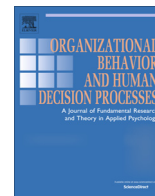




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# Ingratiation and popularity as antecedents of justice: A social exchange and social capital perspective



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## ABSTRACT

We contribute to an emerging literature viewing organizational justice as an endogenous outcome that employees may attempt to proactively influence instead of an exogenous event to which employees react. Drawing on social capital and social exchange theory, we test a model whereby employees' ingratiation toward their supervisor leads to higher levels of justice as a result of higher leader–member exchange (LMX) quality. We further identify employee's popularity as a boundary condition, such that popular employees do not benefit from ingratiation in terms of LMX quality. Across three studies utilizing a variety of methodological designs, assessing constructs from different sources, and taking place in both controlled experimental settings as well as field settings, we largely find consistent results for our hypotheses. Overall, our findings extend theory on organizational justice by illuminating the role that employees' volitional behavior, as well as the social context surrounding that behavior, play in influencing justice.

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## 1. Introduction

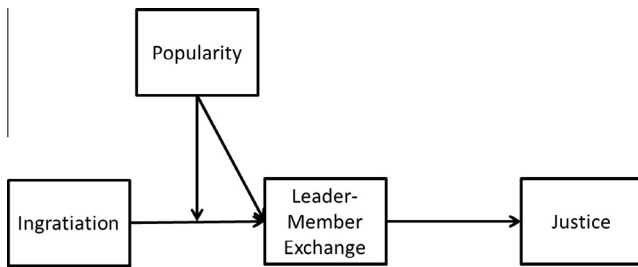
Scholarly interest in organizational justice has never been higher. In a recent meta-analysis, Colquitt et al. (2013) identified 1155 published manuscripts on the topic of justice from just the previous decade, of which 413 were ultimately included in the analysis. Though sometimes conceptualized in an overall sense (Ambrose & Schminke, 2009; Colquitt, 2012), organizational justice is often better known through its constituent dimensions: distributive, procedural, informational, and interpersonal (Colquitt, 2008). Distributive justice refers to rules governing the distribution of outcomes and is typically fostered by adherence to a norm of equity (Adams, 1965). Procedural justice captures adherence to rules about decision-making procedures, specifically whether those decisions provide employees with voice and are made in an unbiased, consistent, accurate, correctable, ethical, and representative fashion (Leventhal, 1980; Thibaut & Walker, 1975). Informational justice reflects rules about whether employees are provided with truthful explanations for decisions, and interpersonal justice reflects rules about whether employees are treated with dignity and respect (Bies & Moag, 1986; Greenberg, 1993).

For years, scholars have largely directed their research efforts toward understanding employee reactions to their perceptions of justice (Scott, Colquitt, & Paddock, 2009). Theoretical models associated with this approach place justice as an exogenous factor that affects employee attitudinal and behavioral outcomes. Arguably, the intense focus on this perspective has solidified the importance of organizational justice to the management literature by linking it with outcomes such as commitment, performance, and health (e.g., Colquitt, Conlon, Wesson, Porter, & Ng, 2001; Colquitt et al., 2013; Robbins, Ford, & Tetrick, 2012). Indeed, Colquitt (2012, p. 537) recently asserted that, without this focus, "it is difficult to conceive of how the literature could have grown as fast as it did in the past two decades."

Given the general consensus that perceptions of justice are associated with important outcomes, scholars have recently begun to investigate the antecedents of justice (Colquitt, 2012; Scott et al., 2009). This "justice as a dependent variable" approach (Brockner, Wiesenfeld, Siegel, Bobocel, & Liu, in press; Folger & Skarlicki, 2001; Scott, Colquitt, & Zapata-Phelan, 2007) changes how justice is conceptualized by treating it as an endogenous construct that may be driven by factors related to organizations, supervisors, or employees themselves (see: Gilliland, Steiner, Skarlicki, & Van Den Bos, 2005). By modeling justice as an outcome, the supervisor's role as a lynchpin in the process of treating employees with justice becomes clear, as adhering to justice rules

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**Fig. 1.** Hypothesized model. Notes: Ingratiation, popularity, and justice were operationalized in a number of different ways across three studies to demonstrate the robustness of this model. In study 1, we operationalize ingratiation as a self-report and justice as an employee perception of overall justice. In study 2, we operationalize ingratiation and popularity as experimental manipulations, and justice as an actor's intention to treat an employee with overall justice, informational justice, and interpersonal justice. In study 3, we operationalize ingratiation as a self-report, popularity as an aggregated coworker report of a focal employee, and justice as an employee perception of informational and interpersonal justice.

is generally at the supervisor's discretion (particularly for informational and interpersonal justice rules; Scott, Garza, Conlon, & Kim, 2014).

Because employees value justice (Blader & Tyler, 2005), and because justice can be transacted to employees at the supervisor's discretion, it may be seen as a resource that supervisors can provide to employees as part of an ongoing social exchange relationship (Blau, 1964; Foa & Foa, 1974). As such, we propose a theoretical model (Fig. 1) that identifies the supervisor's assessment of leader–member exchange (LMX) quality with an employee as a key antecedent of the level of justice received by that employee. This then raises an interesting question: If justice represents a resource provided in a social exchange relationship, then what might employees contribute that leads to higher levels of justice from the supervisor?

To answer this question, we incorporate a social capital lens (see: Adler & Kwon, 2002) to examine how an employee's social capital may serve as such a contribution. Specifically, we suggest two ways in which employees can use social capital to contribute to their LMX relationship: by developing social capital directly with the supervisor through ingratiation (i.e., Westphal & Clement, 2008), or by drawing on the social capital they possess as a result of their social position within their work group (i.e., their popularity; Scott, 2013; Scott & Judge, 2009). In addition, drawing from Adler and Kwon (2002), we propose that these two sources of social capital are substitutable (e.g., Howell, Dorfman, & Kerr, 1986), such that a high level of either form of capital is sufficient to achieve a strong LMX relationship.

By illuminating LMX as a mediator of the relationships between ingratiation and justice, and popularity as a moderator of those relationships (i.e., moderated mediation; Edwards & Lambert, 2007), we extend theory and research on the justice as a dependent variable approach to organizational justice by providing answers to both *why* and *for whom*, respectively (Whetten, 1989). In so doing, we add to the growing literature that specifically investigates employee characteristics as antecedents of justice, and we extend this research by incorporating social capital and social exchange perspectives to provide a broader theoretical picture of why certain employees receive higher levels of justice in the workplace. We test our model in a multi-method series of three studies (a within-individual field study, an experimental study, and a multi-source [employees, supervisors, and coworkers], cross-sectional field study) that build upon each other and provide constructive replications of our results (Leavitt, Mitchell, & Peterson, 2010).

## 2. Employee characteristics affecting the receipt of justice

As noted at the outset, research on justice as a dependent variable is growing, with studies examining organizational (Gilliland & Schepers, 2003; Schminke, Ambrose, & Cropanzano, 2000), managerial (Ambrose, Schminke, & Mayer, 2013; Scott et al., 2014) and employee (Cornelis, Van Hiel, De Cremer, & Mayer, 2013; Zapata, Olsen, & Martins, 2013) factors as antecedents of justice. Although investigating characteristics of organizations and managers is undoubtedly important, we focus our attention on employee characteristics as we believe it is important to highlight the ultimate recipients of justice. In contrast to organizational and managerial characteristics, which imply that levels of justice experienced by employees will be similar for a given factor (e.g., employees in smaller organizations perceive higher levels of interactional justice; Schminke et al., 2000), a focus on the employee can uncover whether *certain employees* are more likely to receive higher levels of justice, regardless of the particular managerial or organizational factors that are present. This has important practical implications, as the relationship between employee characteristics and higher levels of justice suggests that employees may be capable of shaping the justice they receive from their supervisors.

To date, a small number of studies have investigated the role of employee characteristics. Korsgaard, Roberson, and Rymph (1998) found in a lab study (but failed to replicate in a field quasi-experiment) that students who communicated assertively influenced others' adherence to informational rules of justice. Scott et al. (2007) found that charismatic subordinates elicited more positive sentiments and fewer negative sentiments from their supervisor, sentiments which were in turn related to adherence to interpersonal (but not informational) rules of justice. Zapata et al. (2013) linked employee trustworthiness indirectly to adherence to interpersonal and informational rules of justice through felt obligation and trust. Finally, two other studies (Cornelis et al., 2013; Hoogervorst, De Cremer, & Van Dijke, 2013) found that employees with higher belongingness needs were likely to receive higher levels of procedural justice.

These studies have laid a strong foundation for the notion that some employees are likely to receive higher levels of justice than others, and our focus on social capital builds upon this foundation in two ways. Regarding social capital developed through ingratiation, we suggest that employees may be able to influence the level of justice they receive through their own volitional behavior. This extends the scope of prior research described above as charisma is generally regarded as a stable individual difference and, though an employee may certainly be in control of their actions that lead others to make assessments trustworthiness, ultimately that judgment lies with the observer (Mayer, Davis, & Schoorman, 1995; Zapata et al., 2013). Although findings from Korsgaard et al. (1998) are suggestive, their results are somewhat equivocal as they could not demonstrate this effect outside of a laboratory setting. Finally, a study by Dulebohn and Ferris (1999) provides indirect evidence in support of our position by showing that employees who used influence tactics as a form of voice during performance evaluations perceived more procedural justice. Regarding social capital arising from an employee's popularity, here we address calls to more broadly incorporate the social context into justice models (Masterson & Tong, 2015). Our focus here illuminates a way in which an employee's social position among coworkers can affect the level of justice received from the supervisor.

Before proceeding further however, there is an important (and implicit) assumption underlying our model specifically, and justice as a dependent variable research that focuses on employee characteristics more generally, that should be made explicit. This assumption is that supervisors may enact differential levels of

justice between employees based on employee individual differences. This speaks to a fundamental tension within organizational justice scholarship: whether the conceptualization is *prescriptive*, specifying “what ought to be done to achieve justice” or *descriptive*, focusing on the “attitudes and behaviors of people concerning justice” (Greenberg & Bies, 1992, p. 433). If one adopts a prescriptive conception, then the notion that supervisors may provide some employees with higher levels of justice than others based on factors such as charisma or ingratiation could be seen by other group members, or perhaps by a dispassionate observer, as *violating* key tenets of justice. In contrast, if one adopts a descriptive conception, then the words of Greenberg and Bies (1992, p. 433) are particularly poignant: “while the fact that people commonly accept a certain practice as fair does not necessarily make it so in any ideal sense, it is critical to appreciate such idealism in light of the empirical facts about human nature on which they are based.” As Greenberg (1990) notes, justice is in the eye of the beholder (whether that beholder is the supervisor or the employee). In this study, we adopt a descriptive conception that is more aligned with the broader justice literature (Colquitt, Greenberg, & Zapata-Phelan, 2005), and is consistent with justice as a dependent variable research to date. This view informs our theoretical development and the interpretation of our results, however we return to the implications of both perspectives in the discussion.

### 3. Theory and hypotheses

According to theory on social capital, resources available to an individual are a function of that individual’s location in the structure of their social relationships (Adler & Kwon, 2002). In particular, Lin (2001, p. 29) defined social capital as “resources embedded in a social structure that are accessed and/or mobilized in purposive actions.” As social capital is inherent in the relationships both between and among persons (Nahapiet & Ghoshal, 1998), this suggests that individuals’ relationships both with specific others, as well as with their workgroup as a whole, may affect the social capital they accumulate. Indeed, a key tenet of this perspective is that an individual’s behavior is a critical input to the development of social capital (Coleman, 1988).

Importantly, social capital theory dovetails with social exchange theory (e.g., Blau, 1964; see also: Cropanzano & Mitchell, 2005), such that connections with others create “social exchanges wherein certain people become trusted exchange partners who can be called upon for resources and support” (Oh, Chung, & Labianca, 2004, p. 860). In this respect, social capital is located in the relationships that are created and maintained through social exchange (Adler & Kwon, 2002). Thus, both perspectives stipulate that an individual’s social relationships can facilitate access to valuable resources (Nahapiet & Ghoshal, 1998), which, we suggest, includes justice from their supervisors. Specifically, we propose two ways in which employees can accumulate social capital in dyadic relationships both with their supervisors and their workgroup as a whole: through their ingratiation behaviors (an individual-level source of social capital; Westphal & Clement, 2008; Westphal & Stern, 2007) directed at their supervisor, and through their popularity (a group-level source of social capital; Scott, 2013) among their coworkers.

#### 3.1. Ingratiation, leader–member exchange quality, and the receipt of justice

Ingratiation, defined as “an attempt by individuals to increase their attractiveness in the eyes of others” (Liden & Mitchell, 1988, p. 572), is generally thought of as an influence tactic within the larger spectrum of self-presentation behaviors (Jones &

Pittman, 1982) or impression management behaviors (Bolino, Kacmar, Tumley, & Gilstrap, 2008). In their theoretical model, Liden and Mitchell (1988) noted that ingratiation behaviors are often directed at a target who is in control of, and capable of providing, valuable resources. Most commonly, ingratiation occurs in an upward fashion as employees (who are dependent on their supervisors; Emerson, 1962) attempt to alleviate uncertainty about the allocation of scarce resources (Ralston, 1985).

Ingratiation is often subdivided based on whether the behavior is focused on enhancing oneself or enhancing others (Wayne & Liden, 1995). Self-enhancement ingratiation involves the ingratiation highlighting their own best characteristics, whereas other-enhancement involves the use of compliments or flattery directed toward the target of ingratiation (Bolino et al., 2008). Of these two forms of ingratiation, research has generally concluded that enhancing others tends to be the most effective, particularly when it is used in an upward fashion (Gordon, 1996; Higgins, Judge, & Ferris, 2003). This type of ingratiation carries little risk to the individual, is generally accepted in social situations (Aguinis, Nesler, Hosoda, & Tedeschi, 1994), and is the least likely to be interpreted as manipulative or insincere by the target (Vonk, 2002). In contrast, self-enhancement strategies are generally viewed as less effective because they tend to be seen as more transparent (Higgins et al., 2003; Wayne & Liden, 1995). For these reasons, we focus our investigation on ingratiation that is other-enhancing.

We propose that engaging in other-enhancement ingratiation behavior (hereafter: ingratiation) will help employees to develop social capital with their supervisor, and that those employees will in turn receive higher levels of justice from their supervisor. We further propose that the supervisor’s assessment of LMX quality with the employee is a key mediator for this process. LMX theory stipulates that leaders develop differential relationships with their followers which constitute on-going, reciprocal, and mutually reinforcing interactions between an employee and supervisor (Bauer & Green, 1996; Graen & Uhl-Bien, 1995). High quality LMX relationships are characterized by social exchanges based upon the exchange of socio-emotional resources, whereas low quality LMX relationships are characterized by economic exchange and formal contracts (Dulebohn, Bommer, Liden, Brouer, & Ferris, 2012; Gerstner & Day, 1997). Importantly, social exchange relationships require regular maintenance to maintain their strength (Adler & Kwon, 2002; Cropanzano & Mitchell, 2005).

Ingratiation behaviors represent an important means by which employees can develop and maintain social capital with their supervisor (Adler & Kwon, 2002; Westphal & Stern, 2007), and this capital may serve as the employee’s contribution to this ongoing social exchange relationship. Ingratiation efforts (e.g., praise, favors or flattery) convey to supervisors that they are valued and admired, leading to the formation of positive opinions (Schriesheim, Castro, & Yammarino, 2000), perceptions of similarity, increased liking, and favorable performance assessments (Wayne & Ferris, 1990; Wayne & Liden, 1995). Accordingly, supervisors are more likely to assess such relationships as being of high quality (Dienesch & Liden, 1986; Dulebohn et al., 2012). Thus, ingratiation should promote the development of social capital with the supervisor, leading to a higher quality LMX relationship (Uhl-Bien, Graen, & Scandura, 2000).

As a result of this relationship, employees should then be more likely to receive valuable resources from their supervisors. From a social exchange perspective, justice may be one such resource that is provided as a signal of the employee’s value and worth (Colquitt, 2012; Foa & Foa, 1974; Masterson, Lewis, Goldman, & Taylor, 2000). As a resource, justice may be prized by employees, as it serves as an indicator of the quality of the relationship with their supervisor. On this point, Chen, Brockner, and Greenberg (2003)

showed that employees valued justice over outcome favorability in their desire for future interactions with a higher status person.

Supervisors may provide these resources to employees with whom they have high quality exchanges for a number of reasons. For example, prior research has shown that supervisors tend to provide higher levels of justice to those employees whom they trust, or feel favorable sentiments toward (Scott et al., 2007; Zapata et al., 2013); both of which are associated with high-quality LMX relationships (Graen & Uhl-Bien, 1995). However, there are additional reasons to expect this relationship as well. As Wilson, Sin, and Conlon (2010) described, supervisors also benefit from high-quality LMX relationships and thus have an incentive to maintain those relationships. For example, higher levels of justice may be a way in which supervisors can remove potential uncertainties from the environment (e.g., Lind & Van Den Bos, 2002), allowing the employee to focus on performing. As another example, Colquitt et al. (2013) demonstrated that justice is associated with employee commitment and Wilson et al. (2010) note that this is another resource that supervisors can obtain from employees.

Although we expect higher levels of overall justice to be a consequence of LMX, there are reasons to suspect that particular dimensions of justice will be affected as well. Specifically, supervisors have more direct control and discretion over interactional forms of justice (i.e., informational and interpersonal) compared to distributive and procedural justice (Scott et al., 2014) because these dimensions are most relevant to daily interactions (Bies, 2005). This notion fits well with Blau's (1964) discussion of social exchange relationships as requiring "voluntary actions" (p. 91) from members of those relationships. Indeed, outcomes such as dignity, respect, and access to information have been previously noted as stemming from social exchange and social capital (Cropanzano & Mitchell, 2005; Uhl-Bien et al., 2000).

It is important to note that although a long history of research has established a link between LMX quality and organizational justice (Colquitt et al., 2013), prior theorizing has generally conceptualized LMX quality as a consequence of justice. However, social exchange is a two-way, as opposed to a one-way, street (Blau, 1964). Thus, we turn the tables and argue that LMX quality is also an antecedent of justice, such that supervisors will in general provide higher levels of justice to subordinates as a contribution to the ongoing social exchange relationship. In support of this, Masterson and Lenses (2014) recently proposed that supervisor assessments of LMX quality influence subsequent levels of justice. Accordingly, through ingratiation behaviors, employees generate social capital with their supervisor, developing and maintaining a high quality LMX relationship to which supervisors reciprocate through greater adherence to rules of justice, closing the loop and perpetuating the exchange (e.g., Wilson et al., 2010).

**Hypothesis 1.** Employee ingratiation behavior is associated with higher levels of justice.

**Hypothesis 2.** Supervisor ratings of LMX quality mediates the positive relationship between employee ingratiation behavior and justice.

#### 4. The moderating role of popularity

Although the scientific study of popularity has a long history in developmental and educational psychology (for a review, see: Rubin, Bukowski, & Parker, 2006), only recently have scholars of organizational behavior recognized its relevance to the workplace. Popular employees are those who are "socially preferred and

socially visible" within their workgroups (Scott, 2013, p. 163) and are "generally accepted" by their peers (Scott & Judge, 2009, p. 21). Unlike dyadic concepts such as friendship or liking, popularity is a group-level phenomenon reflecting a shared perception of an individual's social position in the workplace (Scott, 2013).

Recent considerations of popularity by organizational scholars have suggested that popularity is important to workplace settings because it provides individuals access to social capital (Scott, 2013). Unlike social capital created directly with a supervisor through ingratiation, popularity provides social capital indirectly through the structure and nature of an employee's social relationships in the workplace (Adler & Kwon, 2002; Scott, 2013). For example, popular employees tend to be politically skilled and central in workplace communication networks, which provides them with access to information and resources, and these employees tend to have better relationships with their coworkers (Cullen, Fan, & Liu, 2014; Scott & Judge, 2009).

The social capital possessed by popular employees through their connections with others puts them in a prime position to gather information and mobilize resources (Adler & Kwon, 2002; Nahapiet & Ghoshal, 1998). We propose that this social capital serves as a contribution to a high quality LMX relationship with their supervisor. For example, as a result of their communication centrality within the group (Scott & Judge, 2009), popular employees should have access to information from others in the workgroup that the supervisor may not have, and they may use this information as a resource contribution (Dienesch & Liden, 1986; Wilson et al., 2010). This information conduit may go both ways as well; popular employees may further contribute to the LMX relationship by serving as a means by which the supervisor can transmit important information back to the workgroup. In addition, given their social status, popular employees may emerge as informal leaders, which puts them in a position to disseminate information efficiently and serve as a source of information (Oh, Labianca, & Chung, 2006).<sup>1</sup>

Another reason why popular employees are likely to be involved in higher-quality LMX relationships is that supervisors may possess greater affiliation motives toward those employees (Liden & Maslyn, 1998). Supervisors may associate with popular employees because such employees are likeable and possess positive qualities (e.g., core-self evaluations; Scott & Judge, 2009). However, even if a supervisor were to dislike a popular employee, an affiliation motive may still be present for more instrumental reasons. That is, a high quality relationship with a popular employee may be advantageous to a supervisor by conveying a sense of unanimity with the group (i.e., by being "with" popular employees in the group, the supervisor is "with" the group as opposed to "against" it). Indeed, prior research suggests that relationships with prominent individuals provides important reputational benefits (Kilduff & Krackhardt, 1994).

**Hypothesis 3.** Employee popularity is positively related to supervisor ratings of LMX quality.

We further theorize that popular employees, given that they possess social capital from their relationship with other members of the workgroup, will not obtain an additional benefit in terms of the quality of their LMX relationship through ingratiation. Based on Adler and Kwon's (2002) suggestion that different sources of

<sup>1</sup> Interestingly, a recent article by Zhang, Waldman, and Wang (2012) suggested the reverse causal ordering for the above arguments; instead of employees using their position to contribute to the LMX relationship, these authors suggested the LMX relationship helps employees to establish this position. Importantly, these authors noted the relationship is likely reciprocal, and their study was unable to disentangle the causality as those measures were collected at the same time point. As we discuss in more detail below, the design of our study 2 was in part to provide support for our proposed causal direction.

social capital may be substitutable, we expect that the relationship between ingratiation and LMX will be weaker for employees who already possess social capital through their popularity. That is, ingratiation is likely to serve a compensatory function instead of an enhancement function (Adler & Kwon, 2002), such that those employees who may otherwise be deficient in their social capital (as a result of low popularity) can still develop it directly with their supervisor by ingratiating. In other words, employees lacking the structural and relational benefits that come from popularity may still benefit (in terms of LMX) by developing social capital directly with their supervisor through ingratiation (Westphal & Stern, 2007). Conversely, popular employees are likely to have a high quality LMX relationship, and so ingratiation is unlikely to provide these employees with an additional benefit.

The worst outcome is likely to arise in the situation in which individuals possess no social capital (Coleman, 1988); that is, when they neither possess social capital through relationships among members of their workgroup, nor do they engage in specific behaviors to develop it with their supervisor. Seibert, Kraimer, and Liden (2001) provide indirect evidence on this point as they noted that a lack of social capital was associated with reduced career outcomes for individuals. Overall, the pattern of relationship we have proposed corresponds to a substitution relationship whereby either popularity or ingratiation are sufficient to contribute to a high-quality LMX relationship; however, their joint effect provides no incremental benefit and the absence of both represents the worst-case situation.

**Hypothesis 4.** Employee popularity moderates the relationship between ingratiation behavior and supervisor ratings of LMX quality, such that the relationship is weaker for more popular employees and stronger for less popular employees.

When viewed as a whole, our series of hypotheses implies a complex, moderated mediation relationship between ingratiation and the receipt of justice. Specifically, if the “first stage” (Edwards & Lambert, 2007) of the indirect effect (i.e., the relationship between ingratiation and LMX) is weaker for popular employees, then the indirect effect of ingratiation on justice may not hold for popular employees. Instead, we anticipate that because less popular employees benefit more from ingratiation, the influence of this behavior on the receipt of justice will occur more strongly for less popular employees. Put directly, our expectation is that the magnitude and significance of the indirect effect linking ingratiation with higher levels of justice is contingent on the level of the moderator (Edwards & Lambert, 2007; Muller, Judd, & Yzerbyt, 2005). Thus, while the preceding hypotheses provide the specific details of the relationships we expect, this final hypothesis illustrates how all aspects of our theoretical model tie together.

**Hypothesis 5.** The indirect effect of ingratiation on justice via LMX is weaker for more popular employees and stronger for less popular employees.

## 5. Overview of the present research

We conducted three studies (two field and one experimental) to test our study hypotheses. *Hypothesis 1* concerns the direct relationship between employee ingratiation and justice and reflects our belief that higher levels of justice can be brought about through ingratiation. Study 1 operationalized justice using overall justice perceptions and tests this hypothesis in a within-individual sample of working employees. In study 2, we use an experimental scenario study to examine whether LMX quality mediates the relationship between ingratiation and justice, as well as whether the effects of ingratiation and popularity on LMX are

substitutable (*Hypotheses 2–5*). We manipulate ingratiation and popularity and examine the extent to which these influence an actor’s intention to subsequently enact higher levels of justice to an employee (operationalized as intentions to enact overall justice, informational justice, and interpersonal justice). In study 3, we confirm our hypothesis tests from study 2 in a field setting using data from multiple sources, and operationalize justice as employee perceptions of informational and interpersonal justice.

## 6. Study 1: method

### 6.1. Sample and procedures

Study 1 consisted of a longitudinal, within-individual field study whereby 83 full-time employees from a wide array of organizations provided weekly surveys over a six-week period. Undergraduate students in a large management course (as one option for course extra credit) identified a potential focal participant (i.e., a friend, family member, or colleague). This method of using student contacts to obtain access to employee samples has been used successfully in previous studies (e.g., Groth, Hennig-Thurau, & Walsh, 2009; Wo, Ambrose, & Schminke, *in press*). To safeguard against students completing the surveys themselves, the research team recruited participants with the contact information provided by students. Each participant was sent an initial e-mail explaining the requirements of the study. In exchange for participation, employees were entered into a random drawing for ten \$100 prizes (one entry for completion of each weekly survey). A total of 105 employees initially agreed to participate in the study.

Employees then completed one weekly survey over a six-week period. Each of the six weekly surveys was sent via e-mail to participants with a personalized hyperlink. These e-mails were sent near the end of their workweek, and participants were asked to complete the survey prior to leaving the office for the weekend. Seven participants failed to take part in the weekly portion of the study, another 7 only completed the weekly survey one time, and 8 participants failed to complete the weekly survey on any two consecutive weeks over the six week period. Of the remaining 83 participants, we obtained a total of 370 weekly surveys out of a possible total of 498. Our analysis, which controlled for the lagged outcome, reduced the within-individual (i.e., level-1) sample to 231. The final sample was 58% female, and the average age was 41.75 years.

### 6.2. Measures

We measured all items on a Likert scale (1 = strongly disagree and 5 = strongly agree).

#### 6.2.1. Ingratiation

We measured the employee’s engagement in ingratiation behavior over the past week using the five item scale developed by Wayne and Liden (1995). An example item is “I praised my supervisor on his/her accomplishments” ( $\alpha = .86$ ). This scale specifically measures ingratiation as a series of behaviors oriented toward “other-enhancement.” The proportion of variance in ingratiation behavior that varied within-individuals was 27%. This suggests that individuals do vary in their ingratiation behavior on a week-to-week basis.

#### 6.2.2. Justice

We operationalized justice by using an overall measure of justice perceptions over the past week using an adapted version of the three item, direct measure developed by Ambrose and Schminke (2009). Specifically, we asked employees about their

**Table 1**  
Descriptive statistics for and correlations among study 1 variables.

		Mean	s.d.	1
<i>Level 1</i>				
1	Ingratiation	3.03	.54	
2	Overall justice	4.22	.53	.22*

Notes: Level 1  $n = 370$ . Ingratiation and overall justice were rated weekly by the employee. Correlations among these two variables represent group-mean centered relationships. Justice was operationalized as a “perception” by the employee.

\*  $p < .05$ .

overall perception of justice from their supervisor, instead of from the organization as in the original. An example item is “I have been treated fairly by my supervisor” ( $\alpha = .97$ ). The proportion of variance in overall justice perceptions that varied within-individuals was 68%. This suggests that individual perceptions of overall justice vary considerably within-individuals on a week-to-week basis.

### 6.3. Study 1: results & discussion

Table 1 shows the descriptive statistics for and correlations among the focal variables. Given the within-individual nature of our data, we used HLM 6.08 for our analyses. Ingratiation and overall justice perceptions were measured weekly and were modeled at the within-individual level of analysis. Following recommendations of Enders and Tofghi (2007), all level 1 predictors were centered at the individual’s means (i.e., group-mean centered), which effectively removes between-individual variance in the relationships of interest. When regressing overall justice perceptions on ingratiation behavior (i.e., the observations at time  $t$ ), we controlled for the individual’s overall justice perceptions from the previous week (i.e., the observation at  $t - 1$ ). This method allows us to examine whether ingratiation is associated with a change (specifically, an increase) in overall justice perceptions (Hypothesis 1), alleviating – though not entirely – concerns about causal direction (e.g., Scott & Barnes, 2011).

Our results provide support for Hypothesis 1 as ingratiation behavior was significantly associated with an increase in overall justice perceptions ( $\gamma = .21, p < .05$ ). As mentioned, we controlled for overall justice perceptions from the previous week ( $\gamma = .01, p > .05$ ) and so the relationship between ingratiation behavior and justice can be interpreted as an increase in overall justice perceptions compared to the previous week.<sup>2</sup> In further support of the directionality of our hypothesis, the reverse relationship (i.e., whether overall justice perceptions are associated with an increase in ingratiation behavior) was not significant ( $\gamma = .14, p > .05$ ). These results suggest that ingratiation during a given week is positively associated with an increase in overall justice perceptions as compared to the previous week. Because we modeled overall justice perceptions as a change, this analysis provides some support for the causal order of the relationship between ingratiation and justice,

<sup>2</sup> An anonymous reviewer brought up two important points regarding this analysis that we wish to discuss. First, although our analytical strategy is consistent with other published examples demonstrating a change relationship between two variables (e.g., Scott & Barnes, 2011), an alternative strategy would have been to instead model ingratiation at time  $t - 1$  (for a comparable example, see: Bono, Glomb, Shen, Kim, & Koch, 2013). Both analytical strategies are valid and differ simply in the interpretation of the results. Specifically, our strategy suggests that ingratiation has a concurrent effect on overall justice perceptions, whereas the alternative strategy suggests that this effect may be delayed by a week. We tested the alternative model suggested by the reviewer and the results were not significant. The second point is that overall justice perceptions at time  $t - 1$  are not significantly associated with overall justice perceptions at time  $t$ . This suggests that, within-individuals, overall justice perceptions appear to fluctuate considerably on a week-to-week basis. In further support of this point, we note that the proportion of variance in overall justice perceptions that was within-individuals was 68%.

however the mechanisms and boundary conditions of this effect remain in question. Therefore, in study 2, we test our full theoretical model by manipulating ingratiation and popularity in a controlled experimental study and examining their effects on LMX and subsequent justice. In addition to overall justice we also examine the two dimensions of justice over which managers should have the greatest control (i.e., informational and interpersonal).

## 7. Study 2: method

### 7.1. Sample and procedures

Study 2 consisted of an experimental vignette study wherein participants, role-playing the leader of a four-person team in a high-end electronics firm, were tasked with responding to requests for additional budgetary funds from the three other members of the team (Bill, Jerry, and Robert). Specifically, participants read a brief description of each member of the team. For one member of the team (Bill), we manipulated information on his popularity relative to the other members of the team; the information presented for Jerry and Robert was held constant. After this, participants read brief justifications from each team member as to why he needed the additional budgetary funds. We manipulated whether Bill’s justification contained ingratiation behaviors or not; again, the justifications from Jerry and Robert were held constant (complete wording for all descriptions and manipulations can be found in the Appendix A). After being presented with this information, participants made their decision and were then presented with the LMX measure in which they indicated the quality of their relationship with Bill, Jerry and Robert. Participants were then asked to imagine how they would subsequently communicate with each employee about the decision, and then they completed measures of justice intentions, as well as measures of ingratiation and popularity to be used as manipulation checks.

The initial sample consisted of 402 individuals located in the United States recruited from Amazon’s Mechanical Turk (Mturk) website. Data collected through Mturk has been shown to be comparable to other methods such as student subject pools (Buhrmester, Kwang, & Gosling, 2011). Participants who agreed to participate were directed to a survey hosted by Qualtrics. Inspection of IP addresses from participants revealed that 18 participants completed the study twice, and we removed their second response from the dataset to arrive at the final sample of 384 individuals. We randomly assigned participants to one of the four experimental conditions: Bill ingratiating ( $N = 97$ ), Bill is popular ( $N = 87$ ), both ( $N = 97$ ) and neither ( $N = 103$ ).

### 7.2. Measures

We measured all items on a Likert scale (1 = strongly disagree and 5 = strongly agree).

#### 7.2.1. Ingratiation

As a manipulation check, participants indicated their agreement with statements about Bill’s engagement in ingratiation behaviors using the same measure of ingratiation from study 1 (e.g., “Bill offered to do me a favor”;  $\alpha = .77$ ).

#### 7.2.2. Popularity

As a manipulation check, participants indicated their agreement with statements about Bill’s popularity among the other members of the team using the eight item scale developed by Scott and Judge (2009). An example item is “Bill is popular” ( $\alpha = .98$ ).

7.2.3. LMX

The participant’s assessment of their LMX relationship with Bill was measured using an adapted version of the LMX7 (Graen & Uhl-Bien, 1995), with items modified to reflect the supervisor’s perspective of the LMX relationship. An example item from this scale is “I would characterize my working relationship with Bill as ‘extremely effective’” ( $\alpha = .85$ ).

7.2.4. Justice

We operationalized justice as the actor’s intention to enact justice toward Bill in a subsequent interaction. We measured justice intentions using an overall justice measure as in study 1, however we utilized a new measure developed by Colquitt, Long, Rodell, and Halvorsen-Ganepola (2015) that we felt was more conducive to wording from the actor’s perspective. An example item from this scale is “I will act fairly toward Bill” ( $\alpha = .93$ ). Second, we measured justice indirectly using the rule-based measures of informational and interpersonal justice developed by Colquitt (2001). An example item for informational justice intentions is “I will provide a reasonable explanation for my decision to Bill” ( $\alpha = .78$ ). An example item for interpersonal justice intentions is “I will treat Bill with respect” ( $\alpha = .91$ ).

7.2.5. Liking and trust

An important part of theory building is demonstrating that new relationships hold when accounting for previous findings. Recently, Scott et al. (2007) demonstrated that affective sentiments toward employees are a driver of justice. These sentiments are closely related to liking or interpersonal attraction; a key aspect of the mechanism for ingratiation’s effect on outcomes (Liden & Mitchell, 1988) – and specifically on LMX (Dulebohn et al., 2012; Wayne & Ferris, 1990). Thus, liking could be viewed as a potential confound to our model, such that higher levels of justice are not the result of a dyadic exchange relationship, but rather simply a result of the supervisor liking the employee. To rule this out, we measured each participant’s assessment of how much he/she liked Bill using the four item scale from Wayne and Ferris (1990). An example item from this scale is “I like Bill” ( $\alpha = .90$ ).

Trust is also related to LMX (Dulebohn et al., 2012) and has recently been shown to have a relationship with justice (Zapata et al., 2013). As with liking, given that trust is related to LMX and to justice, it could also be viewed as a potential confound to our model. Accordingly, the participant’s trust toward Bill was assessed using the three item scale from Kirkpatrick and Locke (1996). An example item from this scale is “I have complete trust in Bill” ( $\alpha = .87$ ).

Accordingly, we controlled for liking and trust when predicting justice to rule these out as alternative explanations for our findings. However, following recent recommendations regarding

control variables, we ran our analyses with and without these two variables and results were unchanged (Becker, 2005).

7.3. Study 2: results and discussion

Table 2 shows the descriptive statistics for and correlations among the focal variables. Prior to testing our hypotheses, we examined the effectiveness of our manipulations. ANOVA results showed that the ingratiation manipulation had a strong effect on the ingratiation check ( $F = 135.66, p < .05, Ms = 3.32$  vs.  $2.47, \eta^2 = .27$ ) and no effect on the popularity check ( $F = .15, n.s., Ms = 3.14$  vs.  $3.05, \eta^2 = .00$ ). Similarly, the popularity manipulation had a strong effect on the popularity check ( $F = 1812.11, p < .05, Ms = 4.55$  vs.  $1.73, \eta^2 = .83$ ), but also exhibited some spillover to the ingratiation check ( $F = 14.66, p < .05, Ms = 3.06$  vs.  $2.75, \eta^2 = .04$ ). However the degree of spillover appears to be relatively minor compared to the magnitude of the intended effect and is unlikely to impair interpretation of results (Shadish, Cook, & Campbell, 2002). For example, the  $F$  statistic for the effect of the ingratiation manipulation on the ingratiation check was over 9 times larger than the statistic for the popularity manipulation, and the  $\eta^2$  value was over 6 times larger. Given these checks, we proceeded to test our hypotheses.

We first specified a path analysis using Mplus 7.11 to simultaneously model our main effect and mediation hypotheses (Hypotheses 2 and 3). This model provided acceptable fit to the data:  $\chi^2 = 26.36$  ( $df = 6$ ); CFI = .98; RMSEA = .09; SRMR = .04. Ratings of LMX quality were regressed on the ingratiation and popularity manipulations (coded as 0,1 for the low and high conditions in each manipulation), and the justice intentions measures were regressed on LMX. As noted above, to demonstrate the uniqueness of LMX beyond previous findings, we also controlled for both liking and trust when predicting justice. Hypothesis 2 predicted that supervisor ratings of LMX quality mediate the relationship between employee ingratiation behavior and justice. As expected, the ingratiation manipulation was significantly associated with ratings of LMX quality ( $B = .13, p < .05$ ), and LMX quality was significantly associated with each measure of justice: overall justice intentions ( $B = .37, p < .05$ ), informational justice intentions ( $B = .44, p < .05$ ) and interpersonal justice intentions ( $B = .35, p < .05$ ). To test the significance of the indirect effects, we conducted a bootstrapping analysis on the indirect effects with 1000 resamples (Mackinnon, Lockwood, & Williams, 2004). In support of Hypothesis 2, the confidence intervals for each of the three indirect effects excluded zero. Specifically, the indirect effect for overall justice intentions was .047 (confidence interval: .011, .117), the indirect effect for informational justice intentions was .056 (confidence interval: .012, .118) and the indirect effect for interpersonal justice intentions was .045 (confidence interval: .010, .110). In support of Hypothesis 3, the popularity manipulation

**Table 2**  
Descriptive statistics for and correlations among study 2 variables.

		Mean	s.d.	1	2	3	4	5	6	7
1	Ingratiation	.50	.50							
2	Popularity	.48	.50	.04						
3	Leader–member exchange	3.77	.60	.11*	.36*					
4	Overall justice	4.42	.63	.05	.05	.47*				
5	Informational justice	4.19	.54	.05	.06	.55*	.67*			
6	Interpersonal justice	4.49	.62	.05	.10	.47*	.85*	.67*		
7	Liking	3.70	.84	.18*	.49*	.70*	.42*	.45*	.43*	
8	Trust	3.75	.92	.07	.44*	.62*	.31*	.33*	.33*	.77*

Notes:  $n = 384$ . Ingratiation and popularity were experimental manipulations (0 = no ingratiation or unpopular, 1 = ingratiation or popular). Leader–member exchange, justice, liking and trust were rated as supervisor-reports by the participant. Liking and trust are included to show incremental contribution beyond previous findings. Justice was operationalized as an “intention” by the actor.

\*  $p < .05$ .

**Table 3**

Study 2: Planned comparisons of ingratiation and popularity conditions predicting LMX quality.

Contrast 1 Low popularity		Contrast 2 High popularity		Contrast 3 Low/low vs. all other conditions	
Low ingratiation	High ingratiation	Low ingratiation	High ingratiation	Low/ low	Other conditions
<i>Planned comparisons</i>					
<b>3.48</b>	<b>3.66</b>	3.96	4.03	<b>3.49</b>	<b>3.88</b>

Notes: Contrast 1 displays the means of ingratiation in the low popularity condition. Contrast 2 displays the means of ingratiation conditions in the high popularity condition. Contrast 3 displays the means of the low ingratiation/low popularity condition compared to the average of the other three conditions. Values that are bold italicized represent significant mean differences (contrast 1 and contrast 3;  $p < .05$ ).

had a significant main effect on ratings of LMX quality ( $B = .42$ ,  $p < .05$ ).

**Hypothesis 4** predicts that popularity and ingratiation exhibit a substitution pattern of effects on ratings of LMX (e.g., Howell et al., 1986), where we expect that ingratiation will enhance supervisor ratings of LMX in the low employee popularity condition, but not in the high popularity condition. Because these two inputs were experimental manipulations, we examined this prediction in SPSS (v22) using planned comparisons among the four conditions in our experimental design (Cohen, Cohen, West, & Aiken, 2003). Prior to testing this hypothesis, we conducted a oneway ANOVA to test whether ratings of LMX quality varied by condition. This analysis revealed significant mean-differences on ratings of LMX quality by condition ( $F = 21.02$ ,  $p < .05$ ); we therefore proceeded with our planned comparisons. These comparisons can support our hypothesized substitution pattern if the ingratiation condition promotes a higher quality LMX relationship in the low popularity condition (contrast 1), but not in the high condition (contrast 2). The lowest level of LMX quality should occur in the condition with no ingratiation or popularity manipulation, compared to the other three conditions (contrast 3).

Means and contrast test results for each condition are presented in Table 3. The first planned comparison tested our expectation that ingratiation should affect LMX quality if the employee is not popular. As hypothesized, the contrast test revealed a significant difference in ratings of LMX quality between these two conditions ( $t = 2.29$ ,  $p < .05$ ,  $M_s = 3.49$  vs. 3.65 as ingratiation moves from low to high across the low popularity conditions). The second planned comparison tested our expectation that ingratiation should not affect LMX quality if the employee is popular. As hypothesized, there was no significant difference in ratings of LMX quality between these two conditions ( $t = .84$ ,  $p > .05$ ,  $M_s = 3.96$  vs. 4.03 as ingratiation moves from low to high across the high popularity conditions). The final comparison tested our expectation that the lowest levels of LMX quality occur in the joint absence of the two inputs compared to the other three conditions. As hypothesized, there was a significant difference in ratings of LMX quality in the low/low condition compared to the other three ( $t = 6.29$ ,  $p < .05$ ,  $M_s = 3.49$  vs. 3.88). Overall these three contrasts provide support for our hypothesis of the substitution pattern of interaction between ingratiation and popularity predicting LMX quality, such that the relationship is weaker for more popular employees and stronger for less popular employees.

To test our moderated mediation hypothesis (Hypothesis 5), we re-specified our model as a multiple-group path analysis (Kline, 2005). A multiple-group path analysis is ideal for situations where a moderator variable is dichotomous as it permits the simultaneous investigation of whether the strength of a specified relationship (in our case, the path between ingratiation and LMX) differs

in magnitude between two conditions (in our case, the low and high popularity conditions). Conducting a multiple-group path analysis requires the specification of two models tested simultaneously in Mplus: one represents the model for the low popularity condition and the other represents the model for the high popularity condition. All hypothesized paths are constrained to be equal across these two models, except for the path that is hypothesized to vary based on the popularity condition (i.e., the path from ingratiation to LMX). The results of this analysis supported our moderated mediation hypothesis. First, the relationship between ingratiation and LMX was significant in the low popularity condition ( $B = .18$ ,  $p < .05$ ) but not in the high popularity condition ( $B = .07$ ,  $p > .05$ ). Second, the indirect effect confidence intervals between ingratiation and justice excluded zero in the low popularity condition (.013, .152 for overall justice intentions; .016, .168 for informational justice intentions; .013, .154 for interpersonal justice intentions), and included zero in the high popularity condition (−.028, .090 for overall justice intentions; −.035, .103 for informational justice intentions; −.026, .093 for interpersonal justice intentions).

Overall, these results provided evidence for the unique effects of ingratiation and popularity on LMX, and our mediation analysis demonstrated an indirect relationship between ingratiation and justice when controlling for the effects of popularity. By assessing justice from the actor's perspective, we were able to show that our ingratiation findings hold regardless of source. While the design of our study did not allow us to measure justice as an enacted behavior from the actor, we were able to capture the actor's intentions which reflect a plan to carry out a specific behavior (Ajzen & Fishbein, 1977; Eagly & Chaiken, 1993). In addition, our planned comparison tests for Hypothesis 4 demonstrated our proposed substitution relationship between ingratiation and popularity, and our multiple-group path analytic results extend this finding by showing that the indirect relationship between ingratiation and justice is stronger for individuals of low popularity.

Although the results of this study provide supportive evidence for our hypotheses, both ingratiation and popularity were experimental manipulations. Further confidence in our theory could thus be obtained by testing the full model in a field sample. Accordingly, in study 3 we tested our model using a multi-source field sample of employees, supervisors, and coworkers.

## 8. Study 3: method

### 8.1. Sample and procedures

The sample for study 3 was composed of a matched set of 230 employee-supervisor-coworker triads across a variety of organizations located predominantly in the mid-western United States. Similarly with study 1, students in a large undergraduate management course identified a person to serve as the focal employee (i.e., a friend, family member, or colleague) and, in exchange for extra credit in the course, provided the research team with this person's contact information. The data collection occurred over two semesters with slight differences in recruitment. In the fall, students hand delivered a recruitment packet to the focal employee, or the packet was mailed to the focal employee by the research team. This packet contained recruitment information, as well as packets to be delivered to the supervisor and participating coworkers. In the spring, students provided email contact information for the focal employee directly to the research team, and the focal employee similarly provided email contact information for his/her supervisor and participating coworkers. In exchange for their participation, each individual was given a token honorarium (\$5–\$10).



The focal employee survey contained the ingratiation, interpersonal justice, and informational justice measures. The supervisor survey contained the LMX measure, as well as measures of the supervisor's liking and trust of the focal employee, which were again used as controls. The coworker survey contained the popularity measure. Of 432 focal employees who were contacted, we received 363 surveys (84%). From those 363 employees, we received 265 supervisor surveys (73%) and 908 coworker surveys (83%). In all, we obtained 243 observations with an employee survey, a supervisor survey, and at least 1 coworker survey.<sup>3</sup>

Following best-practice recommendations from Wheeler, Shanine, Leon, and Whitman (2014) and Zapata et al. (2013) regarding complex, multi-source data such as this, we implemented several quality checks. First, students were informed that they would not be eligible to receive extra credit if they completed the surveys themselves. Second, we randomly selected several supervisor names and entered them into a Google search to confirm that they worked for the company they indicated. Third, a member of the research team contacted all research participants to verify their address to remit payment. Finally, a comparison of survey completion time and IP addresses (collected when each online survey was submitted) was conducted to identify "red flags" (Zapata et al., 2013, p. 5). On the basis of all of these checks, a total of 26 responses (impacting 13 sets of matched data from all 3 sources) were eliminated from the analysis (e.g., if all surveys were completed rapidly over a short period of time or if all IP addresses came from an on-campus source; for a similar procedure, see: Zapata et al., 2013). The final matched sample of employee, supervisor, and coworker responses after eliminating this data was 230 (of which 148 were from the spring collection and 82 were from the fall collection). The average age for our focal employees was 38 years, and 61% were female. The average age of the supervisors was 42 years, and 47% were female.

## 8.2. Measures

Employee, coworker, and supervisor responses were all measured using a Likert scale (1 = strongly disagree and 5 = strongly agree).

### 8.2.1. Ingratiation

We used the same measure of ingratiation as used in the previous studies (e.g., "I take an interest in my supervisor's personal life";  $\alpha = .78$ ).

### 8.2.2. Organizational justice

To assess justice, we used the indirect, rule-based measures of informational and interpersonal justice developed by Colquitt (2001), previously used in study 2. For the five item informational justice scale, the employee was asked to consider the communication received from his/her supervisor (e.g., "My supervisor is candid in his/her communications with me";  $\alpha = .87$ ). For the four item interpersonal justice scale, the employee was asked to consider the treatment received from his/her supervisor (e.g., "My supervisor treats me in a polite manner";  $\alpha = .93$ ).

### 8.2.3. Popularity

Coworkers rated their perceptions of the focal employee's popularity using the same measure of popularity used in study 2

<sup>3</sup> This overall response rate is similar to that of Zapata et al. (2013); these authors used a similar recruitment strategy and offered some compensation to participants. In contrast, our response rate is somewhat higher than other studies that used a similar strategy (i.e., Mayer, Aquino, Greenbaum, & Kuenzi, 2012; Mayer, Kuenzi, Greenbaum, Bardes, & Salvador, 2009). However, these researchers did not note whether or not compensation was offered to participants.

(e.g., "this employee is generally admired"). The number of peer raters for each employee ranged between 1 and 3 (average = 2.43). Twenty-nine of the cases had only one rater, 74 cases had two raters, and 127 cases had three raters. To examine interrater agreement among coworkers, we computed  $r_{wg(j)}$  (James, Demaree, & Wolf, 1993) and the intraclass correlation ICC(1). The average  $r_{wg(j)}$  for the popularity ratings was .94 (median  $r_{wg(j)} = .98$ ), and the ICC(1) for the popularity ratings was .34 ( $F = 2.24$ ,  $p < .05$ ). Based on these results, we aggregated the popularity scores across coworkers. Given the high ICC and  $r_{wg(j)}$  values, in the few (13%) cases where only one coworker rated the focal employee's popularity, we treated that score as representative of the group's rating. A  $t$ -test on the mean difference between popularity ratings including and excluding those cases with fewer than three raters (4.29 vs. 4.27), was not significant.<sup>4</sup> Coefficient alpha for the aggregated scale was .94.

### 8.2.4. Leader-member exchange

We measured leader-member exchange from the supervisor's perspective using the same adaptation of the Graen and Uhl-Bien (1995) scale used in study 2 (e.g., "I recognize the potential of this employee";  $\alpha = .82$ ).

### 8.2.5. Control variables

Due to the small change in our recruitment method between the fall and spring academic semesters noted above, we included a dummy code for the semester as a control. In addition, we included the same supervisor-reported measures of liking ( $\alpha = .85$ ) and trust ( $\alpha = .75$ ) of the focal employee used in study 2. As with study 2, we tested our model with and without these controls and our results were unchanged.

## 8.3. Study 3: results and discussion

Table 4 shows the descriptive statistics for and correlations among the focal variables. We tested our hypotheses using structural equation modeling in Mplus version 7.11, simultaneously modeling all hypothesized paths. Because our ratio of cases to free parameters fell below the 10 to 1 recommendation of Kline (2005), we used a partially-latent approach, which is the method recommended by Cortina, Chen, and Dunlap (2001) when structural models include interaction terms. To implement the partially-latent approach, scale scores for the constructs were standardized and modeled as single indicators of the latent construct. In this approach, the factor loading for each indicator is fixed to the square root of the scale reliability, and the error variance is fixed to  $1 - \alpha$  (Kline, 2005, p. 229). To create the interaction term between ingratiation and popularity, we followed the recommendations of Cohen et al. (2003) and created a product term from the standardized ingratiation and popularity variables and modeled this term as a partially-latent construct. The reliability of the interaction term was calculated using the formula from Cortina et al. (2001, p. 351). Liking and trust were modeled as

<sup>4</sup> An anonymous reviewer for this manuscript raised a concern regarding our use of cases for which fewer than three coworkers provided a rating of the employee's popularity. This is a potential concern as manuscripts often choose to exclude cases with fewer than three raters (Ambrose et al., 2013; Priesemuth, Schminke, Ambrose, & Folger, 2014; Tracey & Tews, 2005), however this is not a universal rule (e.g., Cullen et al., 2014; Farh, Seo, & Tesluk, 2012; Scott & Judge, 2009). Importantly, ICC(1) values can be interpreted as "an estimate of the extent to which raters are interchangeable – that is, the extent to which one rater from a group may represent all the raters within the group" (Klein & Kozlowski, 2000, p. 224) as well as "a measure of the reliability associated with a single assessment of the group mean" (Bliese, 2000, p. 356). Given that our ICC(1) statistic is large (Bliese, 2000; Lebreton & Senter, 2008), we retained those cases with only one or two raters of popularity and acknowledge this as a limitation of our analyses.

**Table 4**  
Descriptive statistics for and correlations among study 3 variables.

	Mean	s. d.	1	2	3	4	5	6
1 Ingratiation	3.18	.80						
2 Leader–member exchange	4.29	.42	.12					
3 Interpersonal justice	4.56	.66	.09	.31*				
4 Informational justice	4.12	.70	.15*	.32*	.63*			
5 Popularity	4.27	.52	.03	.10	.07	.07		
6 Liking	4.45	.57	.11	.49*	.22*	.27*	.10	
7 Trust	4.59	.54	.09	.39*	.25*	.29*	.18*	.49*

Notes:  $n = 230$ . Ingratiation, interpersonal justice, and informational justice were rated by the focal employee. Leader–member exchange was rated by the focal employee's supervisor. Popularity was aggregated from coworker ratings of the focal employee. Liking and trust are included to show incremental contribution beyond previous findings and were rated by the focal employee's supervisor. Justice was operationalized as a "perception" by employees.

\*  $p < .05$ .

predictors of informational and interpersonal justice perceptions, and, in accordance with recommendations from Zapata et al. (2013) and Kline (2005), were allowed to covary with the disturbance term of LMX because these constructs were measured from the same source. Following similar recommendations from Zapata et al. (2013), we allowed the disturbance terms between informational and interpersonal justice to covary (see also: Kline, 2005; Preacher & Hayes, 2008), as both reflect a general interactional justice construct.

The structural model provided acceptable fit to the data:  $\chi^2 = 16.26$  ( $df = 11$ ); CFI = .98; RMSEA = .05; SRMR = .04. Overall, the results were largely supportive of our hypotheses and successfully replicated and extended our results from study 2. Specifically, ingratiation was significantly associated with LMX quality ( $B = .16$ ,  $p < .05$ ) and LMX quality was significantly associated with higher levels of justice perceptions ( $B = .26$ ,  $p < .05$  for informational justice perceptions and  $B = .28$ ,  $p < .05$  for interpersonal justice perceptions). In terms of mediation (tested via bootstrapping as in study 2), the indirect effect of ingratiation on interpersonal justice perceptions was .044, and the confidence interval excluded zero (.003, .149). For informational justice perceptions, the indirect effect was .041 and the confidence interval excluded zero (.002, .147). Thus, Hypothesis 2 was fully supported. For Hypothesis 3, though the effect of popularity on ratings of LMX quality was in the hypothesized direction, it was not significant ( $B = .12$ ,  $p < .10$ ). In support of Hypothesis 4, however, the interaction of ingratiation and popularity was significant ( $B = -.21$ ,  $p < .05$ ).<sup>5</sup> Fig. 2 shows support for our hypothesized substitution pattern of effects and reveals a positive relationship between ingratiation and LMX quality for less popular employees ( $B = .34$ ,  $p < .05$ ) and not for more popular employees ( $B = -.02$ ,  $p > .05$ ).

To probe these results further, we supplemented our simple slopes analysis with a Johnson–Neyman analysis (Preacher, Curran, & Bauer, 2006). The Johnson–Neyman analysis is an extension of simple slopes in that, instead of describing the relationship

between an independent and dependent variable at two distinct values of the moderator (i.e.,  $\pm 1$  SD by convention), this technique identifies the boundary for which the relationship between an independent and dependent variable changes from being significant to non-significant. Applied to the current analysis, our results thus far show that ingratiation is significantly associated with LMX at average levels of popularity. This analysis confirms that finding, and reveals that the boundary for the significance of this relationship occurs at .02 standard deviations above average popularity. Thus, our results suggest that for individuals of average popularity or lower, ingratiation is significantly associated with LMX. However, it appears that once individuals are of higher than average popularity, ingratiation is no longer significantly associated with LMX.

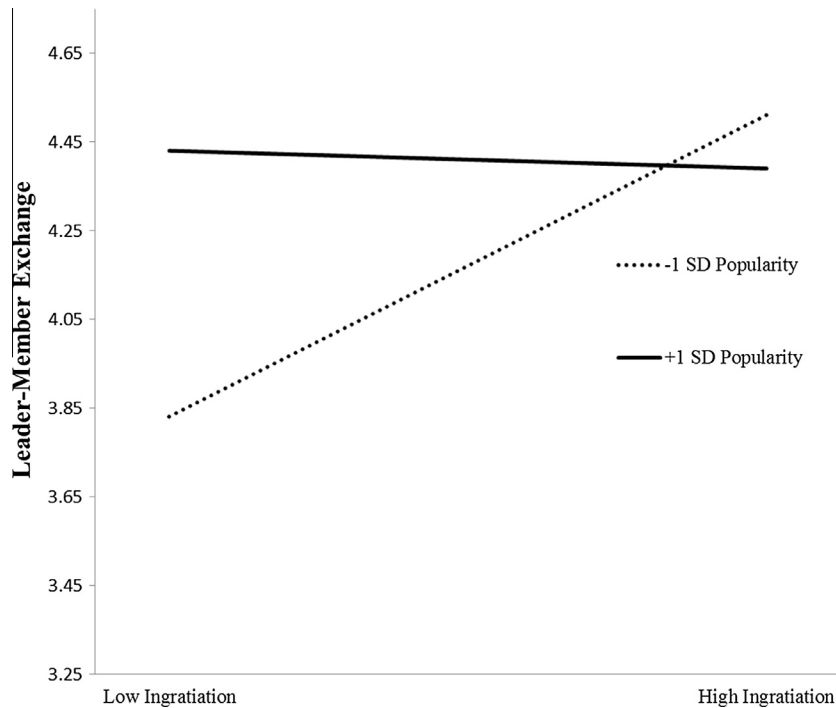
Hypothesis 5 extends these results further by proposing that the mediation relationship between ingratiation and justice is weaker for more popular employees and stronger for less popular employees (i.e., moderated mediation). We again tested this hypothesis via bootstrapping on the conditional indirect effects with 1000 resamples. We hypothesized that, in this analysis, the mediated relationship will be significant for less popular employees (those employees of "lower" popularity;  $-1$  SD) and not significant for more popular employees (those employees of "higher" popularity;  $+1$  SD). Our results support this hypothesis. For interpersonal justice perceptions, the conditional indirect effect for less popular employees was .103, and the 95% bias-corrected bootstrap confidence interval excluded zero (.012, .328), while the confidence interval for more popular employees contained zero (–.156, .059). For informational justice perceptions, the conditional indirect effect for less popular employees was .098, and the 95% bias-corrected bootstrap confidence interval excluded zero (.014, .331), while the confidence interval for more popular employees contained zero (–.147, .060).

Overall, these results provide support for the theoretical model proposed in this manuscript and constructively replicate and extend our findings from study 2 using a multi-source field sample. Because we model the main and interactive effects of popularity when testing our mediation hypothesis, these results can be interpreted as controlling for the effects of popularity and suggest that ingratiation is associated with higher levels of justice as mediated by LMX quality (Edwards, 2009). Although a strict interpretation of our results fails to fully support all hypotheses, as the main effect of popularity was not significant at the 95% confidence level, we built on our results from study 2 by demonstrating that popularity moderates the relationship between ingratiation and LMX. The pattern of this interaction supports our prediction that ingratiation and popularity function as substitutes in this relationship, and moreover our moderated mediation results highlight that the indirect effect of ingratiation on justice is in fact conditional on whether an individual is considered to be popular, or not, by their coworkers.

## 9. General discussion

Responding to recent calls to focus on justice as a dependent variable, we drew from theories of social capital and social exchange to explain why some employees receive higher levels of justice than others. Across multiple studies, utilizing a diverse range of sources and methodologies, we documented a complex moderated mediation model that articulates how a focal employee's ingratiation behavior is associated with higher levels of justice (operationalized as overall justice, informational justice, and interpersonal justice across the studies). Specifically, building from the components of this model, we provided a theoretical explanation for this proposed relationship. Then, we showed a direct relationship between ingratiation behavior and perceptions of

<sup>5</sup> An anonymous reviewer expressed concern that, although our ICC statistic for the popularity measure suggests a reasonable level of group consensus, it is possible that the use of cases with only one or two raters could bias the magnitude of our coefficient and potentially change the interpretation of our results. If this bias were present, the magnitude of the coefficient should change substantially if these cases were removed from the data. Alternatively, if cases with only one or two raters do provide a reasonable estimate of the group consensus, then the magnitude of the coefficient should change relatively little (though the significance may change due to the substantially reduced sample size). A reanalysis of the data suggests that these cases do not bias the magnitude of the coefficient, as it was little changed when using only cases with three raters ( $B = -.16$ ,  $p > .05$ ,  $N = 127$ ).



**Fig. 2.** Study 3: Popularity as a Moderator of the Relationship between Ingratiation and LMX. Notes: Simple slope tests confirm that the relationship between ingratiation and LMX is significant for less popular employees ( $B = .34, p < .05$ ) and not more popular employees ( $B = -.02, p > .05$ ).

overall justice in study 1, and further illustrated that a supervisor's assessment of the social exchange relationship (operationalized via LMX judgments) mediates the relationship between ingratiation behavior and justice (study 2 and study 3).

Going further, in studies 2 and 3 we also examined a boundary condition to this relationship in the form of the focal employee's popularity (assessed as both an experimental manipulation as well as by coworker ratings), such that being considered to be popular by one's coworkers appeared to substitute for any social capital arising from an individual's own ingratiation behavior. In study 2, our planned comparison tests illustrated the substitution relationship between popularity and ingratiation, and study 3 (which utilized actual coworker ratings of popularity) confirmed these findings. Thus, our results suggest that for individuals of average popularity, ingratiation behavior indirectly leads to higher levels of justice via a stronger LMX relationship with one's supervisor. It is important to note here that the lower level main effects we documented should be interpreted in the context of our boundary condition, popularity. On this point, our moderated mediation hypotheses were also supported, suggesting that this indirect relationship becomes stronger for individuals of lower popularity. Overall, these results support our theory that accumulating social capital, whether through ingratiation or through popularity, facilitates the development of strong social exchange relationships and results in access to valuable resources in the form of higher levels of justice.

Taken together, our investigation and its findings have several important theoretical implications. First, although ingratiation is generally considered to be an assertive and intentional influence behavior, our data cannot confirm whether higher levels of justice were the individual's intended goal for the behavior. Yet, whether intentional or not, ingratiation behavior appears to be effective in this regard. Relatedly, we demonstrated that our hypothesized relationships hold even when controlling for the effects of liking and trust. By controlling for these factors, our study suggests that justice may serve as a resource provided to employees within

ongoing LMX relationships, and that this resource is provided to employees with higher levels of social capital developed through ingratiation. Our findings for popularity further illuminate the role that social capital plays in the receipt of higher levels of justice, and provide support for the notion that social capital, which popular employees possess more of (Scott, 2013), may compensate for a lack of capital obtained from other means (Adler & Kwon, 2002). This research addresses calls to better understand the antecedents of justice rule adherence (Colquitt, 2012), and to forge additional links between justice and other prominent organizational literatures such as influence tactics and social capital (Ambrose & Arnaud, 2005). Moreover, our results suggest that the organizational justice literature may benefit from the incorporation of other theories that factor into an employees' social capital, such as theories on power (Fiske, 2010) and social networks (Tichy, Tushman, & Fombrun, 1979).

It is important, however, to not overgeneralize our findings to suggest that all forms of social capital might exhibit a substitution pattern of interaction. We hypothesized a substitution pattern of interaction given that we expected both ingratiation and popularity to independently influence LMX quality, and so our expectation was that the social capital derived from either source was sufficient in this regard and that both would not provide an additional benefit. However, just as Adler and Kwon (2002) noted that different sources of social capital may serve a compensatory function, they note that in other cases, different forms of social capital might be enabling or enhancing. Coleman (1988, p. 98) goes further and suggests that, in some situations, certain types of social capital could be "useless, or even harmful." For example, perhaps an employee is part of a subculture within a workgroup. While that employee may have social capital among certain employees, that capital may not have any value to the supervisor or the workgroup at large. Thus, while the perspective that we advance has much to contribute to the justice literature, it should be noted that other types of social capital may operate differently.

Finally, we return to our discussion of the contrast between descriptive and prescriptive conceptualizations of organizational justice. Our application of a descriptive lens reveals an interesting insight into the nature of justice in organizations. That employees are sometimes treated unfairly is without question (Colquitt et al., 2013). However, research to date has offered few solutions to employees seeking to change that behavior. Our results may be seen as empowering to employees as our model suggests that higher levels of justice can be obtained through ingratiation behavior, particularly for employees who may otherwise lack social capital.

However, if justice is viewed through a prescriptive lens as a normative ideal or moral imperative, then although it may be wrong that employees are sometimes not treated with justice, one could argue that resorting to potentially manipulative influence tactics to improve the situation does not necessarily result in “two wrongs making a right.” In fact, our model highlights an interesting consequence of the relational function served by organizational justice. While justice itself is not a scarce resource possessed by supervisors, adhering to justice rules requires the investment of a very scarce resource possessed by supervisors: time. Lind and Van Den Bos (2002, p. 208) make this point explicitly in their comment that “fair interpersonal process – which involves according subordinates personal attention and providing them with accounts and explanations of decisions – of necessity involves substantial investment in the form of the time and attention of managers and executives.” Thus, it is possible that higher levels of justice toward one employee could impact levels enacted toward another employee; indeed, it is easy to envision a situation in which a manager takes the necessary time to thoroughly and respectfully explain a decision to one employee, but not to another. If these disparate levels were the result of variation in ingratiation behavior between the two employees, then while the ingratiating employee might perceive justice, the entire situation may be considered to be unjust.

This suggests several avenues for future research that could intertwine the descriptive and prescriptive conceptualizations of justice that we described. First, while extant research has examined the behavioral reactions of third parties to varying justice levels provided to a focal employee (e.g., Christian, Christian, Garza, & Ellis, 2012), might the reactions of those third parties depend on the attributions made for why that employee received a given level of justice (e.g., if higher levels of justice were attributed to ingratiation)? If so, then while the advantaged employee might perceive justice, the other employees in the workgroup might recognize the inherent injustice in the situation and thus perceive lower levels of justice themselves. Another question is, to what extent do employees compare their levels of perceived justice with the levels they see enacted toward their coworkers, and how might discrepancies influence subsequent outcomes? We feel that these represent viable and fruitful direction for future research.

### 9.1. Strengths and limitations

Although the three studies together provide general support for our model, there are limitations that should be noted. For example, although the within-individual data in study 1 allowed us to show that ingratiation is associated with an increase in overall justice perceptions, we only tested part of our theoretical model, and the data were collected from the same source. In studies 2 and 3, however, we tested the entire model using a combination of experimental manipulations, self-reports, and other-reports. In addition, although the experimental design of study 2 enhanced internal validity, a drawback of this approach is that our scenario was somewhat artificial, leading to concerns about external validity. Those concerns, however, are somewhat alleviated by the field settings

for studies 1 and 3. Another limitation is that we measure justice from the employee's, and not the supervisor's, perspective in studies 1 and 3, however this limitation is somewhat offset by our actor focus in study 2, as well as research by Zapata et al. (2013) that showed a significant relationship between supervisor and employee reports of justice. Finally, although study 3 relied on multi-source data, the cross-sectional design of that study hinders our ability to draw conclusions about the causal order of the relationships we propose, however that limitation is somewhat alleviated through our analyses in studies 1 and 2. In study 1 we showed that ingratiation is associated with an increase (demonstrated via a change score) in overall justice perceptions compared to the previous week, and further that the reverse relationship (whether overall justice perceptions are associated with an increase in ingratiation) was not significant. In study 2 we manipulated both ingratiation and popularity to examine their effects on LMX quality. Thus, although each particular study has its limitations, those limitations tended to be offset by the design of another study.

Our use of multiple studies also provided us with the ability to demonstrate the robustness of our theoretical model through the use of multiple operationalizations of organizational justice. Although the use of multiple operationalizations necessitated the sacrifice of a measure of precision in our hypothesis development, our results show that the theory we develop is robust to the measurement of justice (direct vs. indirect), the dimensionality of justice (overall vs. informational vs. interpersonal) and the source of the measurement (actor vs. receiver). It should be noted, however, that our theory is not bound to any particular source of measurement, and so the consistency of our findings across three studies should provide considerable confidence in our model. Another strength was our multiple operationalizations for popularity (an experimental manipulation in study 2 and a group-level report from coworkers in study 3) and ingratiation (an experimental manipulation in study 2, and a self-report in studies 1 and 3). Also, in study 2 we found a substitution pattern of interaction between ingratiation and popularity which we then confirmed in study 3. The inclusion of such cross-level relationships have been identified as a fruitful area of future research (Klein & Kozlowski, 2000), and these relationships have the potential to extend the richness of theoretical models predicting justice.

Also, several of the variables in study 3 had relatively high means (i.e., popularity and LMX). Perhaps employees selected coworkers likely to see the employee as being popular; similarly, perhaps supervisors with high LMX relationships were more likely to participate. These processes could explain the relatively high means on popularity and LMX and create the potential for range restriction. While the manipulations of popularity and LMX in study 2 should somewhat alleviate these concerns, it is also important to note that range restriction implies a level of conservatism to the results by reducing the total variance of the measure and thus should not threaten the validity of our findings. Somewhat relatedly, our effect sizes in all three studies are somewhat small. However, Colquitt (2012) recently noted that justice as a dependent variable research tends to have relatively small effect sizes. Moreover when it comes to just treatment in organizations, even small effect sizes may be meaningful to employees (Colquitt et al., 2013).

Another potential limitation is that we operationalized popularity at the group-level, even though some of our cases had fewer than 3 raters. Thus, one might question whether this measure truly represents the group's perception of the focal employee's popularity. However, we note that the magnitude of our ICC(1) statistic provides strong evidence that perceptions of popularity were largely shared by the group, suggesting that a rating from a single individual provided a good approximation of the group-level average (Bliese, 2000; Woehr et al., 2015). Moreover, our ICC(1) statistic is similar to a study on popularity that used a similar

method as we used in study 3 (i.e., Cullen et al., 2014), as well as a study where popularity assessments were collected from every member of the group (i.e., study 2; Scott & Judge, 2009). Finally, we tested the sensitivity of our results by reanalyzing the data and excluding cases with fewer than 3 raters; this analysis revealed that the magnitude of the interaction coefficient changed only marginally, thus somewhat diminishing these concerns.

Again pertaining to study 3, although multi-source data can be considered a strength, it has other limitations. While such a data collection avoids concerns over same-source bias, this creates an issue in that construct operationalizations may acquire somewhat different meanings based on their source. For example, consider ingratiation. We believed the employee to be the best source for measuring ingratiation as our research question was about how this behavior might influence the supervisor. It is possible that our results may differ if we used a supervisor-rated measure of ingratiation, as this operationalization would likely capture the supervisor's attribution for certain behaviors (e.g., Treadway, Ferris, Duke, Adams, & Thatcher, 2007). In contrast, given the significant relationship Zapata et al. (2013) identified between supervisor and employee reports of justice, as well as the correspondence found in our results when measuring justice from the actor or receiver, we would expect findings using either source to be similar. However, future research could consider the impact of using different sources for each variable.

The above discussion suggests an important boundary condition to our model that we wish to discuss: that the supervisor does not attribute the employee's behavior as being ingratiation. We explicitly chose to focus on the other-enhancement form of ingratiation because it is widely seen as a form of "social glue" within workgroups (Ralston, 1985, p. 478) and targets often fail to perceive the behavior as manipulative (Vonk, 2002). However, there is evidence to suggest that when an employee is seen as ingratiation or manipulative, the target is likely to react negatively (Treadway et al., 2007). For example, Lam, Huang, and Snape (2007) showed that LMX quality was attenuated when the supervisor attributed impression management motives to an employee's feedback-seeking behavior, and Eastman (1994) found that employees received lesser rewards compared to their colleagues when their behaviors were attributed as being ingratiation by the supervisor. Although ingratiation is considered to be a low risk influence tactic (Aguinis et al., 1994; Vonk, 2002), target awareness of the ingratiation behavior is an important boundary condition to our model. Future research should thus examine the motives that supervisors attribute to employees' attempts at ingratiation.

## 9.2. Implications for practice and future research

Despite these limitations, we see several implications for practice and future research. First, while we proposed mechanisms for the effects of popularity that are well-grounded in extant theory and research, directly testing these mechanisms was beyond the scope of the current manuscript as our goal was to demonstrate the interactive relationship between popularity and ingratiation in the prediction of LMX. Overall, the literature on workplace popularity is relatively nascent and so future research would benefit from investigations of these processes.

Another potential avenue for future research arises from the distinction between measuring justice from the actor or the receiver. While our results suggest that our model is robust to the source, and Zapata et al. (2013) showed a significant relationship between actor and receiver reports, there is likely more to the story. Greenberg (1988, 1990) points out that supervisor enactment of justice and employee perception of justice may sometimes be misaligned, and two recent chapters (Gilliland & Paddock, 2005; Li, Masterson, & Sprinkle, 2012) highlight this point as well. Thus,

one promising avenue for future research is to explore the black box between supervisors and employees to explain when justice reports from these sources are aligned, as well as when they are not. We expect that reports from both sources will, in general, tend to coincide, but that there may be boundary conditions to this relationship.

The justice literature would benefit from further investigation into the mechanism linking LMX and justice. As discussed, one explanation for this relationship could be that supervisors tend to both like and trust employees with whom they have high quality LMX relationships; indeed both constructs have been linked to justice in prior actor-focused research (Scott et al., 2007; Zapata et al., 2013). Thus, we controlled for their effects to demonstrate the incremental validity of focusing on LMX and so it is reasonable to ask: What drives this relationship once liking and trust are removed? On this point, we feel it is instructive to remember that supervisors benefit from high quality LMX relationships as well (Wilson et al., 2010). Thus, providing resources such as higher levels of justice to employees in a high quality LMX relationship may be a means of maintaining that relationship so as to ensure the continued receipt of resources from the employee, and we invite future research to investigate this question in more depth.

Similarly, our manuscript is relevant to research on the interplay of high and low status individuals in social exchange relationships (e.g., Blader & Chen, 2011; Chen et al., 2003). Prior research has shown that low status individuals may prize justice above outcome favorability due to the certainty this treatment provides (Brockner & Wiesenfeld, 1996; Chen et al., 2003). Our results conceptually align with these, in that this may explain why employees value receiving justice from their supervisor as part of a social exchange relationship. However, Chen et al. (2003) showed that high status individuals were concerned both with the actions of low status individuals, as well as the outcomes they received from the relationship; a finding Blader and Chen (2011) confirmed as reflecting status maintenance concerns. This suggests an additional potential mechanism for why supervisors might provide justice as a resource in a social exchange relationship. Perhaps the act of enacting justice itself highlights the status differential between a supervisor and subordinate in that, through their actions, supervisors may confirm and solidify their own relative position in the exchange relationship (e.g., Barnard, 1938; Emerson, 1962). Given that employees strongly desire justice from organizational authorities, supervisors may be able to "reinforce the existing social order" by enacting justice (Brockner, 2010, p. 167).

Future research would also benefit from a closer investigation of the time elapsed between ingratiation behavior and justice. As we discussed in the results of our study 1, we expected that the effects of ingratiation on overall justice perceptions would be relatively immediate (as opposed to being delayed by a week). However, this invites a different research question: How delayed are the effects of ingratiation on justice? Perhaps ingratiation early in the workday is associated with justice later that day, or alternatively, perhaps the effects are seen the next day or accumulate over the week. Unfortunately, our data do not permit us to investigate this question, and so we invite future research to probe this question further.

Finally, our focus on other-enhancement ingratiation is relatively narrow given the scope of identified influence tactics (e.g., Bolino et al., 2008). It is likely that the observed relationships may vary if one focused either on specific behaviors involved in ingratiation, or more broadly on other influence tactics. For example, perhaps performing a favor for someone is harder to forget (and thus more impervious to moderation) than would be flattery (e.g., Flynn & Brockner, 2003). Also, different results may be expected if researchers focused on influence tactics that may be more threatening to the supervisor (i.e., intimidation), although,

whether an individual's popularity might blunt this effect remains an open question. Future research could seek to discover whether some influence tactics are more or less sensitive to the effects of popularity.

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## Appendix A. Study 2 materials

### A.1. Role of participants

Upon agreeing to an informed consent, participants were presented with the following description of their role in the scenario.

In this exercise, we want you to imagine that you work for **CRISPON ELECTRONICS**, a company that manufactures a variety of high-end electronic components (TVs, stereos, etc.).

Your position at Crispon is head of the finance group. This is a very high ranking position within the company, and because of your position you have a great deal of formal authority when it comes to making business decisions.

Your role as the head of the finance group means that you are the leader of the Strategy Team at Crispon. This team consists of three additional department representatives ("reps"). In total, the four of you are the Strategy Team, and you are the leader of this team. Below is some information about your other team members.

Please read these descriptions carefully as you will need this information to make your decisions and answer several questions on the next page.

### A.2. Descriptions of other members of the team

After being presented with this role information, participants read a brief description of the three members of the team. The descriptions for two of the employees, Jerry and Robert, were held constant. The description for Bill contained the popularity manipulation. This manipulation was designed for the current study by utilizing key words from the [Scott and Judge \(2009\)](#) popularity measure.

**Bill (Popular).** Bill is the rep for Sales. Sales includes marketing and is widely viewed as a company strength. To be honest, Bill is the most popular member of the Strategy Team you lead. Bill is admired, well-liked, and well-known by everyone on the team. He is also very popular with the Sales Department that he represents.

**Bill (Unpopular).** Bill is the rep for Sales. Sales includes marketing and is widely viewed as a company strength. To be honest, Bill is the least popular member of the Strategy Team you lead. Bill is not admired, not well-liked, and not well-known. He is also not a popular person with the Sales Department that he represents.

**Jerry.** Jerry is the rep for Production. Production involves assembling components into the finished products sold by the company. The production lines that Jerry oversees have been running at solid levels for stereo and LED televisions, while pilot production is still underway for producing the next generation of televisions (known as the 4K Ultra HD TV).

**Robert.** Robert is the rep for Research and Development (R&D). R&D helps develop new consumer products (like Ultra HD

Television) and component pieces (such as magnets and optical systems) that might be sold to other companies for use in their finished products. Both of these research and development areas are viewed as important for the company.

### A.3. Budget allocation decision

After reading these descriptions, participants were told that they had a discretionary budget of \$700,000 that had to be allocated between the three employees. Each employee had requested the entire amount to cover additional expenses in their department and provided a brief rationale as well an additional message explaining why the funds were needed. We utilized the "additional message" to implement the ingratiation manipulation from Bill. The ingratiation manipulation was designed for the current study using key words from the [Wayne and Liden \(1995\)](#) ingratiation measure. The rationale and additional message for the other two employees were held constant.

We informed participants that the decision was theirs alone to make after reading each employee's rationale and additional. The only restriction was that the entire amount (\$700,000) had to be allocated, however it could be given to one employee, or distributed among two or three of the employees. Upon reading these rationales and messages, participants made the allocation decision and then proceeded to complete the survey measures associated with the study. We asked each participant to provide their first name at the beginning of the survey, and this input was linked into the '[NAME]' field below so that it appeared as if each employee was addressing the participant directly.

**Bill's rationale.** The use of the Internet has increased dramatically and our customers are increasingly buying our products online. As a result, our web system and servers are becoming stressed, and there is a need for greater technical and human support. We request an additional \$700,000 in order to pay for additional staffing and technical support to augment our capabilities and online presence.

**Bill's additional message (ingratiation).** Hello [NAME], great chatting with your family at the company picnic last week. Crispon has really been on a roll since you became leader of the Strategy Team. I'm certain you will continue to make the best decisions for the company. I hope you can help the Sales Department by funding our entire request. Enjoy working with you, and if I can help with anything else, just let me know!

**Bill's additional message (no ingratiation).** [NAME], I know that all of the departments are scheduling their strategic planning meetings over the next six weeks. Since the sales group has team members located around the country, I am going to schedule our group meeting to be at the end of that six week timeframe. By doing so, this will give all team members a chance to arrange their schedules so they can travel here and attend.

**Jerry's rationale.** As a result of high oil prices, the price of plastic materials has gone up, and a significant part of the price of raw materials in our electronics includes the purchase of plastic. The logical consequence is that our procurement budget for the year is no longer adequate. We request an additional \$700,000 to allow us to supplement our procurement budget.

**Jerry's additional message.** [NAME], have there been any updates on when the offices are going to be painted? I just want to make certain that we will get some advance notice as they want everything moved away from the walls and they want nothing on our floors. I don't want to move stuff until I have to do it, so if you have any specific dates for the painting, please pass them on.

**Robert's rationale.** To achieve a competitive advantage in the area of sustainability, our products must be energy frugal and

visible steps need to be taken to make our products and the production of our products as environmentally friendly as possible. To begin working toward this goal, we are requesting \$700,000 which will be used to reduce the packaging costs associated with our products.

**Robert's additional message.** [NAME], I just wanted to remind you and the other members of the Strategy Team that I will be out of the office for much of next week. As required by the company, I will be attending mandatory continuing education on the topic of workplace safety best practices. The program runs until 5 pm each day. As a result, the best way to reach me next week will be by email.

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