines its consequences. We answered important questions, such as when and why subordinates view status (in)congruence as a determinant of fairness perceptions pertaining to their promotion system.

Second, previous status research has assumed status markers and perceived competence to be causally and highly positively related. However, we argue that it is entirely possible for them to be weakly or not at all related, as shown in the survey data in Study 1. This is because employees can form perceptions of the supervisors' competence based on other attributes and behaviors other than their status markers, especially in more enduring relationships (Bunderson, 2003). Thus, we suggest amending the view that status

markers and perceptions of competence are strongly related to one another. In fact, they can be disentangled, and accordingly, their separate effects may be examined. Doing so allows us to answer important questions, such as *when* status congruence induces subordinates to respond more positively to supervisors who are not very competent (i.e., when subordinates lack power or system escapability) and *why* this is the case (i.e., due to people's desire for system justification).

Third, this article contributes to the justice literature by identifying system justification as a motivated reasoning process that influences fairness perceptions. Our lens complements much research on organizational fairness that relies on a rational, nonmotivated process (e.g., equity theory), which emphasizes that attributes of distribution, process, and interactions shape fairness perceptions. We show that when people are reliant on their systems (which heightens their system justification motive), it can increase the perceived fairness of their organizations' promotion system under certain conditions (i.e., when less competent bosses are high in status congruence). This increase in perceived fairness happens even without any changes to the attributes of the system (or those related to distribution, process, and interactions) and even in an obviously flawed (unfair) system.

Practical Implications

As status incongruence becomes increasingly prevalent, it is important for organizations to understand its effects on employees' work beliefs (e.g., fairness perceptions). We suggest that, when creating status-incongruent teams, organizations should proactively ensure and convey that the supervisors are (and are perceived to be) competent and, thus, suitable for supervisory positions. Emphasizing the principle of meritocracy is especially important when organizations are promoting someone who is younger, less educated, or has a shorter tenure than his/her direct reports. Similarly, supervisors who find themselves lacking the traditional status markers of age, education, and tenure may be reassured by the present findings. If they can convey their competence, their status-incongruent attributes are less likely to be held against them. Through training, organizations may decrease potential biases (in our context, against those with younger age, less education, and shorter tenure) that may impede some individuals' ability to convey their competence. According to our findings, if subordinates view or recognize the status-incongruent supervisors as highly competent, they will perceive the promotion system as fair, which prior research has shown leads to positive effects on important downstream work attitudes and behaviors (e.g., Greenberg & Colquitt, 2005).

Finally, subordinates who lack power or employment alternatives should be aware that there may be a counterproductive side to experiencing status congruence. When working under a relatively incompetent supervisor, subordinates may use status congruence to justify an unfair system to avoid the psychological discomfort that may result from acknowledging an unfair system. However, defending and rationalizing an unfair system may be to their own long-term disadvantage. For these employees, the better moves for their career may be to garner more resources and power or to seek alternative employment opportunities, rather than to justify a flawed system. Acknowledging one's system as unfair may be a trigger for psychological discomfort but can also be a catalyst for change.

Limitations and Suggestions for Future Research

In this section, we discuss the limitations of our studies while also offering suggestions for future research. Despite having developed and validated an implicit measure of system justification, which provided converging evidence that participants engaged in system justification reasoning, we did not evaluate whether the results on the word fragment test may account for the focal interaction effect of status (in)congruence and supervisor competence on promotion system fairness or acceptance. Future research is needed to link this novel implicit measure to various outcomes of the system justification process.

In addition, future research should evaluate how the impact of status (in)congruence may differ across various contexts such as industrial sectors and organizational forms (Li et al., 2016; Ridgeway, 1993). In certain industries and organizations, the norms around hierarchy and status markers (e.g., age, education, and tenure) are weaker or reversed. For example, in technological start-ups, being young may be a signal of technological fluency and, thus, a symbol of high status. In some industries, certain status markers are must-haves for both the subordinates and supervisors (e.g., in the R&D divisions of pharmaceutical companies, researchers, and their supervisors usually both have PhD degrees), thus violations of such expectations can be rare and viewed as extremely unfair if/when they do occur. Moreover, while our results are consistent across the United States and China, we did not examine multiple cultures within a single study to examine the effects of culture. Future research should test whether cultural differences such as power distance and social immobility strengthen people's tendency to justify their systems.

We also call for research that examines how system justification may influence other forms of organizational justice, such as distributive, procedural, and interactional. We found that elicitors of system justification caused people to see a flawed promotion system—that is, people with low competence in supervisory positions—as more fair under certain conditions such as when those individuals had status markers. Perhaps the perceptions of other forms of organizational justice could also be similarly influenced by people's need to justify the system. Put differently, research on system justification theory could be extended to include the antecedents of employees' fairness perceptions beyond the traditional "nonmotivational" approaches that address how fairness perceptions are influenced by the attributes of procedures (e.g., having input into a decision), interactions (e.g., interpersonally sensitive treatment and information), and outcomes (e.g., proportional inputs and outcomes, à la equity theory).

Conclusion

Status incongruence, in which traditional status markers (e.g., age, education, and tenure) associated with supervisors' and subordinates' roles are reversed, is increasingly prevalent in contemporary organizations. We found that when the supervisor was relatively less competent, status congruence was more likely to lead to system justification and, thus, enhance subordinates' perceptions of fairness and acceptance of the promotion system. This finding was especially likely to emerge under the very conditions known to heighten people's needs to justify their systems, such as lacking power or lacking system escapability. Given the growing importance of understanding status (in)congruence in the workplace, we encourage

management scholars to extend the present studies that integrate fairness perceptions from the justice literature with psychological theories of system justification and status characteristics. We hope that the insights gleaned from our theoretical integration and empirical tests will spark further cross-area research in supervisor–subordinate relationships and beyond.

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