Unpacking the Coworker Influence: A Moderated Mediation Model of Coworker Exchange Quality and Coworker Organizational Citizenship Behavior

ZHIJUN CHEN*
Hong Kong University of Science & Technology
School of Business and Management
Department of Management
Clear Water Bay, Kowloon, Hong Kong SAR
E-mail: mnczj@ust.hk

RIKI TAKEUCHI
Hong Kong University of Science & Technology
School of Business and Management
Department of Management
Clear Water Bay, Kowloon, Hong Kong SAR
Voice: (852) 2358-7741
Fax: (852) 2335-5325
E-mail: mnrikit@ust.hk

Author Notes
Zhijun Chen, Department of Management, Hong Kong University of Science & Technology. Riki Takeuchi, Department of Management, Hong Kong University of Science & Technology.

We thank Larry Farh, Kenneth Law, and others for their helpful comments on an earlier version of this article. Correspondence regarding this article should be addressed to Zhijun Chen, Department of Management, Hong Kong University of Science & Technology, Clear Water Bay, Kowloon, Hong Kong SAR. Electronic mail may be sent to mnczj@ust.hk
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ABSTRACT

This multisource field study unpacks the underlying processes linking coworker influence to employee job performance behaviors, including both task performance and organizational citizenship behavior (OCB). Drawing on a sample of 362 supervisor-focal employee-coworker triads, we developed and tested a moderated mediation model by integrating social information processing and social cognitive theories. Results generally supported the hypothesized relationships in that employee role ambiguity partially mediated the coworker exchange quality (CWX) – employee job performance relationships. Furthermore, coworker OCB fostered employee job performance behaviors directly and indirectly as a moderator to weaken the employee role ambiguity – job performance relationships. Therefore, this study highlights coworker as an important agent who can influence employee job performance behaviors. Implications of the findings are discussed.

Keywords: Social Information Processing; Social Cognitive; Coworker Exchange Quality; Role Ambiguity; Organizational Citizenship Behavior

PAPER TEXT

Given that coworkers are an integral part of the workplace and can literally define it (Schneider 1987), it is of theoretical and practical importance to delineate “how coworkers ‘make the place’ for individuals (focal employees)” (Chiaburu & Harrison 2008: 1082). Theoretically, increasing but fragmented empirical evidence show affable connection with coworker affects employee attitude (cf. Chiaburu & Harrison 2008) and facilitates their job performance (e.g., Liden, Wayne, & Sparrowe 2000). Practically, this question relates to issues regarding who to select or to recruit (Kamdar & Van Dyne 2007) and how to design task interdependent jobs (De Jong, Van der Vegt, & Molleman 2007).

Yet, questions about the mechanisms through which coworkers affect focal employee’s job performance have remained “not only unanswered but, in some cases, unasked” (Chiaburu & Harrison 2008: 1082). To the best of our knowledge, only one study has attempted to delve into this issue within teams. Liden et al. (2000) conceptualized employee psychological empowerment to mediate the team-member exchange (TMX) and employee job performance relationship but failed to obtain empirical support for this mediating effect. Perhaps, this is due to their focus on the entire team (i.e., TMX) rather than a particular coworker, as a friendly coworker might exert substantially greater impact on the
employee than a neutral (or even hostile) one (Mas & Moretti 2009). Moreover, beyond explicit impacts through direct contact, the social cognitive theory (Bandura 1997, 2001) suggests coworker influence can also be achieved indirectly through employee vicarious learning (Bommer, Miles, & Grover 2003). Thus, a thorough conceptualization of coworker dyadic influence should take both forms simultaneously into account, which has not been addressed by extant studies.

Our purpose is to address the question and advance the coworker influence literature by developing a moderated mediation model and theoretical logic associated with it. Specifically, we rely on the social information processing theory (Salancik & Pfeffer 1978; Wyer & Srull 1989) to propose employee role ambiguity, which refers to employee’s feeling of unclear expectations on their role specific behaviors (Turbe & Collins 2000), to mediate the links between quality of coworker exchange (CWX) and employee job performance behaviors, including task performance and overall organizational citizenship behavior (OCB). We then take into account employee’s vicarious learning from the social cognitive theory (Bandura 1997) and propose coworker OCB’s main effects on employee job performance behaviors as well as its moderating effects such that higher coworker OCB weakens the negative relationships between employee role ambiguity and job performance behaviors.

Consequently, this study entails four theoretical merits. First, we enrich the view adopted by previous studies on the dyadic mechanisms through which a coworker affects employee job performance behaviors (cf. Chiaburu & Harrison 2008). Second, by incorporating the social information processing and social cognitive theories, this study transcends the social exchange theory used as a dominant framework in predicting employee OCB (Zellars & Tepper 2003). Third, by considering coworker OCB to affect employee job performance, we extend the nomological network of OCB from focal employee-coworker dyad perspective (Penner, Dovidio, Piliavin, & Schroeder 2005; Podsakoff, MacKenzie, Paine, & Bachrach 2000). Finally, we introduce coworker OCB as a moderator of the relationship between role ambiguity and employee performance in which prior research finds substantial amount of variance that has not been well explained by extant frameworks (Gilboa, Shirom, Fried, & Cooper 2008).
THEORETICAL BACKGROUND AND HYPOTHESES

Social Information Processing and Social Cognitive Theories

As our theoretical foundation, we adopt the social information processing (Salancik & Pfeffer 1978; Wyer & Srull 1989) and social cognitive (Bandura 1991, 1997, 2001) theories. Disregarding their somewhat different orientations, these two theories share a key tenet in that various informational cues from proximal social environment affect individual attitudes and behaviors through two mechanisms. On the one hand, these cues affect individual mental operation, guide allocation of cognitive resources, and change subsequent information processing (Whitaker, Dahling, & Levy 2007). On the other hand, they shape the manner in which people perceive and construct the ambient social reality (Bommer et al. 2003). They set up the judgmental criteria for ‘expected’ reactions and offer justifications to ‘standard’ activities (Ehrhart & Naumann 2004). As for coworker influence, prior studies find that a coworker affects the focal employee also in two ways. Directly, a coworker affects an employee by conveying information related to individual’s work roles (Bauer, Bodner, Erdogan, Truxillo, & Tucker 2007; Kammeyer-Mueller & Wanberg 2003). Indirectly, coworker influence can be exhibited through employee vicarious learning when the focal employee observes and imitates coworker behaviors (e.g., Bommer et al. 2003).

Based on the social information processing and social cognitive theories (Bandura 1997; Salancik & Pfeffer 1978; Wyer & Srull 1989), we develop a moderated mediation model by integrating both types of coworker influence on employee job performance behaviors, as indicated in Figure 1. In line with recent meta-analytical reviews (e.g., Hoffman, Blair, Meriac, & Woehr 2007; LePine, Erez, & Johnson 2002), we envisage employee job performance to include both task performance and OCB.

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Insert Figure 1 about here
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Role Ambiguity as a Mediator between CWX and Employee’s Job Performance Behaviors

We first predict that a coworker, as an information sharer, affects the focal employee’s job performance behaviors through employees’ mental processing of role-relevant knowledge (i.e., by reducing role ambiguity). To remain consistent with previous studies (e.g., Sherony & Green 2002), we
conceptualized this type of coworker influence as CWX, which assesses the quality of dyadic relationship between one coworker and one employee working under the same manager (Sherony & Green 2002). We argue that role ambiguity transmits the effects of CWX onto employee task performance. In modern workplace, coworkers frequently play the role of knowledge transferor and role sender (Chiaburu & Harrison 2008). When a communal relationship (CWX) is established, they often share personal experiences or task related advices with the focal employees (Whitaker et al. 2007). Then, focal employees will have less role ambiguity, which is also associated with higher efficacy (Chen & Bliese 2002) and stronger motivation (LePine, Podsakoff, & LePine 2005). These factors, in turn, facilitate task performance (LePine et al. 2005). Thus, we hypothesize the following:

Hypothesis 1a. Employee role ambiguity mediates the relationship between CWX and employee task performance.

Similarly, we posit role ambiguity to mediate the relationship between CWX and employee OCB. When employees’ role ambiguity is reduced by high quality CWX, it decreases employee anxiety and work stress (LePine et al. 2005). The focal employees will feel it easier to internalize firms’ core values and goals. This leads to a more satisfying employee-organization relationship and enhances employee job satisfaction and commitment (Bauer et al. 2007), both of which have strong associations with employee OCB (Hoffman et al. 2007; LePine et al. 2002). Thus, we propose the following:

Hypothesis 1b. Employee role ambiguity mediates the relationship between CWX and employee OCB.

Coworker OCB and Employee Job Performance Behaviors

Based on the social cognitive theory (Bandura 1991, 1997), we expect a coworker to have indirect impact on employee’s job performance behaviors (Mas & Motetti 2009), beyond the direct influence of role clarification. Among various behavioral cues that may be emitted by the coworker, we choose OCB in this study, due to OCB’s ‘unbounded’ feature. Compared to other alternatives that are harder to observe or less indicative of the coworker’s intention and expectation, OCB offer more prototypical cues of the specific coworker and his/her behavioral expectation for the focal employee (Ferrin, Dirks, & Shah 2006).
In line with the social cognitive theory (Bandura 1997), we argue that coworker OCB is positively associated with employee task performance. For the focal employees, coworker OCB reflects a social norm signaling a demand for great work involvement (Ehrhart & Naumann 2004). When the coworker performs specific tasks above and beyond the call of duty, the focal employees feel a normative pressure to also improve their task performance. If they observe their coworker help others remove barriers or overcome challenges in work, the focal employees indirectly learn how to deal with similar issue and enhance their task performance, too. Accordingly, we hypothesize:

**Hypothesis 2a.** Coworker OCB is positively related to employee task performance.

Second, we argue that coworker OCB introduces a behavioral norm into the workplace (Chiaburu & Harrison 2008) and also affects employee OCB. Due to this norm, the focal employees begin to realize that doing OCB is required and expected (Bommer et al. 2003; Ehrhart & Naumann 2004). This perception compels them to take extra efforts, even if they learn it from only one coworker (Bandura 1997; Mas & Moretti 2009). If they violate the norm by refusing to behave cooperatively, they will face the risk of ostracism and exclusion. Accordingly, we propose:

**Hypothesis 2b.** Coworker OCB is positively related to employee OCB.

**Coworker OCB as a Moderator**

In addition to its direct association with employee job performance behaviors, our third prediction concerns the moderating effect of coworker OCB. First, we expect coworker OCB to weaken the negative association between employee role ambiguity and task performance. For focal employees, coworker OCB reflects a behavioral standard for others to evaluate their work involvement and accomplishments in task goals (Bandura 1991; Ehrhart & Naumann 2004). When they observe their coworker tolerates less than ideal circumstances and still dedicates to the pursuit of organizational goals or when their coworker takes great initiatives in overcoming problems at work, this norm compels focal employees to keep abreast with the role model and enhance their task performance, disregarding their ambiguous role perceptions. Then, they will have greater efficacy and become less bounded by ambiguous roles. Accordingly, the association between role ambiguity and employee task performance is weaker when the coworker exhibits more OCB.
Simultaneously, role ambiguity will have a stronger negative association with employee task performance when the coworker exhibit less OCB. Under this situation, employees have less external information about the behavioral standard and cues of critical contextual factors (Bandura 1997). They have to rely on their personal experience and role knowledge to accomplish task goals. Thus, vague roles divert their focus from core tasks and job responsibilities (Whitaker et al. 2007), which then leads to low task performance. In addition, great role ambiguity causes strong anxiety and low efficacy (Chen & Bliese 2002; LePine et al. 2005). Without external sources of information and motivation obtained from coworker OCB, the focal employee will have more difficulties in fulfilling their task requirements. It leads to lower task performance as well. Therefore, we hypothesize:

_Hypothesis 3a. Coworker OCB moderates the negative relationship between employee role ambiguity and employee task performance such that this relationship is weaker when coworker OCB is high rather than low._

Second, we contend that coworker OCB will mitigate the negative relationship between employee role ambiguity and employee OCB. If they observe more coworker OCB, focal employees will have clearer understanding about the behavioral standard for others to interpret his/her contributions in the workplace (Bandura 1997, 2001). Such informational cues clarify the murky relationship between behavior and evaluation caused by uncertain role expectation and ambiguous role requirements (LePine et al. 2005). Thus, the negative association between role ambiguity and employee OCB will become weaker when external behavioral cues from coworker OCB are abundant. However, a low level of coworker OCB causes the focal employee to interpret that doing OCB is not a salient norm in the workplace (Ehrhart & Naumann 2004). They are more likely to withdraw from exhibiting OCB to endure work anxiety and stress caused by ambiguous roles. Then, role ambiguity will have stronger relationship with employee OCB when the focal employee cannot vicariously learn role-specific knowledge from his/her coworker. As such, we propose the following:
Hypothesis 3b. Coworker OCB moderates the negative relationship between employee role ambiguity and employee OCB such that this relationship is weaker when coworker OCB is high rather than low.

METHODS

Sample and Procedure

Our sample consists of 450 triads including one focal employee, one coworker, and their immediate managers, all of whom are affiliated with a university in Hong Kong. We chose to collect the information from three independent sources to avoid the percept-percept bias. After matching dataset, we received 400 employee-coworker-manager triads, corresponding to an effective response rate of 88.9%. Finally, cases were dropped for missing values on the demographic variables. Thus, the final sample size became 362. Meanwhile, the respondents had come from a wide variety of industries and occupations.

Measures

Except for demographic variables, the response categories for all variables ranged from “Strongly disagree” (1) to “Strongly agree” (7).

Coworker exchange (CWX). The coworkers responded to six items developed by Sherony and Green (2002) that assessed the quality of their dyadic relationship with the focal employee (α = .82). One sample item is, “This coworker understands my problems and needs well enough”.

Employee role ambiguity. We measured the variable with five items from Rizzo, House, and Lirtzman (1970) (α = .82). One sample item is, “I have clear, planned goals and objectives for my job”.

Coworker OCB. We asked the focal employee to rate coworker OCB on 11 items selected from a 14-item OCB scale developed by Williams and Anderson (1991). Three negatively worded items were deleted from the original scale because these negatively worded items have been shown to form separate factors (Yun, Takeuchi, & Liu 2007). One sample item is: “Passes along information to coworkers”. We averaged the scores across all 11 items to form an overall measure of coworker OCB (α = .90).

Employee task performance and OCB. We obtained managerial ratings of focal employee’s task performance with a four-item scale taken from Van Dyne and LePine (1998) (α = .90). An example item is:
“Fulfills the responsibilities specified in his/her job description.” Same as coworker OCB, we used 11 items (without the negatively worded items) from Williams and Anderson (1991) to assess focal employee’s OCB (e.g., “Goes out of way to help new employees”). We obtained managerial ratings of OCB to be consistent with that of task performance and also to reduce common method bias concerns. Ratings across the 11 items were averaged to indicate employee’s overall OCB ($\alpha = .91$).

**Control variables.** We controlled for coworker and focal employee’s age, gender (0 = female, 1 = male), and education level (1 = middle school, 2 = high school, 3 = 2-year college degree, 4 = 4-year university degree, 5 = graduate school) (Kamdar & Van Dyne 2007) and the quality of leader-member exchange (LMX) because the dyadic relationship between the focal employee and their manager may have confounding effect with our results (Chiaburu & Harrison 2008; Sherony & Green 2002). We used a seven-item scale of LMX originally developed by Scandura and Graen (1984), and used the focal employee’s ratings ($\alpha = .80$) (e.g., “My supervisor understands my problems and needs well enough”). Our results do not substantively change with or without these control variables. In the result section below, we show the findings with the control variables to be more conservative.¹

**RESULTS**

Descriptive statistics for all variables are listed in Table 1. We further conducted a confirmatory factor analysis to examine the fit of the six-factor measurement model (CWX, LMX, role ambiguity, coworker OCB, employee OCB, and employee task performance). The results show the proposed model fit the data relatively well, $\chi^2$ (N = 370, df. = 215) = 824.35, $p < .01$; $\chi^2$/df. = 3.83; RMSEA = 0.088; CFI = 0.95; NFI = 0.93; GFI = 0.84).

1 The results without the control variables are available upon request to the primary author.
Kenny (1986). In brief, results from Table 2 show, when both CWX and role ambiguity were included (M3), the coefficients of CWX onto each dependent variable dropped (for task performance: from $\beta = .21, p < .01$ to $\beta = .18, p < .01$ and for OCB: from $\beta = .15, p < .01$ to $\beta = .13, p < .05$). We further conducted a Sobel test based on a bootstrapping approach recommended by Preacher & Hayes (2004). The test of indirect effects supported our expectation that role ambiguity mediated the linkage between CWX and task performance ($\beta = .04, p < .01$) and the relationship between CWX and employee OCB ($\beta = .03, p < .01$). Meanwhile, the test of direct effects showed CWX had positive association with task performance ($\beta = .15, p < .01$) and OCB ($\beta = .11, p < .05$) that were not mediated through role ambiguity. Thus, Hypothesis 1a and 1b received weak support. Role ambiguity partially mediated the relationship between CWX and employee OCB and task performance.

Hypotheses 2 predicted positive relationships between coworker OCB and 1) employee task performance (H2a) and 2) employee OCB (H2b). As shown in M4 (for model 4) in Table 2, coworker OCB was positively related to employee task performance ($\beta = .34, p < .01$) and OCB ($\beta = .32, p < .01$). Thus, we found strong support for Hypotheses 2. Hypotheses 3 predicted that coworker OCB weakens the negative linkages between role ambiguity and employee task performance (H3a) and employee OCB (H3b). To test these hypotheses, we used hierarchical regression analyses and regressed the dependent variables onto employee role ambiguity, coworker OCB, and the interaction term between them. The results were listed as M5 (for model 5) in Table 2. Indeed, coworker OCB interacted with employee role ambiguity in affecting employee task performance ($\beta = .19, p < .01$) and OCB ($\beta = .15, p < .01$).

To further unravel a potential moderated mediation model, we used a recently developed approach recommended by Edwards and Lambert (2007). In comparison with the OLS approach and other methods to test moderated mediation effects, this approach has three advantages. First, by bootstrapping the sample a large number of times, it is less affected by insufficient statistical power when the sample size is relatively small (Preacher & Hayes 2004). Second, it has lower chances of making Type I error because it does not require normal distribution for the standard errors of the product terms (Edwards & Lambert
Third, it offers direct evidences about where the moderating effect occurs by using a path analytical procedure to examine the moderating effects and the mediation effect simultaneously. Since we have two dependent variables, we tested the models separately. To obtain the coefficient estimates, we standardized all the key variables and ran two regression equations for each model.

\[
\text{Role Ambiguity} = a_0 + a_X CWX + a_Z Z + a_{XZ} CWX \times Z + \varepsilon_1
\] (1)

\[
Y = b_0 + b_X CWX + b_M Role Ambiguity + b_Z Z + b_{XZ} CWX \times Z + b_{MZ} Role Ambiguity \times Z + \varepsilon_2
\] (2)

where \(Y\) refers to the dependent variable (employee task performance or OCB) and \(Z\) referred to coworker OCB. Then, we calculated the simple effects for each model by replacing \(Z\) with one standard deviation above and below its mean. The results were listed in Table 3. We computed the bias-corrected confidence intervals for each standard error and derived alternative significance tests by also bootstrapping the sample 1,000 times. Meanwhile, differences in the simple effects for each model were calculated by subtracting the effects of low coworker OCB from the effects of high coworker OCB. From the bootstrapping analysis, we further obtained the results of the significance tests for every difference in corresponding simple effects. From these coefficients and significance tests, we plotted the interaction effect between role ambiguity and coworker OCB for each dependent variable in Figure 2 and 3.

As shown in Table 3, coworker OCB significantly moderated the second stage effects of the indirect effect (between role ambiguity and employee task performance as well as OCB). When coworker OCB is high, the role ambiguity and employee task performance relationship was positive but non-significant (\(\beta = .01, p > .10\)). When coworker OCB is low, it became negative and significant (\(\beta = -.30, p < .01\)). In addition, the difference between these two conditions is also significant (\(\beta = .30, p < .01\)). Similarly, when coworker OCB is high, the role ambiguity and employee OCB relationship was positive (\(\beta = .07, p > .10\)). When coworker OCB is low, it became negative (\(\beta = -.17, p < .05\)). Meanwhile, the difference between them was also highly significant (\(\beta = .24, p < .01\)). Thus, this test provides consistent results with our OLS
analysis. It also suggests Hypotheses 3 were supported such that coworker OCB mitigated the negative relationship between role ambiguity and employee task performance (H3a) and employee OCB (H3b).

DISCUSSION

Theoretical and Practical Implications

In the current study, we address a central question in the coworker influence literature by explicating the mechanisms through which a coworker affects focal employee’s job performance behaviors. Specifically, we proposed and tested a moderated mediation model, which was generally supported based on a sample with multiple rating sources across a variety of industries and occupations. First, we found role ambiguity partially mediated the CWX-employee job performance behaviors relationships. Until now, only one study has attempted (but failed) to unpack the underlying process between coworker influence and employee performance (Liden et al. 2000). Thus, our study directly echoes a call recently made from the coworker influence literature to fill this void and unravel the process (Chiaburu & Harrison 2008). Second, we found coworker OCB had strong associations with employee task performance and OCB. Thus, these results supported our prediction derived from the social cognitive theory (Bandura 1997, 2001) that coworkers affect focal employees’ performance through employee vicarious learning. Our findings also enriched current knowledge of the nomological network of employee OCB (Podsakoff et al. 2000) by studying them from a dyadic perspective (Penner et al. 2005).

Third, our results show coworker OCB mitigated the negative relationships between employee role ambiguity and employee job performance behaviors. In this way, we illustrated that the coworker influence-employee performance relationship was more complicated than was previously conceptualized. Moreover, we responded to calls from the role ambiguity literature for studying potential moderators on role ambiguity-job performance relationship (Gilboa et al. 2008; Tubre & Collins 2000). Premised on the social cognitive theory, we introduce coworker OCB as a useful candidate for future research. In addition, these results transcended the domain of the social exchange perspective and supported social information processing and social cognitive theories as useful frameworks in predicting employee OCB.
Finally, our results also have practical implications for managers. For instance, evidences of the effect of role ambiguity suggest that managers can build up an effective work force if they can help employees clarify work roles. To achieve this purpose, they can 1) provide more career or job-related mentoring, 2) encourage employees to take each other as role models and conduct vicarious learning (Bandura 1997), and 3) re-design jobs so that coworkers have better opportunities to observe each other and participate in mutual coaching (Ostroff & Kozlowski 1992).

Limitations and Future Directions

However, results and implications from our study must be interpreted in light of several limitations. First, our data were cross-sectional. Therefore, we are unable to address the issue of causality. However, effects from coworker influence to employee outcomes have been well acknowledged in prior research (Chiaburu & Harrison 2008). Reverse causality should not be a critical concern for our argument and results. But we still encourage future research to replicate our findings with a longitudinal design. Second, we have focused exclusively on the cognitive mechanism of coworker social influence. Thus, we offer limited knowledge to the hedonic processes through which coworkers affect each other. Besides, we also shed less light on the social context where coworker influence is achieved. Future research might extend our inquiry by considering whether the following factors will adjust the strength of coworker influence: job level (Gilboa et al. 2008), task interdependence (De Jong et al. 2007), or organizational culture and climate (Ehrhart, & Naumann 2004). Third, we examined the effect of one single coworker that the focal employee selected. This may be considered a strong situation where our hypotheses are likely to be supported. However, our intention was not to illustrate that coworker influence is identical across groups of coworkers. Future study might complement our findings by analyzing whether these effects would generate into different groups of coworkers (Penner et al. 2005).
REFERENCES


### TABLE 1. DESCRIPTIVE STATISTICS AND CORRELATIONS

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<td>-.16**</td>
<td>.68**</td>
<td>-.11*</td>
<td>-.11*</td>
<td>-.11*</td>
</tr>
</tbody>
</table>


* p < .05; ** p < .01; (two-tailed)
<table>
<thead>
<tr>
<th>Dependent Variable</th>
<th>Role ambiguity</th>
<th>Task Performance</th>
<th>OCB</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M 1 (H1a)</td>
<td>M 2 (H2a)</td>
<td>M 3 (H3a)</td>
</tr>
<tr>
<td>Employee Age</td>
<td>-.17**</td>
<td>-.05</td>
<td>.02</td>
</tr>
<tr>
<td>Employee Gender</td>
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<td>.03</td>
<td>.06</td>
</tr>
<tr>
<td>Employee Education</td>
<td>-.17**</td>
<td>.06</td>
<td>.12</td>
</tr>
<tr>
<td>Coworker Age</td>
<td>-.01</td>
<td>.13*</td>
<td>.12*</td>
</tr>
<tr>
<td>Coworker Gender</td>
<td>-.02</td>
<td>.05</td>
<td>-.03</td>
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<tr>
<td>Coworker Education</td>
<td>.03</td>
<td>-.04</td>
<td>-.06</td>
</tr>
<tr>
<td>Leader-member exchange</td>
<td>-.41**</td>
<td>.02</td>
<td>.13*</td>
</tr>
<tr>
<td>Coworker exchange</td>
<td>-.10*</td>
<td>.21**</td>
<td>.18**</td>
</tr>
<tr>
<td>Employee role ambiguity</td>
<td>-.32**</td>
<td>-.30**</td>
<td>-.15*</td>
</tr>
<tr>
<td>Coworker OCB</td>
<td>.34**</td>
<td>.37**</td>
<td>.32**</td>
</tr>
<tr>
<td>Overall F</td>
<td>14.22**</td>
<td>6.69**</td>
<td>4.64**</td>
</tr>
<tr>
<td>R²</td>
<td>.24</td>
<td>.13</td>
<td>.10</td>
</tr>
<tr>
<td>F change</td>
<td>27.75**</td>
<td>37.86**</td>
<td>15.81**</td>
</tr>
<tr>
<td>R² change</td>
<td>.07**</td>
<td>.08**</td>
<td>.03**</td>
</tr>
</tbody>
</table>

Note. N=362. Entries are standardized regression coefficients.

* p < .05; ** p <.01; (two-tailed)
**TABLE 3. RESULTS OF SIMPLE EFFECTS BASED ON BOOTSTRAP ESTIMATES**

<table>
<thead>
<tr>
<th>Dependent Variables</th>
<th>Moderator Variables</th>
<th>Stage</th>
<th>Effect</th>
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<tbody>
<tr>
<td></td>
<td></td>
<td>First</td>
<td>Second</td>
<td>Direct</td>
</tr>
<tr>
<td>Employee Task</td>
<td>Coworker OCB</td>
<td>-.11</td>
<td>.01</td>
<td>.10</td>
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<tr>
<td>Performance</td>
<td>High</td>
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<tr>
<td></td>
<td>Low</td>
<td>.03</td>
<td>-.30**</td>
<td>.19*</td>
</tr>
<tr>
<td></td>
<td>Difference</td>
<td>-.14</td>
<td>.30**</td>
<td>-.08</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Employee OCB</td>
<td>Coworker OCB</td>
<td>-.11</td>
<td>.07</td>
<td>.06</td>
</tr>
<tr>
<td></td>
<td>High</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Low</td>
<td>.03</td>
<td>-.17*</td>
<td>.13</td>
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<tr>
<td></td>
<td>Difference</td>
<td>-.14</td>
<td>.24**</td>
<td>-.06</td>
</tr>
</tbody>
</table>

Note. N=362. Entries are simple effects calculated from the Equation 2. Tests of differences for the first stage, second stage, and direct effect are equivalent to 2 times of the tests for $a_{XZ}$, $b_{MZ}$, and $b_{XZ}$, respectively. Tests of differences for the indirect and total effect were based on bias-corrected confidence intervals derived from bootstrap estimates.

* $p < .05$; ** $p < .01$ (two-tailed).
FIGURE 1. OVERALL MODEL OF COWORKER INFLUENCE

Note. Dashed lines indicate negative relationships while solid lines indicate positive effects.
FIGURE 2. MODERATING EFFECTS OF COWORKER OCB ON ROLE AMBIGUITY – EMPLOYEE TASK PERFORMANCE RELATIONSHIP

FIGURE 3. MODERATING EFFECTS OF COWORKER OCB ON ROLE AMBIGUITY – EMPLOYEE OCB RELATIONSHIP
Appendix --- Scales Used

Coworker Exchange (CWX)

1. I always know how satisfied this coworker is with what I do
2. This coworker understands my problems and needs well enough
3. This coworker would personally use his/her power to help me solve my work problems
4. I can count on this coworker to “bail me out” at his/her expense when I really need it
5. I have enough confidence in this coworker to defend and justify my decisions when I am not present to do so
6. My working relationship with this coworker is extremely effective

Role Ambiguity (Reverse Coded)

1. I feel certain about how much authority I have
2. I know that I have divided my time properly
3. I know what my responsibilities are
4. I know exactly what is expected of me
5. I have clear, planned goals and objectives for my job

Coworker OCB

The coworker:

1. Helps others who have heavy work loads
2. Helps others who have been absent
3. Assists supervisor with his/her work (when not asked)
4. Takes time to listen to coworkers’ problems and worries
5. Goes out of way to help new employees
6. Takes personal interest in other employees
7. Passes along information to coworkers
8. Attendance at work is above the norm
9. Gives advance notice when unable to come to work
10. Adheres to informal rules devised to maintain order
11. Conserves and protects organizational property

**Employee Task Performance**

1. Fulfills the responsibilities specified in his/her job description
2. Performs the tasks that are expected as part of the job
3. Meets performance expectations
4. Adequately completes responsibilities

**Employee OCB**

This Employee:

1. Helps others who have heavy work loads
2. Helps others who have been absent
3. Assists supervisor with his/her work (when not asked)
4. Takes time to listen to coworkers’ problems and worries
5. Goes out of way to help new employees
6. Takes personal interest in other employees
7. Passes along information to coworkers
8. Attendance at work is above the norm
9. Gives advance notice when unable to come to work
10. Adheres to informal rules devised to maintain order
11. Conserves and protects organizational property

**Leader-Member Exchange (LMX)**
1. I always know how satisfied my supervisor is with what I do
2. My supervisor understands my problems and needs well enough
3. My supervisor recognizes my potential some but not enough
4. My supervisor would personally use his/her power to help me solve my work problems
5. I can count on my supervisor to “bail me out” at his/her expense when I really need it
6. I have enough confidence in my supervisor to defend and justify my decisions when I am not present
to do so
7. My working relationship with my supervisor is extremely effective