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Exploring the signaling function of idiosyncratic deals and their interaction

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ABSTRACT

By adopting signaling theory as the overarching framework and integrating self-determination theory, we examined the signaling function of task i-deals, financial i-deals, and their interaction. Across three studies with varying measures, we found that task i-deals, independently and jointly with financial i-deals, conveyed a positive message regarding competence in that they were positively related to recipients' competence need satisfaction. In turn, competence need satisfaction positively related to organizational citizenship behaviors. The competence-signaling function of task i-deals and task-financial i-deals interaction remained significant even after accounting for leader–member exchange, organization-based self-esteem, and perceived organizational support. Financial i-deals, however, did not exhibit a competence-signaling function. The current research sheds light on the signaling function of i-deals and their interaction, and provides guidance on the practice of granting one or multiple types of i-deals.
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1. Introduction

As organizations continue to strive toward attracting and retaining top talent, attention has increasingly focused on the provision of non-standard, idiosyncratic deals (i-deals) to employees as a way for organizations to distinguish themselves from other employers, as well as to enhance employee performance and loyalty. Since the seminal work by Rousseau (2005), research has demonstrated that i-deals are granted with at least moderate frequency in different organizations across multiple industries, and that such i-deals can lead to enhanced attitudinal and behavioral outcomes, including job satisfaction, organizational commitment, task performance, and organizational citizenship behaviors (e.g., Anand, Vidyarthi, Liden, & Rousseau, 2010; Ho & Tekleab, 2013; Hornung, Rousseau, & Glaser, 2009; Hornung, Rousseau, Weigl, Müller, & Glaser, 2014; Liu, Lee, Hui, Kwan, & Wu, 2013).

Reflecting the idiosyncratic nature of such deals, prior works have also found that the content of i-deals can vary, whereby content refers to the particular resources that the i-deals encompass (Rousseau, Ho, & Greenberg, 2006). For instance, Rousseau and colleagues (Hornung, Rousseau, Glaser, Angerer, & Weigl, 2010; Rousseau & Kim, 2006) found, in the context of hospitals, four types of i-deals pertaining to scheduling flexibility (flexibility i-deals), workload reduction, developmental opportunities (developmental i-deals), and the nature of work tasks and responsibilities (task i-deals). More recently, Rosen, Slater, Chang, and Johnson (2013) introduced an updated typology that captures i-deals commonly negotiated across multiple employment settings beyond hospitals. While three of these forms replicate the earlier ones (scheduling flexibility, location flexibility, task/work responsibilities), a new form—financial i-deal—was introduced, capturing compensation arrangements that fit individual needs.

A key premise underlying i-deals theory is that different forms of i-deals convey different messages to employees, such that employees respond differently depending on the content of their i-deals (Rousseau et al., 2006). While some i-deals are indicative of a high-quality social exchange relationship with the organization and may enhance employee motivation, others convey a more economic transaction and may be less effective in motivating employees (Hornung et al., 2009; Rousseau, Hornung, & Kim, 2009). This suggests that different i-deals not only convey different messages, but also may not necessarily engender reciprocity from employees. Thus, researchers have noted that "social exchange theory arguments are insufficient in explaining the process" linking i-deals and employee outcomes, and called for theory-building that expands the set of explanatory mechanisms beyond the conventional social exchange perspective that has dominated i-deals research (Liao, Wayne, & Rousseau, in press, p. 6).

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The present research takes a step toward doing so by integrating signaling theory and self-determination theory (SDT) to examine the competence-signaling, motivational mechanism underlying i-deals. Specifically, our research objective is to explore how two very distinct forms of i-deals (financial and task i-deals) can drive recipients' discretionary organizational citizenship behaviors (OCB) by fulfilling their competence need, over and above the more commonly examined social exchange mechanisms. We focus on task and financial i-deals because their very different nature provides for greater scope to compare the competence-signaling, motivational potential underlying i-deals. Specifically, while task i-deal represents an abstract and non-monetizable form of i-deal, financial i-deal constitutes a more concrete and monetizable form (Rousseau et al., 2006), thereby suggesting that they are likely to convey different messages to employees. Furthermore, their conceptual distinctiveness raises the question of whether the competence-enhancing signal conveyed by each i-deal will be reinforced or diminished when both occur concurrently. In examining the *meta-feature* (Bowen & Ostroff, 2004) of i-deals in terms of how internal consistency between different i-deals may alter their motivational potential, we offer a richer, more nuanced view of such deals.

Building on signaling theory (Connelly, Certo, Ireland, & Reutzel, 2011; Spence, 1973) as an overarching framework to examine how task and financial i-deals independently and jointly drive employees' OCB, this study is the first to explicitly investigate the signals conveyed by i-deals, a notion that was first advanced by Rousseau et al. (2006), who noted that i-deals "can signal [to their recipients] the value an employer places on [them]" (p. 979). At the same time, while signaling theory provides the logic for how i-deals can convey positive messages to employees, it does not articulate the specific mechanisms through which such messages translate into enhanced behavioral responses. Thus, we use self-determination theory (SDT; Deci & Ryan, 1985; Ryan & Deci, 2000), a well-established contemporary theory of motivation, to explicate how the signals from i-deals can enhance individuals' competence need satisfaction and, in turn, OCB.

Our study contributes to extant research on i-deals in three ways. First, we push beyond the dominant perspectives in i-deals theory, primarily social exchange theory (in the form of leader–member exchange and perceived organizational support) (e.g., Anand et al., 2010) and self-enhancement perspective (Liu et al., 2013), to introduce a signaling function of i-deals, thereby advancing i-deals theory. Second, we delineate the role of financial i-deals, a relatively under-investigated form of i-deals, by examining how they not only relate to OCB but also moderate the signaling function of task i-deals, thereby expanding the limited body of work on financial i-deals. In particular, the fact that the only two existing studies (Ho & Tekleab, 2013; Rosen et al., 2013) examining financial i-deals revealed inconsistent findings on their attitudinal outcomes underscores the need to further investigate whether financial i-deals can indeed elicit positive employee outcomes. Our third contribution pertains to demonstrating that different forms of i-deals can operate jointly to shape employee responses, over and above the role that each form of i-deals may independently play. In so doing, we go beyond prior i-deals research that has primarily examined individual forms of i-deals in isolation. Investigating the interactive role that i-deals can play offers a richer, more accurate perspective of how i-deals function, in that employees' reactions to one form of i-deals may be contingent on the level of another form of i-deals. This also addresses researchers' calls to enrich signaling theory by investigating how signalers can manage a portfolio of signals, rather than each individually, so to maximize their collective effectiveness (Connelly et al., 2011), thereby paving the way for further research on the meta-features of i-deals.

We adopt a three-study approach to provide robust support for our model and enhance the validity of our findings. In Study 1, we conduct a field study to examine the relationships that task and financial i-deals have, independently and jointly, with competence need satisfaction, which in turn facilitates coworker-reported OCB. We include leader–member exchange (LMX) as a control mediating mechanism to demonstrate the robustness of competence need satisfaction as a mediating mechanism above and beyond the leader–member social exchange mechanism. In Study 2, we replicate the findings from the previous study while also including organization-based self-esteem (OBSE) as a control mediating mechanism, so as to account for the self-enhancement explanation. In the final field study (Study 3), we replicate our findings from the previous two studies while controlling for perceived organizational support (POS) as another alternative mediator.

2. I-deals as signaling devices

We advance a novel view of i-deals as signaling devices that can explain how i-deals predict employee outcomes. Originally proposed by Spence (1973) to explain how education conveys otherwise unobservable qualities of job candidates to potential employers, signaling theory addresses information asymmetry between two parties (e.g., employer and employee; executives and investors), one of whom has access to information about one's quality and/or intent that the other party does not, and focuses on how the former can communicate such information to the latter through various signals so as to elicit certain desirable responses from the latter. Signaling theory has been used to explain various phenomena, including how brand managers use advertising to signal the quality of their products and services to consumers (e.g., Chung & Kalnins, 2001), how negotiators use offers and counteroffers to signal their willingness to agree on a particular outcome (e.g., Srivastava, 2001), and how employers use various types of employment practices (e.g., recruitment strategies; pay-for-performance[2] incentive plans) to signal their intent to potential and existing employees (e.g., Belogolovsky & Bamberger, 2014; Rynes, 1991). In the specific context of i-deals research, scholars have also alluded to the signaling function of i-deals by noting the i-deals can convey positive signals in the employment relationship and serve as powerful cues (e.g., Rousseau & Kim, 2006; Rousseau et al., 2006; Rousseau et al., 2009).

Several features of signaling theory underscore its relevance to the current focus on i-deals as signaling devices. As elaborated on by Connelly et al. (2011), the key elements in signaling theory comprise (1) the signaler (e.g., employer) who possesses private information about an organization, individual, or products that is not available to outsiders; (2) the receiver (e.g., employee), an outsider who does not have, but wishes to access, such information; and (3) the signal (e.g., i-deals), consisting of actions that the signaler takes to intentionally convey the information to the

[2] While pay-for-performance and merit pay practices share some similarities with financial i-deals, they are nonetheless distinct. I-deals are, by definition, (i) individually negotiated between an employee and the employee; and (ii) heterogeneous such that the terms are customized to the individual. In contrast, merit pay and pay-for-performance practices are generally part of an organization's standard compensation design (not individually negotiated), and all employees in the same position or group can receive the same set of terms and conditions (not heterogeneous). Additionally, the nature of financial i-deals goes beyond simply increasing base pay or bonus according to one's performance, as is typical in pay-for-performance and merit pay plans. Instead, financial i-deals can include different combinations of various financial incentives to suit the individual's needs, such as changing the configuration of salary and benefits, or combining different types of benefits such as health insurance and tuition reimbursement according to one's preferences. Accordingly, despite the fact that all these practices relate to financial incentives, the idiosyncratic nature of financial i-deals sets it apart from the other more conventional and standardized forms of financial incentive systems.

receiver. The use of signals is especially important in the presence of *information asymmetry*, and in an employment relationship, the employer generally has more information about the employee's value to the organization relative to all other workers. As such, the employer may "attempt to communicate or 'signal' certain information to their underinformed exchange partners, hoping that, by reducing uncertainty on the part of the underinformed, they can elicit behavior more favorable to themselves (the more informed)" (Belogolovsky & Bamberger 2014, p. 1709). Additionally, because signaling theory "focuses primarily on the deliberate communication of positive information in an effort to convey positive organizational attributes" (Connelly et al., 2011, p. 44), signals have to be *observable and communicable* to receivers in order to be effective (Connelly et al., 2011). The effectiveness of signaling also hinges on whether receivers accurately interpret the intended message (Belogolovsky & Bamberger, 2014; Connelly et al., 2011). One cause of inaccurate interpretations is *signal inconsistency*, defined as the internal inconsistency among multiple signals from one source (Gao, Darroch, Mather, & MacGregor, 2008), which then evokes cognitive dissonance and negative reactions among signal recipients (Bowen & Ostroff, 2004). Thus, to the extent that multiple signals are consistent, they are more likely to be effective.

Together, these features underscore the role of i-deals as signals that can be used by the employer (the signaler) to convey its positive evaluation and regard for selected employees (the receiver) in order to elicit desirable behavioral responses that benefit the former. Specifically, because the provision of such work arrangements falls under the organization's discretion, the employer has deliberate control over the amount and form of i-deals to provide to effectively signal its intention. The fact that i-deals are clearly observable from the recipients' standpoint further underscores the signaling function they can play. In addition, because i-deals are designed to fit individuals' skills, interests, or needs, they are likely to elicit positive employee attitudes and behaviors that will benefit the signaler, a feature that effective signals should have. Last of all, the fact that i-deals can take on different forms introduces the potential for signals conveyed through i-deals to be consistent with or conflict each other, thereby emphasizing the relevance of signaling theory in predicting how different forms of i-deals may operate independently and jointly to elicit positive employee behaviors.

3. I-deals as signal of employee competence

While prior research and the previous section proposed that i-deals can serve as signals, the specific nature of such signals has yet to be explicated. Drawing from Rousseau et al.'s (2006) observation that i-deals "are predicated on an individual worker's value to his or her employer" (Rousseau et al., 2006, p. 978) and, accordingly, signal the organization's recognition of such value, we contend that the signals conveyed by i-deals are, at least in part, competence-related. This derives from the fact that employees provide value to the organization primarily through their competence in discharging their work responsibilities. In other words, the provision of i-deals signals the organization's recognition of the recipients' work competence, thereby enhancing their competence need satisfaction and, subsequently, OCB.

Competence need, defined as individuals' need to feel effective in interacting with and mastering the environment so as to bring about desired outcomes and manage various challenges (Deci & Ryan, 2000; Van den Broeck, Vansteenkiste, De Witte, & Lens, 2008), represents an innate, universal psychological need that all individuals have, the satisfaction of which not only promotes psychological health but also allows individuals to thrive in changing environments (Gagné & Deci, 2005; Van den Broeck, Vansteenkiste, De Witte, Soenens, & Lens, 2010). While seemingly comparable to constructs such as self-efficacy, which pertains to "*acquired cognitions* with respect to one's capacities to successfully accomplish *specific future* tasks" (Van den Broeck et al., 2010, p. 982), competence need has been distinguished from these constructs by virtue of it being an *innate* need. Thus, an individual can be highly self-efficacious about completing future tasks but yet perceive that the existing work context has failed to fulfill his/her competence need (e.g., because work assignments are not challenging).

Consistent with the proposition in SDT that socio-contextual factors are important in fulfilling psychological needs (e.g., Gagné & Deci, 2005), we propose that i-deals can signal employees' competence, thereby satisfying their competence need. Specifically, task i-deals are designed to enable employees to capitalize on their skills, abilities, and knowledge at work (i.e., their work competence), and are thus likely to convey strong signals about the organization's recognition of the recipient's competence. By granting such an i-deal to employees, the employer indicates that it not only recognizes their competence and skill sets, but also values them to the extent of reconfiguring their work tasks so as to better utilize such skill sets. Thus, employees who are granted task i-deals are likely to receive a positive message regarding their competence such that they will experience competence need satisfaction.

Hypothesis 1 (H1). Task i-deals are positively related to competence need satisfaction.

On the other hand, while financial i-deals may also convey positive, competence-related messages to recipients, we expect the signal to be weaker and more equivocal than that from task i-deals. According to cognitive evaluation theory (CET), a subtheory of SDT (Ryan & Deci, 2000), external tangible rewards can decrease intrinsic motivation in general, but can also, under certain conditions, accentuate intrinsic motivation (Deci, Koestner, & Ryan, 1999). To explain these mixed findings, SDT researchers propose that extrinsic rewards can convey mixed or different messages (e.g., Deci, Eghrari, Patrick, & Leone, 1994; Ryan, Mims, & Koestner, 1983). On one hand, receiving such rewards can serve an informational function by signaling recipients' competence, thereby enhancing their competence need satisfaction and motivation (Ryan et al., 1983). On the other hand, rewards can also be seen as a form of organizational control to implicitly pressure employees to act or think in specified ways (Ryan et al., 1983), and as a way for the organization to reduce potential moral hazard and opportunistic behaviors on the employees' part (Connelly et al., 2011), thereby diminishing their motivation.

While empirical evidence is lacking on which signal is more strongly conveyed by financial i-deals, researchers have recently noted that rewards that are indirectly performance-salient, that is, rewards that are not directly or clearly tied to performance (e.g., base salaries), are less likely to be deemed as controlling one's behavior (Cerasoli, Nicklin, & Ford, 2014). In contrast, rewards that are directly performance-salient, that is, those with a clear and proximal link to performance (e.g., sales commissions), are more likely to be associated with controlling behavior (Cerasoli et al., 2014). Because financial i-deals are not directly tied to specific levels or criteria of work performance, they constitute indirectly performance-salient incentives that are less likely to play a controlling function, thereby suggesting that the competence-signaling function will operate to some extent. Thus, we expect that financial i-deals will convey a weaker but nonetheless positive competence-related signal to recipients, thereby enhancing their competence need satisfaction.

Hypothesis 2 (H2). Financial i-deals are positively related to competence need satisfaction.

In turn, SDT prescribes that the satisfaction of psychological needs, which encompass competence needs, will yield positive employee behaviors such as task performance and OCB (Gagné & Deci, 2005). This also follows directly from the contention in signaling theory that signals are intended to elicit positive behaviors that benefit the signaler. In the present research, we focus on OCB, defined as employee behaviors that are relatively discretionary but nonetheless contribute to effective organizational functioning (Organ, 1997), because as a discretionary, extra-role behavioral outcome, OCB is particularly suited to capture employees' voluntary responses to i-deals. In contrast, in-role task performance is mandated by the organization and, consequently, may exhibit less variability in response to i-deals. Focusing on OCB also allows us to extend prior research that used a social exchange perspective to examine how i-deals facilitate OCB (Anand et al., 2010), by investigating competence need satisfaction as another viable mediator in the i-deals-to-OCB relationship.

Competence need satisfaction can enhance employees' perceived ability as well as motivation to engage in OCB. To the extent that competence need satisfaction bolsters individuals' confidence in their work abilities, it will increase their perceived ability to go beyond in-role responsibilities to engage in discretionary behaviors that help coworkers and/or the organization (Gagné & Deci, 2005; Rosen, Ferris, Brown, Chen, & Yan, 2014). Further, employees whose competence need is satisfied tend to be more engaged and intrinsically motivated to excel at work (Greguras & Diefendorff, 2010; Van den Broeck et al., 2008), with such drive for excellence manifesting in OCB. Accordingly, in line with extant evidence of a positive linkage between overall psychological need satisfaction and OCB (e.g., Greguras & Diefendorff, 2010; Rosen et al., 2014), competence need satisfaction is also expected to relate positively to OCB. Overall, integrating this relationship with the previous set of hypotheses leads us to expect that competence need satisfaction will mediate the positive linkages that both task and financial i-deals are predicted to have with OCB.

Hypothesis 3 (H3). Competence need satisfaction mediates the relationship between task i-deals and OCB.

Hypothesis 4 (H4). Competence need satisfaction mediates the relationship between financial i-deals and OCB.

4. I-deals interaction and signal consistency

Because signals do not operate in isolation but, instead, "may vary as a function of signals inferred from other related management policies or practices" (Belogolovsky & Bamberger, 2014, p. 1708), we argue that task and financial i-deals will interact with each other to predict OCB, and that this relationship is again mediated by competence need satisfaction. This argument derives from the notion of signal consistency, reflecting the extent of agreement between multiple signals from one source (Connelly et al., 2011). To the extent that a signal is reinforced by, and consistent with, signals conveyed through other organizational mechanisms, the former is likely to become stronger and less ambiguous. In particular, weak signals can serve as a framework against which stronger signals are interpreted, such that when weak signals are inconsistent with strong signals, the strength of the latter will be diminished (Belogolovsky & Bamberger, 2014).

Extending this to the context of task and financial i-deals, we expect that financial i-deals, despite being a weaker competence-signaling device, can alter the signal strength of task i-deals. Specifically, while task i-deals are expected to be positive related to employees' competence need satisfaction, we contend that this link will be accentuated to the extent that the employees also receive financial i-deals. When both forms of i-deals "complement one another and fit together as a whole" (Bowen & Ostroff, 2004, p. 211), their competence-enhancing signals can be mutually reinforcing such that combined, they send a particularly strong and consistent message that enhances employees' competence need satisfaction. However, if employees who receive task i-deals do not also get financial i-deals, this inconsistency in i-deal arrangements could diminish the clarity of the competence-enhancing signal conveyed by task i-deals, thereby prompting a discounting of that signal and weakening the efficacy of task i-deals in satisfying employees' competence need.

Hypothesis 5 (H5). Financial i-deals moderate the relationship between task i-deals and competence need satisfaction, such that the relationship is stronger as financial i-deals increase.

Integrating Hypothesis 5 with previous arguments regarding the link between competence need and OCB also leads us to propose the following mediated-moderation hypothesis:

Hypothesis 6 (H6). Competence need satisfaction mediates the relationship between task-financial i-deals interaction and OCB.

5. Overview of present research

We conducted three field studies to test our hypotheses. In Study 1, we provide first evidence on the competence-signaling function of i-deals and their interaction, while including LMX, representing leader–member social exchange, as a simultaneous mediator in order to demonstrate the robust mediating role of competence need satisfaction. To reduce the threat of common-source and common-method bias, we use coworker-rated OCB. Study 2 is another field study that replicates the findings while including OBSE as a simultaneous mediator. Finally, Study 3 replicates the findings while including POS as a simultaneous mediator, and adding the variable of social desirability and a marker variable (Siemsen, Roth, & Oliveira, 2010) to address methodological issues. Across the three studies, we include different control variables that collectively represent alternative mediating mechanisms that have been previously established, so as to provide robust support for our hypotheses. Table 1 displays the hypotheses tested and the corresponding results in each study.

6. Study 1

6.1. Methods

6.1.1. Participants

A total of 131 employee–coworker dyads recruited through the StudyResponse Project completed this study. StudyResponse is a non-profit organization that recruits participants for academic research, and offers them monetary compensation in exchange for completing online surveys. StudyResponse has been frequently used in prior management research related to i-deals (Ng & Feldman, 2015) and other topics (e.g., Kong & Ho, 2015; Triana, Garcia, & Collela, 2010; Umphress, Bingham, & Mitchell, 2010). As recommended by Podsakoff, MacKenzie, and Podsakoff (2012), we collected data over two sessions separated by approximately a month so as to procedurally reduce common method bias.

Two hundred and one respondents completed the survey at Time 1, and after an average of 25 days, 150 of them completed the survey at Time 2, resulting in a retention rate of 74.6%. Respondents were also asked to invite a coworker to participate in the study, and the invited coworker then completed the participant

Table 1
Hypotheses and results across three studies.

Hypotheses	Study 1	Study 2	Study 3
H1: Task i-deals → competence need satisfaction	Supported	Supported	Supported
H2: Financial i-deals → competence need satisfaction	Not supported	Not supported	Not supported
H3: Task i-deals → competence need satisfaction → OCB	Supported	Supported	Supported
H4: Financial i-deals → competence need satisfaction → OCB	Not supported	Not supported	Not supported
H5: Task i-deals × financial i-deals → competence need satisfaction	Supported	Supported	Supported
H6: Task i-deals × financial i-deals → competence need satisfaction → OCB	Supported	Supported	Supported

signup, which was verified by StudyResponse. Out of the 150 matched coworker dyads, we eliminated 19 dyads in which (1) one of the dyad members had changed the organization or supervisor by the second survey; or (2) both dyad members were not working under the same supervisor. This yielded a final sample of 131 focal participants (28% female) paired with their respective coworkers. We checked the quality of the data by looking for patterned responses and reviewing the time used to complete the survey, and did not detect any observations that were problematic. The average age of the focal participants was 41.70 years (SD = 10.46) and average organizational tenure was 88.34 months (SD = 68.81). About 95% of them had at least some college education.

6.1.2. Measures

Focal participants completed the measures of task and financial i-deals and demographics at Time 1, and the competence need satisfaction and LMX measures at Time 2. Their coworkers rated their OCB and task performance at Time 2. All variables were assessed on a seven-point scale ranging from 1 (*strongly disagree*) to 7 (*strongly agree*) unless otherwise indicated.

6.1.2.1. I-deals. Participants rated their task and financial i-deals using the eleven items from Rosen et al.'s (2013) scales of task and work responsibilities (6 items; α = .89) and financial incentives (5 items; α = .92). A sample item of task i-deals is "At my request, my supervisor has assigned me tasks that better develop my skills," and a sample item of financial i-deals is "At my initial appointment, I negotiated with my supervisor to develop a compensation plan that rewards my unique contributions."

6.1.2.2. Competence need satisfaction. Participants indicated their competence need satisfaction by responding to Brien et al.'s (2012) four items (α = .90). Sample items include "I have the ability to do my work well" and "I feel competent at work."

6.1.2.3. LMX. Participants indicated their LMX by responding to Bernerth, Armenakis, Field, Giles, and Walker's (2007) eight items (α = .91). Sample items include "My supervisor and I have a two-way exchange relationship" and "My relationship with my supervisor is composed of comparable of exchanges of giving and taking."

6.1.2.4. OCB and task performance. Coworkers rated respective focal participants' OCB using Lee and Allen's (2002) 16 items (α = .96). Sample items are "This person helps others who have been absent" and "This person takes action to protect the organization from potential problems." As a supplementary measure, coworkers also rated respective focal participants' task performance using Podsakoff and MacKenzie's (1989) six items, which include "This person fulfills all the responsibilities required by his/her job." Two reverse-scored items ("This person often completes tasks in an unsatisfactory manner" and "This person often fails to perform essential duties") had low factor loading scores (below |0.40|) and were dropped; the remaining four items were used to measure task performance (α = .89).

6.1.2.5. Control variables. We included gender (1 = female, 0 = male), age, organizational tenure (in months), education (1 = Bachelor's degree or above, 0 = under Bachelor's degree), and organizational status (1 = entry level, 2 = intermediate level, 3 = middle management level, 4 = upper management level, 5 = executive level) as control variables, based on prior research documenting the links between these and our outcome variable (e.g., Kidder & McLean Parks, 2001; Ng & Feldman, 2009).

6.2. Results

6.2.1. Measurement model

We conducted confirmatory factor analyses (CFAs) in LISREL 8.80 (Jöreskog & Sörbom, 2006) to distinguish among task i-deals, financial i-deals, competence need satisfaction, LMX, OCB, and task performance by comparing the proposed six-factor model to various (more parsimonious) five-factor models (Anderson & Gerbing, 1988). Because the ratio of the sample size to the number of observed indicators was below 5 (Kline, 2005), we followed previous research (e.g., Grant, Berg, & Cable, 2014) and used item parceling to generate a better ratio of sample size to parameters, increase the reliability of latent variables, and improve model fit (Little, Cunningham, Shahar, & Widaman, 2002). We formed two parcels of task i-deal items based on item order (i.e., the first three items as the first parcel and the second three items as the second parcel). A similar approach was used to form parcels of financial i-deals (two parcels), competence need satisfaction (two parcels), OCB (six parcels), LMX (three parcels), and task performance (two parcels). All the indicators loaded onto their respective latent variables, each with a factor loading score of above |.40|. Results indicated that the six-factor model fit the data reasonably well (χ^2 = 176.82, df = 104, CFI = .99, SRMR = .04, RMSEA = .07) and had a better fit than any of the five-factor models ($\Delta\chi^2$s $\geqslant$ 66.44, dfs = 5, ps < .001, ΔCFIs $\geqslant$ .02) (see Hu & Bentler, 1999; Kline, 2005 for the recommended cutoff values of the fit indices). We also conducted a follow-up targeted CFA to test the distinctiveness of task and financial i-deals, and the result indicated that the two-factor model fit the data better than the one-factor model ($\Delta\chi^2$ = 30.45, df = 1, p < .001).

6.2.2. Hypothesis testing

Table 2 presents the descriptive statistics and correlations. The inclusion of gender, age, organizational tenure, education, and organizational status did not change the result patterns; consequently, these control variables were excluded from subsequent analyses for the sake of parsimony. We conducted a path analysis to show the final model with all the key variables included (see Fig. 1), and the model fit the data well: χ^2 = 14.16, df = 3, GFI = .97, CFI = .97, NFI = .97, SRMR = .05.

We tested H1 through H6 using Hayes's (2013) PROCESS algorithm with 1000-replication bootstrapping, which provided bootstrap 90% bias-corrected confidence interval ($CI_{90\%}$). To test H1 through H4, we used PROCESS Diagram 4 and included LMX as a mediator together with competence need satisfaction. The results indicated that task i-deals were positively related to competence need satisfaction (b = .32, SE = .07, p < .001), as predicted in H1. At the same time, task i-deals were positively related to LMX (b = .49, SE = .06, p < .001). A separate analysis showed that

Table 2
Descriptive statistics and correlations (Study 1).

Variable	*M*	*SD*	1	2	3	4	5	6	7	8	9	10
1. Task i-deals (T1)	5.28	1.00	(.89)									
2. Financial i-deals (T1)	4.90	1.38	.77***	(.92)								
3. Competence need satisfaction (T2)	6.03	.90	.35***	.12	(.90)							
4. LMX (T2)	5.56	.87	.57***	.34***	.62***	(.91)						
5. Coworker-rated OCB (T2)	5.76	.88	.58***	.37***	.66***	.74***	(.96)					
6. Coworker-rated task performance (T2)	5.99	1.02	.33***	.16	.60***	.52***	.56***	(.89)				
7. Gender (T1)	.27	.45	−.14	−.33***	.14	.12	.07	.04				
8. Age (T1)	41.70	10.46	−.01	−.14	.09	.21*	.15	.13	.08			
9. Tenure (T1)	152.47	736.75	.04	.01	.01	.06	.07	.11	.15	.23**		
10. Education (T1)	.79	.41	.16	.40***	−.15	−.10	−.12	−.15	−.28***	−.38***	.02	
11. Organizational status (T1)	2.81	.97	.18*	.23**	.02	.15	.12	.09	−.09	.34***	.13	.15

Note. $N = 131$. Alphas (internal consistency) are presented in the parentheses. T1 represents Time 1 and T2 represents Time 2.
* $p < .05$.
** $p < .01$.
*** $p < .001$.

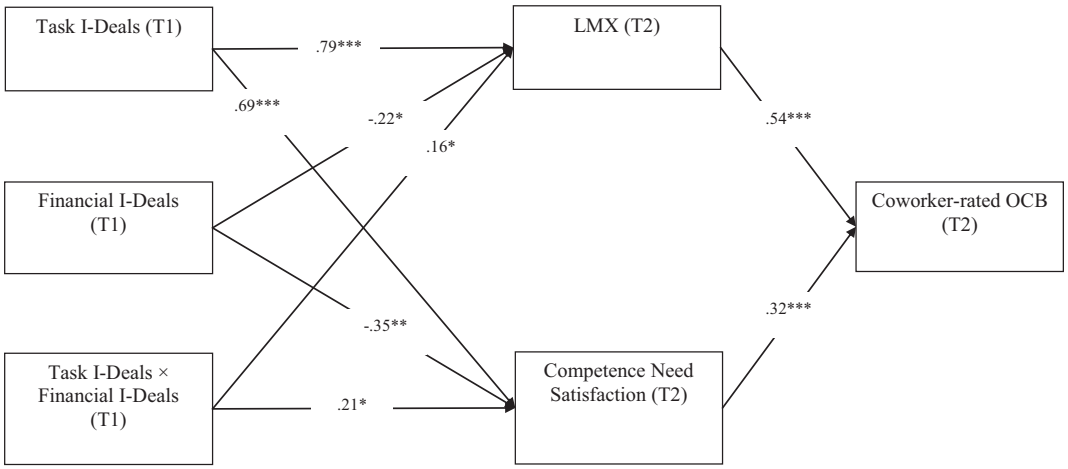

Fig. 1. Final path model (Study 1). *Notes.* $\chi^2(3) = 14.16$, GFI = .97, CFI = .97, NFI = .97, SRMR = .05. The covariance of the disturbance terms of LMX and competence need satisfaction (cov = .28, *SE* = .05, $p < .001$) was modeled but is not presented for the sake of presentation clarity. Standardized path coefficients are presented. LMX represents leader–member exchange. OCB represents organizational citizenship behaviors. T1 represents Time 1 and T2 represents Time 2.

financial i-deals were not significantly related to competence need satisfaction ($b = .07$, *SE* = .06, $p = .18$), thereby failing to support H2; however, financial i-deals were positively related to LMX ($b = .21$, *SE* = .05, $p < .001$).

In terms of mediators, while LMX was a significant mediator for both task i-deals (indirect effect = .20, bootstrap *SE* = .07, $CI_{90\%}$ [.11, .33]) and financial i-deals (indirect effect = .10, bootstrap *SE* = .04, $CI_{90\%}$ [.05, .17]), competence need satisfaction was also a significant mediator in the relationship between task i-deals and OCB (indirect effect = .10, bootstrap *SE* = .04, $CI_{90\%}$ [.04, .18]). However, competence need satisfaction did not mediate the relationship between financial i-deals and OCB (indirect effect = .03, bootstrap *SE* = .02, $CI_{90\%}$ [−.002, .07]). Accordingly, H3 was supported whereas H4 was not.

To test H5, we used PROCESS Diagram 1 and found that task-financial i-deals interaction was positively related to competence need satisfaction ($b = .11$, *SE* = .05, $p < .05$) and LMX ($b = .08$, *SE* = .04, $p < .05$). As depicted in Fig. 2a, task i-deals were more strongly related to competence need satisfaction when financial i-deals were high (+1 *SD*) (simple effect = .78, *SE* = .14, $t = 5.63$, $p < .001$) versus low (−1 *SD*) (simple effect = .46, *SE* = .12, $t = 3.92$, $p < .001$), thereby supporting H5. A similar pattern was found for LMX: task i-deals were more strongly related to LMX when financial i-deals were high (+1 *SD*) (simple effect = .79, *SE* = .12, $t = 6.63$, $p < .001$) versus low (−1 *SD*) (simple effect = .57, *SE* = .10, $t = 5.59$, $p < .001$) (see Fig. 2b). To test H6, we used PROCESS Diagram 8

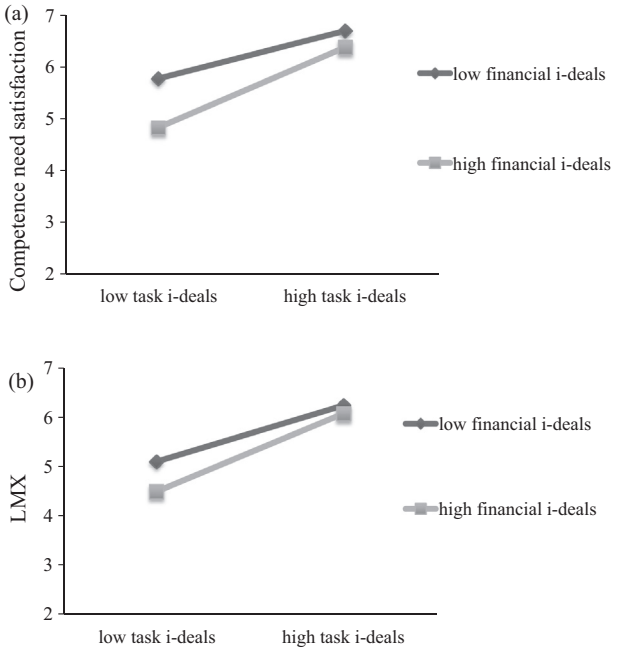

Fig. 2. Financial i-deals as a moderator in the relationships between (a) task i-deals and competence need satisfaction; and (b) task i-deals and LMX (Study 1).

and simultaneously included LMX as a (non-significant) mediator (indirect effect = .03, bootstrap *SE* = .03, $CI_{90\%}$ [−.001, .09]). Results indicated that competence need satisfaction mediated the relationship between task-financial i-deals interaction and OCB (indirect effect = .04, bootstrap *SE* = .02, $CI_{90\%}$ [.01, .07]), supporting H6.

Finally, as supplementary tests, we repeated the above analyses while also including task performance as a covariate predicting OCB, and the pattern of results remained the same. We also assessed the proposed model with task performance as the outcome variable, and results indicated that while LMX was a non-significant mediator, competence need satisfaction mediated the relationships that task and financial i-deals as well as their interaction had with task performance.

6.3. Discussion

In this study, we found support for all the hypotheses except for H2 and H4, suggesting that task i-deals and task-financial i-deals interaction indeed have a competence-signaling function, even when the mediating role of LMX was simultaneously considered. However, financial i-deals appeared to have no significant competence-signaling function. These findings suggest that the perspective of leader–member social exchange cannot fully explain the implications of task i-deals and task-financial i-deals interaction for OCB (or task performance). In the next study, we account for the self-enhancement explanation provided by Liu et al. (2013) by considering the mediating role of OBSE. In so doing, we provide a more rigorous test of the added value that competence need satisfaction offers as a focal mediating mechanism, and demonstrate the robust signaling function of task i-deals and task-financial i-deals interaction, above and beyond self-enhancement.

7. Study 2

7.1. Methods

7.1.1. Participants

A different sample of 126 employees recruited through the StudyResponse Project completed this study. As in Study 2, we collected data over two sessions separated by approximately a month. One hundred and fifty-three respondents completed the survey at Time 1, and after an average of 34 days, 126 of them completed the survey at Time 2, resulting in a retention rate of 82.4%. However, nine participants had changed their organizations or supervisors by the second survey, and one participant did not respond to most of the questions. These ten participants were excluded, leaving a final sample of 116 employees (49% female), with an average age of 34.3 years (*SD* = 6.9). Almost all of them (99%) had at least some college education.

7.1.2. Measures

Participants completed the measures of task and financial i-deals, competence need satisfaction, OBSE, and demographic control variables at Time 1 and OCB at Time 2. Task i-deals (α = .87), financial i-deals (α = .91), OCB (α = .92), and the control variables were assessed with the same items in Study 1, except that organizational tenure was measured in years rather than months. All variables were assessed on a five-point scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*) unless otherwise indicated.

7.1.2.1. Competence need satisfaction. Participants indicated their competence need satisfaction by responding to the three items of Spreitzer's (1995) competence scale (e.g., "I have mastered the skills necessary for my job") (α = .79).

7.1.2.2. OBSE. Participants indicated their OBSE by responding to seven items adapted from Liang, Farh, and Farh (2012) (e.g., "I am valuable around here") (α = .88).

7.2. Results

7.2.1. Measurement model

We again conducted CFAs to evaluate the measurement model and assess the distinction among the five key variables by comparing the five-factor model to various (more parsimonious) four-factor models. We parceled the items of task i-deals (two parcels), financial i-deals (two parcels), OBSE (three parcels), and OCB (six parcels). Due to the insufficient number of competence need satisfaction items for parceling, we did not form a parcel for this variable.

All the indicators loaded onto their respective latent variables, each with a factor loading score of above |.40|. The five-factor model fit the data reasonably well (χ^2 = 206.30, df = 94, CFI = .96, SRMR = .08, RMSEA = .10) and had a better fit than any of the four-factor models ($\Delta\chi^2$s $\geqslant$ 32.62, dfs = 4, *p*s < .001, ΔCFIs $\geqslant$ .01). A follow-up targeted CFA also indicated that the two i-deals variables were distinct, with a two-factor model (task versus financial i-deals) fitting the data better than a one-factor model ($\Delta\chi^2$ = 23.58, df = 1, *p* < .001).

7.2.2. Hypothesis testing

Table 3 presents the descriptive statistics, correlations, and alphas (internal consistency). As in Study 1, the inclusion of gender, age, organizational tenure, education, and organizational status did not change the result patterns, and these control variables were excluded from subsequent analyses for the sake of parsimony. We conducted a path analysis to show the final model with all the key variables included (see Fig. 3), and the model fit the data well (χ^2 = 11.43, df = 3, GFI = .97, CFI = .97, NFI = .96, SRMR = .06).

We again tested H1 through H6 using Hayes's (2013) PROCESS algorithm with 1000-replication bootstrapping. The first four hypotheses were tested using PROCESS Diagram 4 and included OBSE and competence need satisfaction as simultaneous mediators. Consistent with Study 1, task i-deals were positively related to competence need satisfaction (*b* = .22, *SE* = .08, *p* < .01), again supporting H1, and to OBSE (*b* = .26, *SE* = .07, *p* < .001). A separate analysis indicated that financial i-deals were not significantly related to competence need satisfaction (*b* = .09, *SE* = .06, *p* = .17), thereby failing to support H2, but were positively related to OBSE (*b* = .11, *SE* = .06, *p* = .05).

As predicted in H3, competence need satisfaction mediated the relationship between task i-deals and OCB (indirect effect = .06, bootstrap *SE* = .03, $CI_{90\%}$ [.02, .12]) when controlling for OBSE as a (significant) simultaneous mediator (indirect effect = .10, bootstrap *SE* = .05, $CI_{90\%}$ [.04, .20]). We repeated the analysis with financial i-deals as the predictor, but did not find support for the mediating role of competence need satisfaction in the relationship between financial i-deals and OCB (indirect effect = .02, bootstrap *SE* = .02, $CI_{90\%}$ [−.003, .07]), after accounting for OBSE as a (significant) simultaneous mediator (indirect effect = .04, bootstrap *SE* = .03, $CI_{90\%}$ [.01, .11]). Thus, H4 was again not supported.

We tested H5 using PROCESS Diagram 1, and found that task-financial i-deals interaction was positively related to competence need satisfaction (*b* = .32, *SE* = .06, *p* < .001), such that the relationship between task i-deals and competence need satisfaction was stronger when financial i-deals were high (+1 *SD*) (simple slope = .88, *SE* = .15, *t* = 5.76, *p* < .001) versus low (−1 *SD*) (simple slope = .26, *SE* = .11, *t* = 2.42, *p* < .05) (see Fig. 4a). Therefore, H5 was supported. While not formally hypothesized, we nonetheless tested the relationship between task-financial i-deals interaction

Table 3
Descriptive statistics and correlations (Study 2).

Variable	*M*	*SD*	1	2	3	4	5	6	7	8	9
1. Task i-deals (T1)	3.64	.79	(.87)								
2. Financial i-deals (T1)	3.28	.98	.76***	(.91)							
3. Competence need satisfaction (T1)	3.95	.67	.26**	.13	(.79)						
4. OBSE (T1)	4.05	.60	.34***	.18	.67***	(.88)					
5. OCB (T2)	3.78	.61	.38***	.33***	.58***	.62***	(.92)				
6. Gender (T1)	.49	.50	−.07	−.05	.13	.16	.05				
7. Age (T1)	34.33	6.90	−.08	.04	.19*	.01	.20*	.05			
8. Tenure (T1)	5.53	4.09	.13	.07	.24*	.08	.13	.17	.60***		
9. Education (T1)	.94	.24	.02	−.05	.24*	.14	.17	.10	.08	.20*	
10. Organizational status (T1)	2.41	.86	−.03	.02	−.02	−.08	−.02	−.28**	.39***	.38***	.04

Note. $N = 116$. Alphas (internal consistency) are presented in the parentheses. T1 represents Time 1 and T2 represents Time 2.
* $p < .05$.
** $p < .01$.
*** $p < .001$.

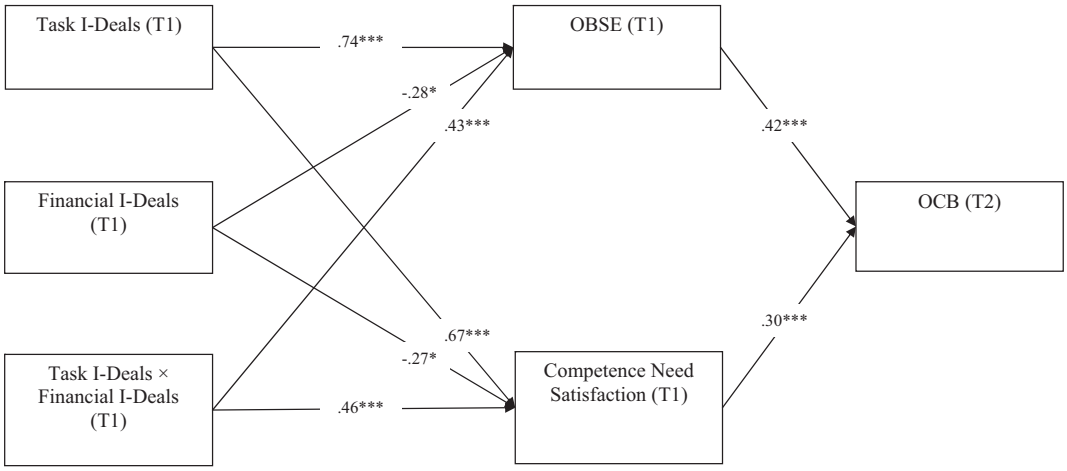

Fig. 3. Final path model (Study 2). *Notes.* $\chi^2(3) = 11.43$, GFI = .97, CFI = .97, NFI = .96, SRMR = .06. The covariance of the disturbance terms of OBSE and competence need satisfaction (cov = .16, *SE* = .03, $p < .001$) was modeled but is not presented for the sake of presentation clarity. Standardized path coefficients are presented. OBSE represents organization-based self-esteem. OCB represents organizational citizenship behaviors. T1 represents Time 1 and T2 represents Time 2.

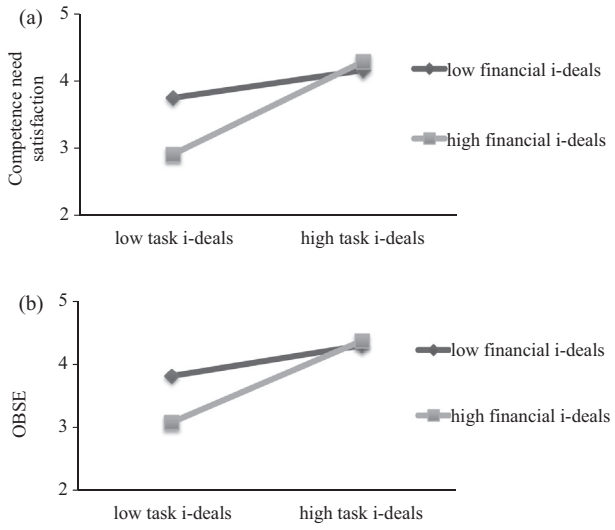

Fig. 4. Financial i-deals as a moderator in the relationships between (a) task i-deals and competence need satisfaction and (b) task i-deals and OBSE (Study 2).

and OBSE and found a positive relationship ($b = .26$, *SE* = .06, $p < .001$). Specifically, the relationship between task i-deals and OBSE was stronger when financial i-deals were high (+1 *SD*) (simple slope = .82, *SE* = .13, $t = 6.11$, $p < .001$) versus low (−1 *SD*) (simple slope = .31, *SE* = .10, $t = 3.24$, $p < .01$) (see Fig. 4b).

Finally, we tested H6 using PROCESS Diagram 8, and found that competence need satisfaction mediated the relationship between the task-financial i-deals interaction and OCB (indirect effect = .08, bootstrap *SE* = .04, $CI_{90\%}$ [.03, .15]), even when controlling for the (significant) mediating role of OBSE (indirect effect = .10, bootstrap *SE* = .04, $CI_{90\%}$ [.04, .19]). Therefore, H6 was again supported.

7.3. Discussion

Study 2 replicated and extended the findings of Study 1, supporting all the hypotheses except for H2 and H4, while concurrently taking into account the self-enhancement mechanism represented by OBSE. The results again demonstrate the competence-signaling function of task i-deals and task-financial i-deals interaction, as well as the mediating role that this function plays in translating these i-deals into enhanced OCB. Again, financial i-deals showed no significant competence-signaling function. In Study 3, we attempt to replicate these findings while simultaneously accounting for POS, so as to increase our confidence in our findings. POS, representing the extent to which employees believe that their organization values their contributions and cares about their well-being (Eisenberger, Huntington, Hutchison, & Sowa, 1986), reflects the quality of organization–member social exchange, which has been shown to explain the work implications

of i-deals. Study 3 also includes measures of social desirability and a marker variable (financial impulsivity) to reduce the threat of social desirability and common method biases to our findings.

8. Study 3

8.1. Methods

8.1.1. Participants

A different sample consisting of 125 employees recruited via the StudyResponse Project completed the two sessions of this study (about three weeks apart), with a retention rate of 94.7% at Time 2. Five participants had changed their organization/supervisor by the second survey and were excluded, leaving a final sample of 120 employees (30% female), with an average age of 37.0 years (*s.d.* = 7.0). All of them had at least some college education.

8.1.2. Measures

Participants completed the measures of i-deals, competence need satisfaction, POS, and demographics at Time 1, and OCB, social desirability, and financial impulsivity at Time 2. Task i-deals (α = .72), financial i-deals (α = .72), competence need satisfaction (α = .76), OCB (α = .85), and the control variables were assessed with the same items and rating scales used in Study 1.

8.1.2.1. POS. Participants indicated their POS by responding to Eisenberger, Armeli, Rexwinkel, Lynch, and Rhoades's (2001) six items (e.g., "My organization really cares about my well-being") on a five-point scale from 1 (*strongly disagree*) to 5 (*strongly agree*) (α = .72).

8.1.2.2. Social desirability. To address the concern of social desirability bias associated with the self-report items, we included Strahan and Gerbasi's (1972) 10-item social desirability scale (e.g., "You always try to practice what you preach"), to which participants provided true/false dichotomous responses.

8.1.2.3. Marker variable. Siemsen et al. (2010) proposed that common method bias can be reduced or eliminated when estimating a regression equation by adding a marker variable. In selecting a marker variable, we followed Lindell and Whitney's (2001) recommendations that marker variables must (a) have high reliability, (b) be theoretically unrelated to at least one of the other variables, and (c) be included in the questionnaire *a priori*. Financial impulsivity, assessed by Tsukayama, Duckworth, and Kim's (2012) six-item scale, met all these conditions. Participants responded to the items (e.g., "buying things on impulse") on a five-point scale from 1 (*never*) to 5 (*very often*) (α = .86).

8.2. Results

8.2.1. Measurement model

We used the same approach as in Study 2 to evaluate the measurement model. All the indicators loaded onto their respective latent variables with a factor loading score of above |.40|, and the five-factor model fit the data reasonably well (χ^2 = 146.96, df = 67, CFI = .95, SRMR = .07, RMSEA = .09) and had a better fit than any of the four-factor models ($\Delta\chi^2$s $\geqslant$ 12.35, dfs = 4, *p*s < .05, ΔCFIs $\geqslant$ .01). Again, a follow-up targeted CFA further indicated the distinctiveness of task and financial i-deals, in that the two-factor model fit the data better than the one-factor model ($\Delta\chi^2$ = 4.31, df = 1, *p* < .05).

8.2.2. Hypothesis testing

Table 4 presents the descriptive statistics, correlations, and alphas (internal consistency). As in Studies 1 and 2, the inclusion of gender, age, organizational tenure, education, and organizational status did not change the result patterns. Additionally, the inclusion of the social desirability and financial impulsivity variables in the path model did not change the pattern of results. Thus, these variables were excluded from the subsequent models. While the preliminary model fit the data moderately well (χ^2 = 20.44, df = 3, GFI = .95, CFI = .94, NFI = .93, SRMR = .07), a review of the modification indices indicated that the model fit could be improved by adding a direct link between financial i-deals and OCB. This direct link takes into account the possibility that financial i-deals translate into OCB through mechanisms other than competence need satisfaction and POS. The final model, with this direct link, fit the data better: χ^2 = 3.15, df = 2, GFI = .99, CFI = 1.00, NFI = .99, SRMR = .01 (see Fig. 5).

We again used the same series of PROCESS-based tests (Hayes, 2013), with 1000-replication bootstrapping, to test H1 through H6. Using PROCESS Diagram 4, we found that task i-deals were positively related to competence need satisfaction (*b* = .29, *SE* = .12, *p* = .01), supporting H1 again, as well as to POS (*b* = .51, *SE* = .09, *p* < .001). A separate analysis indicated that financial i-deals were not significantly related to competence need satisfaction (*b* = .14, *SE* = .10, *p* = .20), again failing to support H2, but yet were positively related to POS (*b* = .41, *SE* = .08, *p* < .001).

Competence need satisfaction mediated the relationship between task i-deals and OCB (indirect effect = .04, bootstrap *SE* = .03, $CI_{90\%}$ [.002, .11]), after controlling for the (significant) mediating role of POS (indirect effect = .18, bootstrap *SE* = .08, $CI_{90\%}$ [.07, .36]). However, as in Studies 1 and 2, competence need satisfaction did not mediate the relationship between financial i-deals and OCB (indirect effect = .02, bootstrap *SE* = .02, $CI_{90\%}$ [−.01, .07]) when POS was simultaneously included as a (significant) mediator (indirect effect = .12, bootstrap *SE* = .06, $CI_{90\%}$ [.05, .23]). Accordingly, H3 was again supported whereas H4 was not.

To test H5, we used PROCESS Diagram 1 and found that task-financial i-deals interaction was positively related to competence need satisfaction (*b* = .32, *SE* = .13, *p* < .05), such that the relationship between task i-deals and competence need satisfaction was stronger when financial i-deals were high (+1 *SD*) (simple slope = .76, *SE* = .23, *t* = 3.37, *p* = .001) versus low (−1 *SD*) (simple slope = .33, *SE* = .17, *t* = 1.93, *p* = .06) (see Fig. 6). Therefore, H5 was again supported.

Finally, using PROCESS Diagram 8, we found that competence need satisfaction mediated the relationship between task-financial i-deals interaction and OCB (indirect effect = .05, bootstrap *SE* = .03, $CI_{90\%}$ [.02, .11]), when the (non-significant) mediating effect of POS was simultaneously accounted for (indirect effect = .02, bootstrap *SE* = .06, $CI_{90\%}$ [−.07, .12]), thereby supporting H6.

8.3. Discussion

By replicating the findings in Studies 1 and 2, Study 3 further reinforces the notion that task i-deals operate not only independently to signal employee competence, but also jointly with financial i-deals when the competence signals conveyed by both forms of i-deals are consistent with each other. Moreover, although POS mediated the relationships that task and financial i-deals had with OCB, it did not mediate the relationship between task-financial i-deals interaction and OCB. Together, these results indicate that the linkage between i-deals and OCB cannot be solely attributed to POS.

Table 4
Descriptive statistics and correlations (Study 3).

Variable	*M*	*SD*	1	2	3	4	5	6	7	8	9	10	11
1. Task i-deals (T1)	3.75	.59	(.72)										
2. Financial i-deals (T1)	3.62	.67	.73***	(.72)									
3. POS (T1)	3.72	.64	.47***	.43***	(.72)								
4. Competence need satisfaction (T1)	5.74	.77	.22*	.12	.41***	(.76)							
5. OCB (T2)	3.92	.46	.41***	.51***	.65***	.46***	(.85)						
6. Social desirability (T2)	5.70	2.14	−.01	−.01	.29***	.30***	.37***						
7. Financial impulsivity (T2)	2.61	.70	.06	.13	−.19*	−.12	−.13	−.30***	(.86)				
8. Gender (T1)	.30	.46	−.22*	−.29***	−.13	.04	−.07	.01	−.06				
9. Age (T1)	37.00	7.03	−.13	−.27**	.09	.06	.03	−.02	−.05	.21*			
10. Tenure (T1)	6.83	3.09	.09	.04	.13	.32***	.13	.18	.04	−.09	.21*		
11. Education (T1)	.93	.26	.43***	.59***	.39***	.08	.32***	−.06	.11	−.09	−.23*	−.09	
12. Organizational status (T1)	2.33	.85	−.04	−.001	.02	.12	.02	−.001	.13	.24**	.21*	.29***	.04

Note. $N = 120$. Alphas (internal consistency) are presented in the parentheses. T1 represents Time 1 and T2 represents Time 2.
* $p < .05$.
** $p < .01$.
*** $p < .001$.

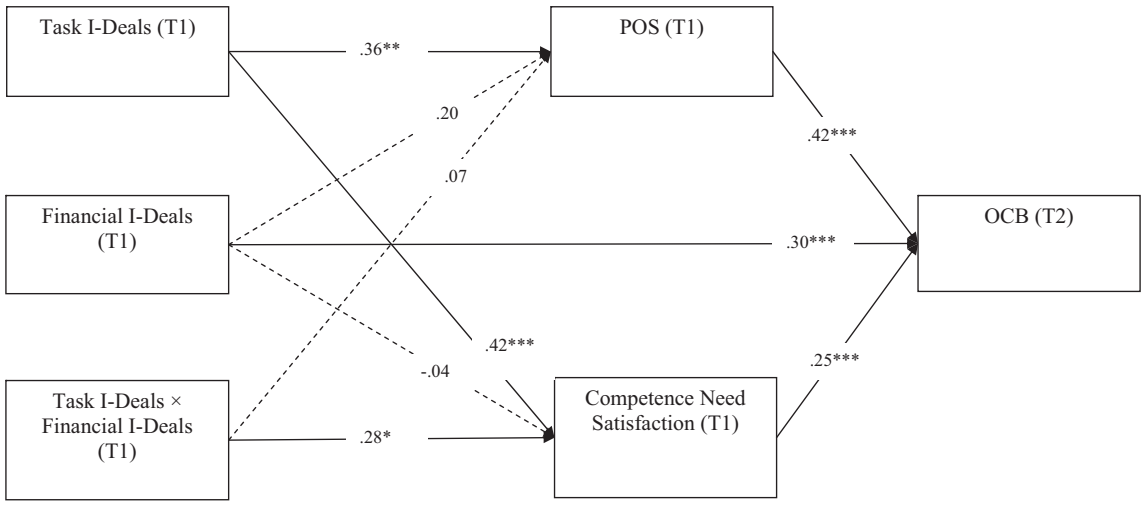

Fig. 5. Final path model (Study 3). *Notes.* $\chi^2(2) = 3.15$, GFI = .99, CFI = 1.00, NFI = .99, SRMR = .01. The covariance of the disturbance terms of OBSE and competence need satisfaction (cov = .15, *SE* = .04, $p < .001$) was modeled but is not presented for the sake of presentation clarity. Standardized path coefficients are presented. The solid lines represent the significant paths whereas the dotted lines represent the non-significant paths. POS represents perceived organizational support. OCB represents organizational citizenship behaviors. T1 represents Time 1 and T2 represents Time 2.

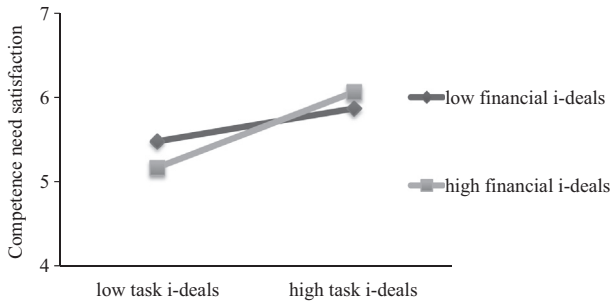

Fig. 6. Financial i-deals as a moderator in the relationship between task i-deals and competence need satisfaction (Study 3).

9. General discussion

Following Rousseau et al. (2006), we conceptualize i-deals as a signaling device utilized by the employer to convey positive messages to employees. By adopting signaling theory as an overarching framework and conducting a series of field studies, we provide several key findings. Specifically, competence need satisfaction mediated the relationships between task i-deals and OCB, and between task-financial i-deals interaction and OCB. However, competence need satisfaction did not mediate the relationship between financial i-deals and OCB. These findings suggest that i-deals operate independently as competence-signaling devices only when the signals conveyed by the i-deals are strong (i.e., in the context of task i-deals), and also operate jointly with other i-deals when the signals conveyed by the portfolio of i-deals are consistent. The signaling function of task i-deals and their interaction with financial i-deals was so robust that it remained significant even when LMX, OBSE, and POS were separately included as alternative mediating mechanisms. These findings advance i-deals research and provide implications for managerial practice.

9.1. Theoretical implications

9.1.1. Signaling function of i-deals

The key premise of our research is that employers use i-deals to send positive signals to employees and elicit favorable responses that benefit the organization. Our research shows that this signaling view of i-deals is robust with both self- and coworker-reported measures of OCB, and also when social exchange and self-enhancement views are simultaneously considered. However, not all forms of i-deals are equally effective as signaling devices. Our

findings indicate that signal strength matters, in that task i-deals are effective in conveying positive signals regarding employees' competence (as indicated by employees' enhanced competence need satisfaction), whereas financial i-deals are not. Further, the findings support the contention in signaling theory that signal consistency determines the strength of strong signals, such that inconsistent messages conveyed by other signals from the same signaler can attenuate the effectiveness of strong signals. Specifically, task i-deals exhibited a stronger positive link to competence need satisfaction when financial i-deals were at a higher level, arguably because low levels of financial i-deals contradicted the positive signals conveyed by task i-deals. These findings respond to Jiang et al.'s (2012) call for human resource research that adopts a "synergistic logic when looking at the composition within a single HR system *[sic]*" (p. 97), and also to Connelly et al.'s (2011) call for research to examine how a portfolio of signals can be configured to maximize their combined effectiveness. In so doing, we open up research avenues into how various forms of i-deals may be mixed and combined so as to realize the inherent motivational and performance potential of i-deals.

9.1.2. Alternative functions of i-deals

Despite recent attempts by i-deals scholars (e.g., Liu et al., 2013) to examine additional mechanisms through which i-deals facilitate behavioral outcomes, the predominant view in the i-deals literature derives from social exchange theory (Liao et al., in press). While the present research offers further empirical support for the relevance of this and the self-enhancement views (Liu et al., 2013), it also goes beyond these functions to introduce a signaling pathway, involving competence need satisfaction, through which task i-deals operate independently and jointly with financial i-deals to facilitate OCB. This mediating mechanism, which operates above and beyond LMX, OBSE, and POS, not only supports Liao et al.'s (in press) contention that a social exchange view is insufficient in explaining how i-deals operate, but also suggests that a self-enhancement view is likewise insufficient. While researchers have alluded to the signaling function of i-deals (e.g., Rousseau et al., 2006), the current research is the first to articulate, and provide empirical evidence on, the competence-related nature of such signals, thereby expanding the nomological network of i-deals and addressing researchers' call for "broaden[ing] the explanatory framework by investigating other mechanisms known to operate in employment relationships" (Liao et al., in press, p. 29).

9.1.3. Financial i-deals

The distinctive signaling strength of task i-deals relative to financial i-deals suggests that i-deals are non-monolithic and may not have identical relationships with employee outcomes. The current research delineates the distinctive nature of financial i-deals, which have not received as much research attention as other forms of i-deals. Specifically, we found that competence need satisfaction did not translate financial i-deals into enhanced OCB, thereby suggesting that financial i-deals, by themselves, convey weak or ineffective competence-related signals to employees. This is in line with SDT arguments that extrinsic incentives may serve opposing (informational versus controlling) functions that potentially counteract each other. Instead, LMX, OBSE, and POS separately mediated the relationship between financial i-deals and OCB, supporting extant social exchange and self-enhancement views of i-deals and suggesting that financial i-deals may operate through non-competence-related mechanisms to enhance employees' discretionary behaviors.

More broadly, our present findings do not preclude the possibility that i-deals can convey other signals beside work competence, thereby presenting opportunities for future research. Further, while previous studies have documented inconsistent and contradictory evidence on whether financial i-deals elicit positive outcomes from employees, the current findings are more aligned with Ho and Tekleab's (2013) findings of positive attitudinal implications of financial i-deals than with the null and negative attitudinal implications reported by Rosen et al. (2013). Thus, these findings offer further evidence that financial i-deals can indeed have positive implications for employee outcomes.

9.2. Practical implications

Our findings demonstrate the organizational benefits that derive from granting task and financial i-deals, and provide another avenue through which employers can promote OCB. Compared to other forms of i-deals that are more easily observed by coworkers and, in turn, may engender social comparison and feelings of inequity or demoralization among others (Rousseau et al., 2006), financial i-deals are less observable because of pay secrecy practices (e.g., Belogolovsky & Bamberger, 2014). As such, financial i-deals may constitute a viable way for organizations to reward star performers without triggering negative third-party reactions. By demonstrating that different forms of i-deals can interact with each other to alter signal strength in eliciting positive employee responses, our research also underscores the broader implication that organizations should pay attention to the entire portfolio of different forms of i-deals, rather than each in isolation, in order to send consistent, reinforcing signals that yield beneficial outcomes.

9.3. Limitations and directions for future research

Although our three field studies used varying measures, thereby complementing and addressing key limitations inherent in each, all variables in Studies 2 and 3 were self-reported, raising concerns about common-method and common-source bias. However, i-deals researchers have noted that employees, compared to supervisors and other organizational agents, are arguably the most knowledgeable about the i-deals they negotiate with different organizational representatives (Liao et al., in press). Additionally, the fact that the pattern of results in Study 1, where OCB was coworker-rated, was replicated in Studies 2 and 3 renders strong confidence in our findings. Also of note is that interactive relationships cannot be inflated by common method bias (Conway & Lance 2010; Evans 1985; Siemsen et al., 2010), thereby further evincing that this bias was an unlikely threat to our findings.

Another limitation is that we cannot draw causal conclusions from the findings with full confidence, even though we collected data at two time points in all three studies. While we expected i-deals to drive employees' competence need satisfaction and, in turn, OCB, and collected data matching this hypothesized sequence, the practical constraints of obtaining an adequate sample size necessitated a small temporal gap between Time 1 and Time 2. As such, this prevented us from making firm conclusions on the predicted direction of causality.

Notwithstanding these limitations, our research provides several directions for future research. First, the signaling view of i-deals can be extended to other forms of i-deals. For instance, developmental i-deals focusing on opportunities to develop work competence may also convey competence-related messages, whereas flexibility i-deals may be less effective. Other signals conveyed by i-deals, beyond one's competence, are also worth investigating in order to provide a more comprehensive and nuanced view of the signaling function that i-deals play. Future research can also continue the inquiry on the interactive roles of i-deals on employee outcomes to investigate how multiple forms of i-deals can operate jointly. Other related questions are whether receiving multiple forms of i-deals can exhibit a too-much-of-a-good-thing

phenomenon (Pierce & Aguinis, 2013), and whether granting multiple forms of i-deals to a single employee may intensify coworkers' perception of unfairness (Greenberg, Roberge, Ho, & Rousseau, 2004).

9.4. Conclusion

We set out to examine the signaling function of task i-deals, financial i-deals, and their interaction. We adopted signaling theory as the overarching framework and integrated SDT to examine how task and financial i-deals independently and jointly predict OCB via competence need satisfaction. The findings, replicated across three field studies, indicate that task i-deals, independently and jointly with financial i-deals, send positive, competence-related signals to motivate employee OCB, and that this signaling function is robust even after accounting for the alternative mechanisms of social exchange (LMX and POS) and self-enhancement (OBSE). On the other hand, competence need satisfaction did not mediate the relationship between financial i-deals and OCB, whereas LMX, OBSE, and POS separately mediated this relationship. Overall, by demonstrating the signaling function of i-deals and highlighting the benefits of granting task i-deals independently and jointly with financial i-deals, the current research advances both research and practice of i-deals.

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