

## ABSTRACT

Title of Document:                   CREATING ORGANIZATIONAL CITIZENS:  
A QUASI-EXPERIMENTAL AND  
QUALITATIVE EXAMINATION OF  
SUPERVISOR- AND PEER-BASED  
INTERVENTIONS

Michael R. Parke, Doctor of Philosophy, 2016

Directed By:                         Associate Professor, Subra Tangirala,  
Management & Organization Department

Research suggests that supervisors and peers can help employees make sense of what is important or expected from them at work and, thereby, shape their behaviors. In this dissertation, I examine how employees' organizational citizenship behaviors (OCB), such as helping and voice, are differentially affected by these two sources of influence over time. In particular, I compare the relative and joint effectiveness of two field interventions to enhance OCB: (a) a role clarification intervention in which supervisors are trained to set expectations for OCB for their employees and encourage them to engage in OCB and (b) a norm establishment intervention in which peers are trained to set expectations for each other and encourage each other to perform OCB. I utilize a mixed methods approach involving a quasi-field experiment to test for changes in OCB and qualitative data to explore the theoretical mechanisms over the course of three months in a large food processing plant. I find that role clarification

interventions alone have immediate positive effects on OCB, whereas norm establishment interventions alone take a longer period of time to increase OCB. In addition, in the condition where both interventions were combined, norm establishment interventions weaken the effects of role clarification earlier on; however, at later stages in time, this pattern reverses as norm establishment enhances the effects of role clarification on OCB. Through these findings, I highlight how (a) organizations seeking quick increases in citizenship might be better off focusing on supervisors as sources of influence; (b) organizations need to persist with peer-focused interventions to see positive gains; and (c) despite initial hurdles with peer-focused interventions, over time, they can lead to the highest increases in OCB when combined with supervisor-focused interventions.

CREATING ORGANIZATIONAL CITIZENS: A QUASI-EXPERIMENTAL AND  
QUALITATIVE EXAMINATION OF SUPERVISOR- AND PEER-BASED  
INTERVENTIONS

By

Michael Robert Parke

Dissertation submitted to the Faculty of the Graduate School of the  
University of Maryland, College Park, in partial fulfillment  
of the requirements for the degree of  
Doctor of Philosophy  
2016

Advisory Committee:  
Professor Subra Tangirala, Chair  
Professor Kathryn M. Bartol  
Professor Rellie Derfler-Rozin  
Professor Paul J. Hanges  
Professor Myeong-Gu Seo

© Copyright by  
Michael Robert Parke  
2016

## Dedication

To my family and my wife for their lifelong support and love.

## Table of Contents

Dedication.....	ii
Table of Contents.....	iii
List of Tables.....	iv
List of Figures.....	v
Chapter 1: Introduction.....	1
Chapter 2: Theory & Hypotheses.....	7
Chapter 3: Overview of Studies.....	18
Chapter 4: Study 1 Methods, Results, & Discussion.....	21
Chapter 5: Study 2 Methods & Findings.....	38
Chapter 6: General Discussion.....	64
Appendices.....	71
Tables.....	73
Figures.....	79
Bibliography.....	81

## List of Tables

Table 1: Means, Standard Deviations, and Correlations among Study 1 Variables...	81
Table 2: Analysis of Effects of Interventions on OCB Change Using Random Coefficient Modeling (Study 1).....	82
Table 3: Coding OCB and Theoretical Mechanisms.....	83
Table 4: Manipulation Checks for Ongoing Interventions.....	85

## List of Figures

Figure 1: Interactive Effects of Role Clarification and Norm Establishment on Change in OCB 1 Month into the Intervention (T1).....	87
Figure 2: Interactive Effects of Role Clarification and Norm Establishment on Change in OCB 3 Months into the Intervention (T2).....	88



## Chapter 1: Introduction

A large body of evidence suggests that organizational citizenship behavior (OCB) – “performance that supports the social and psychological environment in which task performance takes place” (Organ, 1997: 95) – is a vital component of organizational functioning. When employees engage in OCB, such as such as helping and speaking up with constructive suggestions, their teams operate more effectively, and they provide valuable support to the organization in accomplishing its goals (Organ, Podsakoff, & Mackenzie, 2006; Podsakoff, Whiting, Podsakoff, & Blume, 2009). Given OCB’s critical role for workplace functioning, scholars have acknowledged that employees often view OCB as an important and expected part of their jobs (Ilgen & Hollenbeck, 1991; Lam, Hui, & Law, 1999; Morrison, 1994; Organ, 1997). Equally important, many studies find that when employees view OCB as expected at work, they are much more likely to perform these positive behaviors (Jiao, Richards, & Hackett, 2013; McAllister, Kamdar, Morrison, & Turban, 2007; Morrison, 1994; Tepper & Taylor, 2003).

Despite these findings, research examining expectations as an antecedent to OCB has largely failed to investigate *whom* the expectations come from and whether that matters. Multiple theoretical perspectives suggest that supervisors and peers represent two fundamental sources of influence in organizational settings that help employees understand what is important or expected at work and, consequently, shape their behaviors (Cialdini & Trost, 1998; Ilgen & Hollenbeck, 1991; Katz & Kahn, 1978a). In the context of OCB, however, we know little regarding whether supervisor or peer sources of expectations at work differentially motivate OCB

behavior and their sustenance over time (Lemoine, Parsons, & Kansara, 2015). For example, must supervisors drive and manage employees' expectations of citizenship to elicit these behaviors or can fellow group members' expectations of one another motivate performance of OCB (Ehrhart & Naumann, 2004; Yaffe & Kark, 2011)? When are supervisors or peers more effective in changing OCB from focal employees (Chiaburu & Harrison, 2008)? And would supervisor- and peer-based expectations substitute or complement each other in facilitating OCB? Because we lack answers to such important questions, we cannot provide guidance to organizations and managers on how best to instill and manage expectations of citizenship at work to promote these behaviors (Bolino & Turnley, 2003). Without such knowledge then, organizations are likely underutilizing or undermining their capacity to create and cultivate a workforce of organizational citizens.

In this dissertation, I aim to address these theoretical and practical issues by examining how expectations from supervisor and peers differentially influence employee OCB over time. Specifically, I examine the unique and interactive effectiveness of two field interventions designed to tap these two sources of expectations to enhance employee OCB: (a) a *role clarification* intervention in which supervisors promote expectations for and encourage employees to perform OCB and (b) a *norm establishment* intervention in which team members are trained to promote expectations for and encourage each other to perform OCB.

Integrating time with organizational roles and norms research (Bettenhausen & Murnighan, 1985; Chatman & Flynn, 2001; Ehrhart & Naumann, 2004; George & Jones, 2000; Katz & Kahn, 1978a; Kozlowski & Klein, 2000; Mitchell & James,

2001), I propose that supervisor-based role clarification interventions are relatively more effective than peer-based norm establishment interventions earlier on in time. That is, I suggest that role clarification interventions have positive effects on OCB shortly after they are introduced, whereas norm establishment increase OCB only after a longer period of time has elapsed. As for joint effectiveness, I build theory for how norm establishment interventions weaken the positive effects of role clarification earlier on in time (competing effect). However, later on, I propose peer-based norm interventions complement the supervisor-driven role interventions to generate the highest levels of OCB from employees (complementary effect). To examine the proposed theory, I employ the embedded design of the mixed methods approach (Creswell & Plano Clark, 2011), using a quasi-experiment to test for behavioral changes and qualitative data to explore underlying theoretical mechanisms.

This dissertation makes several contributions to existing knowledge on OCB, the role of time in management theories, and social influence. First, in studying the relation between expectations and OCB, past research has largely overlooked sources of expectations (McAllister et al., 2007; Morrison, 1994; Tepper & Taylor, 2003), or alternatively, it has studied supervisor or peer influence on OCB independently (Chen, Takeuchi, & Shum, 2013; Yaffe & Kark, 2011). This is problematic because (a) it prevents an understanding of when each source is more effective in motivating OCB and because (b) we cannot understand the effect of one source on OCB without understanding the effect of the other (Chiaburu & Harrison, 2008). To that end, I provide theory for why supervisor-based role interventions work faster in changing OCB than peer-based norm interventions. In addition, although common wisdom

might suggest that greater expectations from supervisors and peers would create stronger motivation in focal employees to enact OCB, I propose that these effects depend on time. Specifically, while norm establishment interventions complement role clarification interventions in later stages of time to enhance employee performance of OCB, earlier on in time, these peer-based interventions weaken the effects driven by supervisor interventions. Thus, this dissertation helps explain why supervisor and peer expectations for OCB interactively produce different effects depending on time.

Second, I demonstrate how time plays a critical role regarding the effects of role clarification and norm establishment interventions on employee OCB (George & Jones, 2000; Mitchell & James, 2001; Shipp & Cole, 2015). As George and Jones (2000: 670) write: “Although theories in organizational behavior, more often than not, specify relationships among constructs in causal terms...differences in rates of change are often left unspecified.” In this context, I show how speed and rates of change matter in terms of different sources of expectations influencing performance of OCB. Also, by incorporating time as a component of theory building (Mitchell & James, 2001), I show how time (e.g., earlier on versus later on) can serve as another critical condition that helps explicate *when* relations between constructs, in this case expectations and OCB, are stronger versus weaker. Finally, I contribute to new lines of OCB inquiry investigating how individuals’ OCB changes over time by identifying supervisor and peer expectations as key antecedents of these changes (Lemoine et al., 2015).

Third, this dissertation contributes to research on employee social influence. Although multiple streams of research have identified that employees derive expectations or responsibility for work behaviors primarily from either their managers or their peers (Barker, 1993; Ehrhart & Naumann, 2004; Ilgen & Hollenbeck, 1991; Ilies, Nahrgang, & Morgeson, 2007; Katz & Kahn, 1978a), most studies separately investigate these processes. This prevents an understanding to how manager or peer influences may behave together in influencing employee behavior. By integrating these approaches, I provide theory for how these two primary sources of expectations impact employee behavior.

Finally, I provide an empirical contribution of helping increase the causal inference of the relation between expectations and OCB. Although research consistently claims that employees viewing OCB as expected part of work will increase their OCB (Morrison, 1994; Organ et al., 2006), most, if not all, studies investigating this relationship have been cross-sectional (e.g., Jiao et al., 2013). This is a concern given that employees may naturally perform citizenship behaviors due to their personality traits (Organ et al., 2006) and then to make their beliefs consistent with their behaviors, adopt these behaviors into their perceptions of expectations at work. Thus, to provide greater confidence in expectations as an antecedent to OCB, I employ a quasi-experiment in a real organization to test the proposed relationships. This also addresses another empirical gap in which research has often failed to examine the effects of different possible organizational interventions to increase OCB (Bolino & Turnley, 2003).

I begin with a brief overview of OCB, role clarification interventions, and norm establishment interventions. Next, I propose how role clarification and norm establishment interventions independently impact employee OCB over time. Then, I develop theory for their interactive effects, and similarly, how the effects play out over time. Following this, I present the methods, results, and a general discussion.

## Chapter 2: Theory & Hypotheses

### **OCB and Expectations for OCB**

OCB is defined as “performance that supports the social and psychological environment in which task performance takes place” (Organ, 1997: 95). It was originally conceptualized as voluntary or discretionary behavior (Smith, Organ, & Near, 1983). However, many scholars note the discretionary aspect of OCB is often a continuum where employees vary in the extent to which they view these behaviors as discretionary (Ilgen & Hollenbeck, 1991; McAllister et al., 2007; Morrison, 1994). Because of this, many researchers have removed discretionary as a defining feature of OCB and instead focus the conceptualization on the key behaviors (e.g., helping, generalized compliance, initiative, voice) that support the social and psychological environment where tasks are completed (Organ, 1997; Podsakoff et al., 2009).

Taking this further, studies have shown that defining OCB as in-role, or as an expected set of behaviors at work (Katz & Kahn, 1978a), tends to be one of the strongest predictors of employees’ performance of these behaviors (Kim, Van Dyne, Kamdar, & Johnson, 2013; McAllister et al., 2007; Morrison & Phelps, 1999; Tepper & Taylor, 2003; Van Dyne, Kamdar, & Joireman, 2008). Given this, knowledge regarding the processes of why or how employees incorporate OCB as a part of their roles is paramount to understanding how organizations can enhance employees’ performance of them (Morrison, 1994; Tepper, Lockhart, & Hoobler, 2001). In this context, I focus on employee expectations for OCB as a key predictor of citizenship

behaviors and build theory for how different organizational interventions uniquely impact performance of citizenship.

I define expectations for OCB as a belief that one is responsible for or must justify his or her (lack of) OCB to others. The concept of expectations is used in multiple theoretical paradigms including role theory (Ilgen & Hollenbeck, 1991; Katz & Kahn, 1978a; Morrison, 1994) and group norms research (Cialdini & Trost, 1998; Ehrhart & Naumann, 2004). As alluded to above, there are two primary sources of expectations in work settings: supervisors (or direct leaders or bosses) and peers (or members in a focal employee's work group or team).

I suggest that organizations use two fundamental types of interventions – intentional and systematic processes implemented to achieve desired outcomes – when trying to increase expectations for OCB (Bolino & Turnley, 2003; Organ et al., 2006). The first relies on supervisors, in which they aim to increase expectations for OCB in a dyadic fashion through role formation processes (Katz & Kahn, 1978a). That is, supervisors help individual employees clarify their roles and discuss with them what is (and is not) expected from them at work (Morrison, 1994). The second approach involves peers where the managers aim to establish peer norms for OCB in their groups and teams (Bolino & Turnley, 2003). Peer expectations for OCB are often discussed in terms of established peer norms for OCB (Ehrhart & Naumann, 2004). Norms are informal rules that govern group members' behaviors (Feldman, 1984) and include both descriptive (what behavior occurs regularly) and injunctive (what behaviors should occur) (Miller & Prentice, 2016; Morris, Hong, Chiu, & Liu, 2015). Thus, when groups have accepted norms for OCB, peers will promote and



enforce these expectations to one another (Grant & Patil, 2012). Below, I describe these two approaches in more detail.

### **Supervisors as Role Clarifiers**

Drawing from role theory (Katz & Kahn, 1978a), I use the terminology OCB role clarification interventions to describe actions by supervisors that target individual members to clarify or increase the extent to which OCB is incorporated into their individual roles (Bolino & Turnley, 2003; Schaubroeck, Ganster, Sime, & Ditman, 1993). In role clarification, OCB expectations are conveyed and driven by supervisors to group members (i.e., one source to multiple recipients). Such actions by supervisors involved in OCB role clarification include discussing, promoting, and encouraging individual employees to perform OCB (Bolino & Turnley, 2003; Morrison, 1994). For example, role clarification interventions might include supervisors providing written role descriptions to employees or ongoing dyadic communication between leaders and employees. In addition, supervisors reinforce these OCB roles by offering various rewards (e.g., more formal rewards such as bonuses and promotions or less formal rewards such as gratitude and recognition) or punishment (e.g., negative feedback or corrective action) when employees engage or do not engage in OCB, respectively (Katz & Kahn, 1978a). Moreover, organizations rely on supervisors to handle challenges or lack of compliance with OCB role expectations in role clarification interventions. For example, if an employee is refusing to help others in his or her group, then a supervisor would speak with the employee to correct the lack of helping. All of these actions by supervisors in role

clarification interventions aim to help employees clearly understand that OCB is an expected part of their work and individual roles.

### **Peers as Norm Establishers**

For the second approach, I draw on norms research (Cialdini & Trost, 1998) to use the label of OCB norm establishment interventions to describe team-based processes to increase peer norms (descriptive and injunctive) regarding OCB (Barker, 1993; Bolino & Turnley, 2003; Ehrhart & Naumann, 2004; Grant & Patil, 2012). Norm establishment is differentiated from role clarification interventions in that the source of expectation primarily comes from multiple peer members in the group (i.e., multiple sources to multiple recipients) as opposed to solely from the supervisor. The focus of OCB norm establishment is for team members to discuss, promote, and encourage one another to perform OCB (Ehrhart & Naumann, 2004). Examples include group meetings to discuss expectations for OCB or ongoing peer-to-peer communication to hold each other accountable for OCB. In addition, peers reinforce these OCB norms by providing rewards (e.g., social recognition, acceptance, and exchange) or punishment (e.g., negative feedback, rejection) to group members who perform or do not perform OCB, respectively (Cialdini & Trost, 1998). Furthermore, in OCB norm establishment interventions, organizations rely on group members (in addition to supervisors) to deal with any challenges or resistance to OCB norms (Barker, 1993; Bettenhausen & Murnighan, 1991). For example, if an employee fails to show initiative when noticing an error in production, a team member may speak up or train the employee on the correct way to respond when identifying an error (Lepine & Van Dyne, 2001). Altogether, the intention of norm establishment interventions is

to create strong group norms for OCB so that group members not only take responsibility and ownership over OCB, but also that they hold one another accountable to perform these behaviors (i.e., enforce OCB norms).

As seen from above descriptions, both role clarification and norm establishment interventions will likely create stronger expectations for OCB among focal employees and subsequently increase their performance of these behaviors. Given this, the important question for organizational research is to understand when each approach is more effective in increasing and maintaining OCB in organizations. To answer this question, I draw on the role of time (George & Jones, 2000; Mitchell & James, 2001; Shipp & Cole, 2015).

### **The Relative Effects of Role Clarification and Norm Establishment over Time**

I propose that OCB role clarification interventions will result in higher levels of individual OCB more quickly than OCB norm establishment interventions. I propose this for two reasons. First, because norm establishment interventions involve communication from multiple peer sources to focal employees about OCB expectations (Ehrhart & Naumann, 2004), initially, these expectations will likely have greater variance in what peers communicate as appropriate standards of behavior. For example, some members may communicate high expectations of OCB, whereas others communicate low to no expectations. Research highlights that when groups try to create new norms or change existing norms, members often begin with different perceptions of what is appropriate behavior and how much of it should be enacted (Bettenhausen & Murnighan, 1991; Ehrhart & Naumann, 2004; Grant & Patil, 2012). Early on, this variance will likely prevent increases in citizenship behaviors since

common and agreed up on standards do not exist among group members (e.g., Bommer, Miles, & Grover, 2003). In addition, research shows that it takes time for group members to resolve variance in expectations and norms in order adopt agreed upon expectations that are communicated and enforced (Barker, 1993; Bettenhausen & Murnighan, 1991).

In contrast, I propose that OCB role clarification interventions will not suffer from this issue of more noise and variance in OCB standards early on, and therefore, they will lead to positive changes in OCB among employees. In OCB role clarification interventions, expectations come from the supervisor, which represents one (as opposed to multiple) highly legitimate (as opposed to less legitimate) source of power (Katz & Kahn, 1978a). Because of this, role clarification interventions should more quickly establish agreement and clarity between a supervisor and his or her individual employees regarding OCB expectations.

Second, I expect role clarification to have more immediate effects on employees' OCB earlier than norm establishment interventions because supervisors will have more skill and experience (relative to peers) in communicating and enforcing expectations at work than peer group members. Supervisors are typically those employees who have moved up the ranks in the organization and therefore have some experience managing employees. This may include experience or skills with communicating expectations, providing feedback, and rewarding or punishing employees for good and bad performance, respectively. Given this, supervisors (as opposed to peers) are likely more effective in communicating, encouraging, and enforcing OCB expectations. For example, in addition to supervisors having

legitimate power in organizations (Katz & Kahn, 1978a), they already have a role to perform this function for other work behaviors (e.g., task performance). Thus, early on in time, individual employees will likely be more receptive and accountable to influence from supervisors than from peers who have less experience, legitimacy, and skills in promoting and holding others accountable to standards.

In addition, the normative process of expectation setting and enforcement in organizations tends to come in a top-down fashion (i.e., from supervisors to employees) as opposed to horizontal flow (peer-to-peer) (Barker, 1993; Katz & Kahn, 1978b). Thus, it may take a while for peers in the norm establishment conditions to accept a new role of promoting OCB expectations, monitoring their peers, and enforcing these behaviors. Similarly, it will likely also take time for group members to accept and receive this influence from peers since it deviates from the norm of supervisors as the typical source of expectations. Given this, if employees fail to meet OCB expectations (e.g., do not help out), then supervisors in role clarification interventions are more likely (a) to address the situation and (b) to cause change in behavior from the employee than peers in norm establishment interventions. In other words, in norm establishment interventions earlier on, group members might be less likely to hold one another accountable to citizenship. Thus, without possible sanctions from group members for not engaging in OCB, it should be easier for individual members to pass OCB responsibility onto others in the early stages of norm establishment interventions (Darley & Latané, 1968; Schwartz & Clausen, 1970). Given the reasons outlined above, role clarification interventions should more quickly increase employee expectations and OCB than norm establishment interventions.

*Hypothesis 1: OCB role clarification interventions have a positive effect on OCB change earlier than OCB norm establishment interventions.*

Thus far I have discussed the relative effects of OCB role clarification interventions compared to OCB norm establishment interventions in changing employee OCB. However, most employees work in organizations where expectations regarding citizenship can be driven by both supervisors and peers (Katz & Kahn, 1978a). Therefore, the question is how would both of these interventions operate in tandem to influence OCB? For example, would peer expectations in norm establishment interventions help reinforce and complement supervisor expectations, or could they perhaps detract from and interfere with the strong expectations that supervisors provide? To answer these questions, I once again incorporate the role of time.

### **The Interactive Effects of Role Clarification and Norm Establishment on OCB**

Early on, I propose that norm establishment interventions will weaken the positive effects of OCB role clarification interventions on employee OCB for two reasons. The first is what I refer to as learning interference. In models of team development, individual members progress sequentially through different stages of learning their own individual roles and their team member roles (Kozlowski, Gully, Nason, & Smith, 1999). Theory suggests that team members must first learn what is expected of them (individual role) before they can understand how to communicate and promote expectations of others (team member role) (Kozlowski et al., 1999). For example, Kozlowski et al.'s (1999) theory on knowledge compilation in teams outlines how knowledge about one's role is required before people can

develop competencies to communicate and work across dyadic interdependencies. In the context of OCB then, individual employees may first need to learn what is expected of them in terms of their own helping, initiative, and voice behaviors before they can promote and hold other team members accountable to these citizenship standards. Thus, an OCB norm establishment intervention, which promotes team members to communicate expectations and hold each other accountable for OCB, may in fact interfere with these employees' ability to learn what is expected of them individually, which occurs in role clarification. As a result, early on in time, if organizations simultaneously try to establish and enforce peer OCB norms in addition to trying to increase the extent to which individuals incorporate OCB into their roles, the norm establishment interventions may interfere and weaken the effects of role clarification on OCB change.

The second reason relates to how, at first, peers may dilute the clear expectations that supervisors establish. For example, supervisors likely set clear expectations for each individual member regarding their OCB in role clarification interventions because the expectations come from one skilled source of influence. Adding on top of this a norm establishment intervention in which, at initial stages, peers are less experienced and skilled to promote and hold team members accountable for OCB (Gersick & Hackman, 1990), will likely weaken supervisor's clear expectations. Stated differently, instead of having one primary, clear, and consistent source of OCB expectations from their supervisor in role clarification interventions, members that also receive a norm establishment intervention will face communication about OCB from peers that may not be as clear and consistent because their peers are

still developing these competencies. Due to this additional noise or inconsistency of expectations from peers, a norm establishment intervention will likely weaken the strong effects role clarification interventions have on OCB change early on in time. This claim is backed by some empirical findings that show variance in OCB perceptions within teams (e.g., variance in how much members perceive one another to perform citizenship) actually reduces their own individual OCB (Bommer et al., 2003; Naumann & Ehrhart, 2011; Raver, Ehrhart, & Chadwick, 2012). For these reasons, I propose the following interaction hypothesis.

*Hypothesis 2: Early on, the positive effect of OCB role clarification interventions on OCB change is weaker in the presence of OCB norm establishment interventions.*

At later stages in time, I propose that OCB norm establishment should strengthen the positive effects of OCB role clarification on OCB. Research indicates that shared group norms take time to form or change (Barker, 1993; Ehrhart & Naumann, 2004; Gersick & Hackman, 1990; Kozlowski et al., 1999). In the case of groups receiving a norm establishment intervention, as members interact in a group and develop a common understanding of expectations along with the skills and experience to hold one another accountable, they should develop stronger group norms for how members should perform citizenship as time goes on (Bommer et al., 2003; Ehrhart & Naumann, 2004). Thus at later stages in time, employees likely have both supervisors and peers reinforcing the same high expectations. Furthermore, at later stages in time, group members will better understand their team member roles in which they can and should hold one another accountable for OCB standards (Barker,



1993; Kozlowski et al., 1999). This enhanced understanding coupled with greater comfort and ability in holding peers accountable should make it more likely that employees actually hold one another accountable to OCB at later stages. In this context, research shows that peer influence can be a strong form of control on individual behavior when groups have established peer norms (Barker, 1993; Bettenhausen & Murnighan, 1991). Thus, combining the strong influence of supervisors in role clarification intervention with the strong peer norms in norm establishment interventions enables a complementary effect where both supervisors and peers promote OCB, reward those who engage in these behaviors, and punish members who fail to perform OCB. These combined effects at later stages in time should lead to high clarity and strength of expectations for OCB and thus generate high accountability for employees to engage in citizenship behaviors.

*Hypothesis 3: Later on, the positive effect of OCB role clarification interventions on OCB change is stronger in the presence of OCB norm establishment interventions.*

## Chapter 3: Overview of Studies

To test and further expand the proposed theory, I employed the embedded design from mixed methods research (Creswell & Plano Clark, 2011). This approach begins with conducting a field experiment, which is highly useful for increasing inferences of internal and external validity (Shadish, Cook, & Campbell, 2002). In Study 1, I used a quasi-experiment (Shadish et al., 2002) to test for the effects of role clarification and norm establishment interventions on changes in employee OCB over time. The second aspect of the embedded design involves using qualitative data to explore the theoretical processes of the results found in the initial field experiment, which combines the strengths of field experiment with the richness and flexibility of qualitative methodology (Creswell & Plano Clark, 2011; Fine & Elsbach, 2000; Kaplan, 2016; Locke & Golden-Biddle, 2002). This mixed methods approach also allows for triangulation of results (Jick, 1979), and it is recommended for intermediate theory development where some theoretical bases exist but new theoretical processes are being studied (Edmondson & McManus, 2007). For example, Edmondson and McManus (2007) recommend such an approach when proposing relationships between established constructs (in this case OCB) and new constructs (OCB role clarification and OCB norm establishments). Furthermore, scholars suggest using a qualitative study after a field experiment in order to (a) “understand in more depth how the mechanisms worked in a theoretical model”; (b) “to determine if the processes in conducting the trial had treatment fidelity”; and (c) “to help explain quantitative outcomes” that were found in the initial experiment (Creswell & Plano Clark, 2011: 192). In other words, a qualitative follow-up study

greatly helps in understanding and interpreting the processes and results of experiments conducted in the field due the noisy nature of field contexts (as opposed to a more controlled lab experiment) (Creswell & Plano Clark, 2011). Finally, other scholars have recommended a mixed methods approach when trying to understand the role of time in theoretical models as it can help provide a more complete picture of how processes unfold over time (George & Jones, 2000). Thus, in Study 2, I conducted semi-structured interviews (Charmaz, 2006) at the culmination of the interventions to facilitate these goals.

### **Research Setting**

This research took place in a large food processing plant in the Northeastern United States called Food Co<sup>1</sup>. Food Co. specializes in making healthy, ready-to-eat food items, such as salads, sandwiches, wraps, and fruit cups, that are sold at grocery and convenience stores. The studies in this research dealt with employees that worked primarily in the production area of the plant (as opposed to front office employees). There were three reasons why I focused on production employees. First, the management team of Food Co. was most interested in improving company practices that would encourage production employees to engage in higher levels of OCB. In line with existing evidence, they felt production employees needed to greatly improve their OCB if their company was to improve their performance (Podsakoff et al., 2009). Managers felt OCB was one of the most important aspects of employees' contributions to the organization. Second, the separate departments and the physical layout of the plant nicely enabled the needed separation among production employees to form natural experimental groupings for the quasi-experimental design. Third,

---

<sup>1</sup> I use pseudonyms for the company name and all names of employees.

production employees was a highly homogenous group, which enabled creating experimental conditions in which employees did not significantly differ on key attributes.

Production employees work in the “fridge” – a temperature controlled warehouse at approximately 35-37 degrees Fahrenheit where all food products are stored, manufactured, and shipped. Production is separated into eight different departments: 4 different Production Rooms, Maintenance, Warehouse, Sanitation, and Quality Assurance (QA). All products are made in the different production rooms in assembly line fashion; Maintenance is responsible for maintaining the quality of the production equipment and building; Warehouse employees assemble containers (“totes”) of different products to ship as well as receive and organize raw materials used for producing products; Sanitation employees are responsible for keeping all areas of the plant clean and meeting sanitation and hygienic standards (e.g., no litter on the floors inside or outside the building); and QA employees ensure that all products meet quality standards. All employees were paid hourly wages. Besides maintenance and QA positions, labor was unskilled; that is, the education and training required for the position was approximately equal. Departments subdivide into smaller groups that were separated by either the area of the plant where they worked (e.g., people who worked on production line 1 versus line 2) or by the shift they worked (e.g., first versus second shift). Each department had exactly one manager, 1-3 assistant managers depending on size, and one supervisor (called a “lead”) for each subgroup within the department.

## Chapter 4: Study 1 Methods, Results, & Discussion

### **Procedure**

**Treatment assignment.** I implemented a 2 (no role clarification vs. role clarification)  $\times$  2 (no norm establishment vs. norm establishment) quasi-experiment in which natural groupings of employees were assigned to one of the four experimental conditions (Shadish et al., 2002). I used three criteria to group employees prior to randomly assigning treatment conditions in order to eliminate plausible threats to internal validity (Shadish et al., 2002). First, I tried to maintain balanced cells among experimental conditions with similar sample size. For example, two of the production rooms had substantially more employees than other departments. Second, I ensured that employees who worked together would all be in the same experimental condition. Given that departments were largely isolated and employees worked primarily with other employees in their same department, this criterion was relatively easy to meet. This criteria helped prevent any treatment diffusion, which is when treatment from one condition spills over to other experimental conditions (Shadish et al., 2002). After creating clusters based on these criteria, I randomly assigned these clusters to the four treatment conditions. This resulted in four relatively equal experimental conditions: the control group (no role clarification and no norm establishment), the role clarification condition, the norm establishment condition; and the role clarification and norm establishment condition.

**Homogeneity of experimental groupings.** This field experiment is a quasi-experiment because individuals (the level of analysis of the outcome variable) were not randomly assigned to treatment conditions (Shadish et al., 2002). Given this, I

checked for whether groups across experimental conditions differed on key parameters, which such analysis is sometimes referred to as (Rosenbaum & Rubin, 1983; Shadish et al., 2002). These included demographic variables such as gender and cultural background (did demographic composition of groups significantly differ across conditions?), hours worked (did groups differ in the amount of time they worked across conditions?), and job tenure (did groups have different levels of experience across conditions?). Furthermore, I also tested for differences in wage amounts across conditions. For production employees, hourly wage was a strong indicator of level of skill, education, or expertise needed for the position. Of these variables, only job tenure significantly differed across conditions and was included as a control variable (see measures section). This technique is often referred to as propensity score matching (Rosenbaum & Rubin, 1983). Overall, this analysis helps provide evidence that the experimental conditions are relatively homogenous on several key parameters.

## **Interventions**

**Pre-intervention work.** I performed pre-experiment work to help improve the quality of the interventions (Creswell & Plano Clark, 2011). The development of the interventions occurred over the course of three months. To begin, I met with production managers and conducted around 60 interviews with supervisors and employees to learn more about (a) the impediments to OCB currently faced by the organization, (b) what OCB are important for the organization, and (c) feasible ways to intervene to increase OCB. Interviews and meetings revealed two major inhibitors of OCB, which aligned with the theoretical arguments regarding expectations for

OCB. That is, employees lacked clear and consistent standards for OCB (e.g., different supervisors had different expectations for OCB) or there was a general lack of perceived expectations for OCB (e.g., “It does not matter if I help out as long as I do my job”).

In addition, this process led to identifying seven citizenship behaviors in which managers believed were most relevant and important to their organization, which aligned with theoretical dimensions of OCB. These included helping (assisting others with their work), generalized compliance (“general adherence to the spirit as well as the letter of the rules or norms that define a cooperative system”; Organ et al., 2006: 19), context-specific compliance (compliance directed toward specific organizational goals such as sanitation), initiative (anticipating problems and taking necessary actions to address them), safety (compliance with safety procedures and active participation in trying to improve safety at work; Neal & Griffin, 2006), voice (speaking up with constructive suggestions in order to change or improve the status quo), and courtesy (being considerate to others to avoid interpersonal confrontations) (Dekas, Bauer, Welle, Kurkoski, & Sullivan, 2013; Hofmann, Morgeson, & Gerras, 2003; LePine, Erez, & Johnson, 2002; Organ et al., 2006; Podsakoff et al., 2009; Podsakoff, Mackenzie, Paine, & Bachrach, 2000; Van Dyne, Cummings, & Parks, 1995). Each of these behaviors not only maps onto the conceptualization of OCB, which is a broad concept comprised of the many behaviors that support “the social and psychological environment” (Organ, 1997: 95), but they also have been identified as specific citizenship dimensions in past research (Podsakoff et al., 2000). These

seven OCB were then written in manager's own words, institutionalized, and referred to as "The Food Co. 7."

**Intervention implementation.** I utilized company personnel (as opposed to external parties) to launch and train participants as they are were in the best position to do so. Managers rolled out interventions to supervisors and employees during a kick-off meeting that explained what Food Co. was trying to do and why, introduced them to The Food Co. 7, and started the experimental conditions. These meetings first occurred with supervisors only, and then both managers and supervisors conducted the kick-of meetings for employees. The meetings lasted about one hour. All sessions were exactly the same except the last 15-20 minutes, in which managers introduced and began the separate experimental conditions. For employees in the control group, their meeting lasted about half the time. Managers of the control group explained the research that was being conducted and informed employees that after the research is finished, their departments will have the opportunity to go through the training and changes (Grant & Wall, 2008). I attended all but two of 30 meetings as an observer, which occurred on one day for the supervisors (8 total sessions), and two weeks later, occurred on two consecutive days for all employees (22 sessions).

**Role clarification intervention.** The role clarification intervention involved three components that were designed and chosen because of their alignment with theoretical role formation processes (Katz & Kahn, 1978a), their feasibility to implement given various organizational constraints, and their ability to utilize the organization's existing practices and routines. First, in the last 15-20 minutes of the kick-off meeting, employees completed a worksheet in which they wrote why each of



The Food Co. 7 principles are important to them and how they will implement it in their work. This exercise was designed to make employees active participants in clarifying their roles as opposed to passive recipients of role instructions from their managers. The goal was to elicit employee participation and help employees develop an understanding to why OCB is an important part of their work.

The second part of the intervention involved the ongoing role clarification that occurred as employees worked. Employees received a small badge with The Food Co. 7, which employees kept with them at all times when they worked. The purpose of the badge was to reinforce and make salient employee's OCB roles while working. Also, supervisors used these badges to help instill OCB expectations with employees and reinforce the OCB roles (e.g., interviews revealed that supervisors asked employees if they could remember the behaviors on their badges).

Finally, the last component of the role clarification intervention involved training supervisors on how to interact and reinforce OCB expectations. That is, supervisors were encouraged to hold employees accountable to The Food Co. 7 principles on a daily basis. For example, supervisors were encouraged to use the Food Co. 7 badges that employees wore to remind employees individually about the importance of performing OCB. In addition, supervisors were coached that if they saw employees not following through on the OCB standards, then they should have a conversation with him or her about what the employee did wrong and how he or she could better perform OCB. Throughout the training for supervisors, the message of communicating directly with individual employees was repeatedly emphasized as the

best way to help employees take greater responsibility over OCB (i.e., The Food Co. 7).

**OCB norm establishment intervention.** Parallel to the role clarification intervention, the norm establishment intervention involved three parts. These were chosen for the same criteria as the role clarification components: (a) their match with theoretical processes of norm establishment (Bettenhausen & Murnighan, 1985, 1991; Ehrhart & Naumann, 2004), (b) their feasibility of implementation, and (c) their alignment with existing organizational practices and routines. First, in the last 15-20 minutes of the kick-off meeting, employees began the formation of peer norms by discussing examples of every behavior of The Food Co. 7 within their respective teams. In addition, employees shared with their team members why each behavior is important and how they will implement it in their work. This exercise was designed to make employees active participants in the establishment of norms in their groups and help them develop an understanding to why OCB is an important part of their work.

The second part of the intervention involved the ongoing norm establishment that occurred as employees worked. Teams in the norm establishment condition had “engagement meetings,” in which teams and their supervisors got together for about 15 minutes to go over The Food Co. 7 as a team. During these meetings, supervisors and their team members followed a structured protocol in which they (a) reviewed the standards of OCB, (b) provided feedback to one another regarding how the group was doing on The Food Co. 7, and (c) suggested some areas the team could improve. In addition, to increase and reinforce OCB injunctive peer norms, the protocol had

supervisors to encourage group members that they need to help hold each other accountable to these behaviors during work. Therefore, these meetings served to promote, establish, and reinforce both descriptive and injunctive peer norms for OCB. For groups in the norm establishment condition, managers agreed that groups would have 3-5 engagement meetings per week (employees only worked 5 days per week). This flexibility was provided to managers given the variance in production workloads.

Finally, the last part to the norm establishment intervention involved the specific supervisor training. Supervisors were trained to promote, encourage, and coach group members in promoting and enforcing peer expectations for OCB among each other. That is, supervisors were trained to empower group members to set OCB expectations among one another and to hold each other accountable to these expectations. For example, supervisors were trained that if employees came to them about someone not following the Food Co. 7, that they should coach and encourage them to speak up to their fellow coworkers about their behaviors. Throughout this training, the message of supporting and enabling team members to promote and enforce OCB expectations among their peers was repeatedly emphasized as the best way to help employees take greater responsibility over OCB (i.e., The Food Co. 7).

**Both interventions and control conditions.** The both interventions condition received both the role clarification and norm establishment intervention. For example, in their kickoff meeting, employees in this condition filled out the role worksheet and talked about the Food Co. 7 in their team. As for the follow up, supervisors promoted and enforced expectations one-on-one as well as teams held engagement meetings to

go over the Food Co. 7. The control condition did not receive either of the two interventions.

## Measures

**Organizational citizenship behavior.** Supervisors rated OCB of each employee with an aggregate measure comprised of the six specific behaviors<sup>2</sup> that reflect The Food Co. 7. It included a 5-item measure of helping (e.g., "Helps others who have heavy workloads"; P. M. Podsakoff, MacKenzie, Moorman, & Fetter, 1990), a 4-item measure of generalized compliance (e.g., "Attendance at work is above the norm"; P. M. Podsakoff et al., 1990), a 6-item measure of safety behaviors (e.g., "Carries out his/her work in a safe manner"; Neal & Griffin, 2006), a 10-item measure of voice (e.g., "Makes constructive suggestions to improve the unit's operation"; Liang, Farh, & Farh, 2012), a 5-item measure of initiative (e.g., "Takes initiative immediately even when others don't"; Frese, Fay, Hilburger, Leng, & Tag, 1997), and a 3-item measure of sanitation compliance behaviors (e.g., "Follows proper hygiene procedures") that was developed for this specific context. OCB was rated by employees' direct supervisors at T0 (Cronbach's  $\alpha = .98$ ), T1 (Cronbach's  $\alpha = .98$ ), and T2 (Cronbach's  $\alpha = .99$ ). Because each department subgroup had its own supervisor, each supervisor only rated employees within his or her group. In this research design, supervisors were a highly reliable source of behavioral ratings of employees. Not only did supervisors observe employees throughout the entire work day (i.e., they worked on the plant floor with employees), but past studies show that supervisors are frequently used as a reliable source to rate employee OCB (Carpenter,

---

<sup>2</sup> Courtesy was not measured due to survey length constraints and because of its strong theoretical and empirical overlap with helping (Podsakoff et al., 2009).

Berry, & Houston, 2014). Furthermore, supervisors were chosen to rate OCB as opposed to employees because in all of the intervention conditions, employees were specifically told to increase their level of OCB. Thus, employees' self-ratings would likely be more biased (i.e., less accurate) than supervisor ratings given that employees would have strong social desirability to inflate their levels of OCB.

The different citizenship behaviors measured in the study were highly correlated with each other (ranging from .60 to .83). This finding aligns with past research that has indicated that OCB often can be parsimoniously represented by one overarching general factor (e.g., LePine et al., 2002). A multi-level confirmatory factor analysis (Dyer, Hanges, & Hall, 2005) using randomly drawn parcels confirmed that a one-factor OCB measure fit the data well at T0 ( $\chi^2$  [df=10] = 41.07,  $p < .05$ ; RMSEA = .09; SRMRwithin = .01, SRMRbetween = .01; CFI = .98), at T1 ( $\chi^2$  [df=10] = 33.27,  $p < .05$ ; RMSEA = .07; SRMRwithin = .01, SRMRbetween = .01; CFI = .99), and at T2 ( $\chi^2$  [df=10] = 37.78,  $p < .05$ ; RMSEA = .08; SRMRwithin = .01, SRMRbetween = .003; CFI = .99).

**Timing of OCB measurement.** Approximately one month before the interventions, supervisors completed a baseline survey (T0) of employee OCB behaviors. Full data at this point included 382 employees nested in 45 work groups. Approximately one month after the interventions began (T1), supervisors rated employees on the same OCB measures. Complete data at this point in time was 230 employees nested in 40 groups. Finally, approximately two months later (T2), supervisors completed the final ratings of employee OCB. The final sample at this point consisted of 150 employees nested within 35 groups.

In theoretical predictions that incorporate time, it is important to specify the rationale for determining when to measure constructs (Mitchell & James, 2001; Shipp & Cole, 2015). The time it takes for treatment effects to manifest varies in different contexts. Thus, following the recommendations of others (Mitchell & James, 2001; Shipp & Cole, 2015), I had extensive discussions with organizational informants to determine the appropriate times to measure the dependent variables in order to examine the proposed changes. I asked managers and supervisors about their experiences with and observations of changing production procedures, adding new equipment, and other types of practical changes in their departments. These discussions helped provide direct contextual knowledge about how they thought about time length regarding different changes implemented in their departments. Based on these discussions, it became clear that managers and supervisors define and think about the short term as one month and the long term at three months. Following this, I chose one month as the first time interval to capture the first post-intervention measure of OCB and three months to examine whether more long term changes in OCB occurred or were sustained in this longer time period.

**Independent variables.** Role clarification and norm establishment variables were coded for each employee: 0 if employee did not receive the intervention and 1 if the employee received the intervention.

**Control variables.** Because this was a quasi-experiment, the use of control variables is essential to rule out possible alternative explanations (Shadish et al., 2002). As mentioned earlier, only job tenure significantly differed across experimental conditions. Hence, the number of days that employees worked for the

company prior to the beginning of the research (first survey at T0) was used as a control variable. Second, to rule out possible grouping effects, task-related effects (e.g., different levels of interdependence), or manager driven effects from the departments that employees worked in, I included a set of dummy variables that controlled for the fixed effects for each department. Finally, to test the proposed hypotheses that specify changes in OCB behavior at different points in time, I included T0 OCB as a control for examining changes in OCB behavior at T1 and T2. Therefore, each employee's baseline level of OCB that was rated before the interventions was controlled for in examining any changes in OCB after the interventions occurred (Shadish et al., 2002). In addition, when analyzing T2 OCB as an outcome, I included T1 OCB as controls in order to determine the change in OCB that occurred from T1 to T2 (i.e., changes that occurred later on).

### **Manipulation Checks**

I conducted several manipulation checks. First, as mentioned above, I attended training sessions to ensure the manipulations went as planned and that there were no variations across teams within the same condition. Second, I performed five separate random checks throughout the course of the intervention. Each time, I randomly selected managers, supervisors, and employees from different conditions and asked them about the processes that were occurring. Third, during the post-experiment interviews, I asked questions regarding the ongoing interventions (see Appendix A). The results of these checks suggests that interventions remained consistent and intact throughout the course of the study, and that no systematic

differences occurred across conditions. However, there were two observations to note.

First, in all three experimental conditions with interventions, the random checks as well as the post-experiment interviews indicated that the ongoing follow up became less in the later stages of the interventions. I describe this in more detail in Study 2, but essentially, managers, supervisors, and employees indicated that follow-up activities (one-on-one communication in role clarification and group meetings in norm establishment) were needed more at the beginning stages of the interventions and needed less later on.

Second, I checked for treatment diffusion (Shadish et al., 2002) and did not find evidence for it except in one instance. One subgroup in the control condition mistakenly received part of the role clarification and norm establishment interventions. Due to a miscommunication, this group conducted received Food Co. 7 badges and had a few engagement meetings between T1 and T2 to discuss the Food Co. 7. However, because this group did not receive the initial kick-off meeting, supervisors did not receive training on promoting and establishing peer norms for OCB, and they only conducted around 3 total meetings about the Food Co. 7 (instead of the 3-5 per week that all other groups in this condition conducted), then I kept this group designated as a group in the control condition<sup>3</sup>.

### **Analytical Strategy**

Employees in the sample were nested in groups. Due to the nesting, I proceeded to analyze the data using Random Coefficient Modeling (RCM) (Bliese, 2002) in MPlus 7.0 with a maximum likelihood estimator with robust standard errors

---

<sup>3</sup> Results do not differ whether this group was included or excluded in the analyses.



(Muthén & Muthén, 2010). Groups represented Level-2 and employees represented Level-1. Because interventions were assigned by groups, these were modeled as independent variables at Level-2. Department dummy variables that characterized each group were controlled for at Level 2. Employee tenure and OCB measures were at Level 1. I grand-mean centered all Level-1 control variables to examine the influence of role clarification and norm establishment interventions over and above them (Hofmann & Gavin, 1998).

To test whether the three experimental conditions significantly caused change in OCB early on, I modeled the T1 measure of OCB (one month post intervention) as the outcome variable and controlled for the T0 baseline measure of OCB (pre-intervention) (Maris, 1998). Thus, change in OCB between T0 and T1 would be demonstrated if an experimental condition significantly influenced T1 OCB over and above the effects of T0 OCB. To examine change in OCB later on, I modeled the T2 measure of OCB (three months post intervention) as the outcome variable and controlled for the T0 and T1 measures of OCB. Thus, change in OCB between T1 and T2 would be demonstrated if any experimental condition significantly influenced T2 OCB over and above the effects of T0 and T1 OCB.

### **Study 1 Results**

Means, standard deviations, and correlations among all variables are reported in Table 1. Hypothesis 1 predicted that role clarification interventions would have positive effects on OCB earlier on than norm establishment interventions. As seen in Table 2, role clarification interventions significantly and positive predicted change in employee OCB at T1 ( $b = .60$  [ $SE = .26$ ];  $p < .05$ ; Model 2), whereas norm

establishment interventions had no significant effect ( $b = -.04$  [SE = .23]; *n.s.*; Model 2). Furthermore, norm establishment interventions had a significant, positive main effect on OCB change at T2 ( $b = .34$  [SE = .12];  $p < .01$ ; Model 5), but role clarification interventions had no significant effect ( $b = .11$  [SE = .11]; *n.s.*; Model 5). In addition, when removing the T1 measure of OCB as a control in Model 5, both role clarification ( $b = .42$  [SE = .09];  $p < .001$ ) and norm establishment ( $b = .27$  [SE = .09];  $p < .01$ ) have positive and significant effects on OCB change at T2. Altogether, the results suggest that the positive increases in OCB that occurred in role clarification condition happened early on (i.e., after the first month) and remained the same throughout the interventions (i.e., no change between the first and third months). In contrast, the positive changes in the norm establishment condition occurred later on (i.e., between the first and third months of the interventions). Thus, results supported Hypothesis 1.

For hypotheses 2 and 3, I examined differences across the conditions by directly examining the parameter estimates in the regression models rather than raw means due to the nested nature of the data. Hypothesis 2 stated that norm establishment interventions would moderate the effect of role clarification interventions on OCB such that earlier on, the positive relationship would be weaker in the presence of norm establishment interventions. Results indicated that role clarification and norm establishment interacted to significantly predict change in employee OCB at T1 ( $b = -1.12$  [SE = .15];  $p < .001$ ; Model 3). The pattern of this interaction is shown in Figure 1. Simple effects indicate that the average level of change in OCB for role clarification interventions is significantly lower in the

presence of norm establishment interventions than without this intervention ( $b = -.87$  [ $SE = .17$ ];  $p < .001$ ). In addition, OCB change in the role clarification only condition was significantly higher than OCB change in the norm establishment only condition ( $b = .70$  [ $SE = .13$ ]  $p < .001$ ) as well as the control condition ( $b = .95$  [ $SE = .10$ ];  $p < .001$ ). Furthermore, OCB change in the norm establishment compared to the control condition was significantly higher ( $b = .25$  [ $SE = .07$ ];  $p < .001$ ). Finally, the difference between OCB change in the norm establishment condition that did not receive the role clarification versus the cell that did receive the role clarification condition was not significantly different ( $b = -.17$  [ $SE = .10$ ]; *n.s.*). Overall, the results show that the norm establishment intervention weakened the positive effects of role clarification on OCB change early on. Thus, Hypothesis 2 was supported.

Hypothesis 3 stated that norm establishment interventions would moderate the effect of role clarification interventions on OCB such that later on, the relationship would be stronger in the presence of norm establishment interventions. Results indicated that role clarification and norm establishment interacted to significantly predict employee OCB at T2 ( $b = .50$  [ $SE = .20$ ];  $p < .01$ ; Model 6). The pattern of this interaction is shown in Figure 2. Simple effects indicate that the average level of change in OCB from at T2 for role clarification interventions is significantly higher in the presence of norm establishment interventions than without this intervention ( $b = .71$  [ $SE = .16$ ];  $p < .001$ ). In addition, OCB change at T2 in the norm establishment only condition was significantly higher than the control condition ( $b = .22$  [ $SE = .09$ ];  $p < .05$ ) as well as the role clarification only condition ( $b = .25$  [ $SE = .25$ ];  $p < .01$ ). Furthermore, OCB change at T2 for the role clarification only condition did not

significantly differ than the OCB change in the control condition ( $b = -.03$  [ $SE = .08$ ]; *n.s.*), meaning that no change in OCB occurred between T1 and T2. Overall, the results show that the role clarification intervention in the presence of a norm establishment intervention led to the overall highest changes in OCB at T2, which supports Hypothesis 3.

### **Robustness Checks**

There was a large amount of attrition in data over the course of measurement time points. One possible alternative explanation to the findings is that the interventions helped to weed out employees (either voluntarily or involuntarily) who did not meet these OCB standards, and thus given the loss of these employees, supervisors may have more favorably rated the OCB of employees who remained in the company. To rule out this alternative hypothesis, I tested for differences in turnover across conditions at the two time points. There were no significant differences in turnover across conditions for either of these two time points.

Second, it is possible that the interventions had differential effects on the specific citizenship behaviors rather than the more global measure (e.g., did interventions differentially influence helping versus voice behaviors across time?). To test for such differences, I repeated the analyses above using the single behavioral dimensions as outcomes. The results of the specific behaviors as outcomes mirrored the results of global OCB. That is, although some of the parameter estimates for the separate experimental conditions on changes in the specific behaviors were more or less strong than their estimates on global OCB, all patterns of results remained the same for the different time points. In other words, the results did not change when

looking at single behavioral dimensions of OCB compared to global OCB. This result also gives evidence for the treatment of OCB as one general factor construct (LePine et al., 2002).

### **Study 1 Discussion**

The results from the quasi-experimental study support the proposed theory. Results show that role clarification interventions led to increases in employee OCB earlier on than norm establishment interventions. In addition, although norm establishment interventions weakened the effects of role clarification interventions on OCB change earlier on, the effects of role clarification on OCB change were strengthened in the presence of norm establishment interventions at later stages in time. Despite these results, Study 1 does not provide much insight into what actually occurred in the interventions and how they worked over time. Thus, as to further expand the insights from this field experiment, I had three goals for the qualitative Study 2 that are based on the embedded-design of mixed methods research: (a) to confirm the manipulations occurred as intended (b) triangulate the quantitative outcomes, and (c) to understand in more depth how the mechanisms worked in the proposed theory (Creswell & Plano Clark, 2011; Edmondson & McManus, 2007; Jick, 1979).

## Chapter 5: Study 2 Methods & Findings

### Case Selection & Data

I used random purposeful sampling (Miles & Huberman, 1994) to select cases for the post-experiment interview study. Using a full list of employees, supervisors, and assistant managers who were present during the interventions, I randomly selected individuals to participate in this study from each experimental condition. This ensured that responses would not be systematically biased or influenced in any particular grouping other than the experimental condition to which participants belonged.

Following the recommendations of the embedded design approach (Creswell & Plano Clark, 2011), I conducted interviews after the quantitative portion of the research had finished in order to not influence the processes and outcomes of the ongoing field experiment. I and a trained, PhD research assistant conducted 83 semi-structured interviews (Charmaz, 2006) over the course of two weeks (role clarification = 26; norm establishment = 18; both = 20; control = 19). The protocol for these interviews is in Appendix A. The questions in the interview for the experimental conditions focused on eliciting individuals' experiences with the interventions (e.g., what occurred), general questions regarding any changes or challenges that occurred (or did not occur) after the interventions were introduced, and specific-follow up questions to probe at the possible theoretical mechanism that explains the results for the quasi-experiment. For example, to understand how supervisors versus peers enforced citizen expectations, I asked participants to think of a specific instance when someone did not follow the Food Co. 7 and how did

supervisors or peers respond? Furthermore, to match the time points in the quasi-experiment, I asked the same set of questions about the two different time points that fell right before the administration of the T1 and T2 surveys. For this, I relied on an event-tracking technique to ask about two salient time points that occurred at work for employees – the introduction of the interventions and the annual holiday lunch. This technique was used in order to address recall bias as these events were highly specific and memorable to participants (Miller, Cardinal, & Glick, 1997; Vuori & Huy, In-press). In addition, during the interviews, we employed techniques of factual manifestation and asking for concrete examples to also help address the biases that can occur from recall (Miller et al., 1997; Vuori & Huy, In-press). A separate interview protocol was developed for the control condition in order to enable comparisons across treatment and non-treatment groups (see Appendix A). They aimed to elicit similar processes and responses to that of the treatment groups but were more general about working at the company. In addition, they helped to check for treatment diffusion. Interviews typically lasted between 15 and 45 minutes, were recorded, and professionally transcribed.

### **Data Analysis**

Guided by our existing theory, I developed a coding scheme to examine the theoretical constructs of interest. That is, to understand how the proposed theoretical processes about supervisor and peer expectations influenced (or did not influence) the changes in OCB that were observed in the quasi-experiment, I developed a coding scheme to capture these processes and outcomes. This was a four step process. First, after recording condition-specific information (i.e., which department participants

worked for) from each transcript, I stripped this information to from transcripts. This enabled us to code each transcript blind to the specific treatment condition that the participant received (except for the control condition which had different questions than the treatment groups). Second, I and the same research assistant who conducted interviews created a starting list of codes (Miles & Huberman, 1994). For example, we created seven codes for citizenship behaviors of interest that the company implemented in the Food Co. 7. In addition, we also created several codes for expectations that aligned with the proposed theory. Because expectations is a broad concept, and we discuss it in several ways in our theory, we unpacked this with multiple codes. Example codes for expectations included references to source of expectations (supervisors or peers?), clarity of expectations (did employees have a clear understanding of what was expected or was there confusion?), responsibility or accountability (did participants mention feeling responsible for certain behaviors?), strength of expectations (how strongly did participants feel the expectations?), enforcement of expectations (what did supervisors or peers do when someone deviated from expectations?), and any instances of resistance of expectations. Second, using this coding scheme, we coded a random sample of 10% of the responses (Miles & Huberman, 1994). After this, we met to discuss our coding, talk through and resolve any disagreements, and we revised our coding scheme by adding a few more sub-codes to add more precision (e.g., clarity of expectations was divided into very clear, moderately clear, not clear). Finally, we distinguished codes by time points such that we identified whether participants discussed experiences and events around early on after the intervention started (T1) or several months later around the annual



holiday lunch event (T2). Fourth, I and the research assistant independently coded all 83 transcripts using NVivo software. We compared our agreement on the citizenship and expectations codes (see Table 3) and resolved any disagreements to create one master file of codes. These codes were later matched with the condition information of each participant to enable summarizing of main themes found for each experimental condition (Edmondson, 1999).

## **Study 2 Findings**

To unpack my findings, I examined the core themes found in each experimental condition based on the codes. Specifically, I focus on three categories of findings: (a) evidence that the ongoing interventions went as designed (Creswell & Plano Clark, 2011) (b) confirmation (or disconfirmation) of results from the quasi-experiment in whether and when OCB changes occurred (i.e., triangulation; Jick, 1979); and (c) exploration of theoretical mechanisms such as how or why OCB changes occurred during the interventions (Edmondson & McManus, 2007).

## **Manipulation Checks for Ongoing Interventions**

**Treatment alignment.** Starting with the manipulation checks shown in Table 4, the evidence reveals that the interventions occurred as planned for all experimental conditions. First, the experimental conditions were closely contained in their respective treatment groups (i.e., treatment diffusion did not occur). For example, employees in the role clarification and the both condition received Food Co. 7 badges, but employees in the norm establishment condition did not. In addition, groups in the norm establishment and both conditions had ongoing, structured engagement meetings, whereas groups in the role clarification condition did not.

Second, each condition reflected the primary source of expectations that it was designed to tap. For example, in the role clarification condition, supervisors and employees discussed how OCB expectations were mainly driven from supervisors. In contrast, in the norm establishment condition, I found many instances of supervisors encouraging employees to promote citizenship expectations and hold each other accountable to them. Finally, for the both condition, I found examples of both peer and supervisor sources of expectations involved.

**Treatment deviation.** Despite this strong evidence that the treatment remained intact and as planned for the majority of the time the interventions occurred, there are two deviations to note. First, one common deviation in each of the experimental conditions receiving treatment was, as time went on, the strength of the treatment occurred less frequently (e.g., less follow up from supervisors or less engagement meetings). For example, an employee in the role clarification condition commented in reference to whether his supervisors did anything different in terms of promoting and enforcing OCB expectations later on (Employee 103):

*“[supervisors] just didn't really have to ... Like I said, [they] didn't have to do too much adjustment...we're operating pretty smoothly, so only when issues came up would they really bring it up. When we were going good, it wasn't really brought up.”*

Similar to the role condition, the theme in the norm establishment condition that emerged from the interviews was that engagement meetings to go over the OCB expectations occurred for either less time or less frequently later on during the interventions. For example, one manager mentioned how they used to go over each principle in the Food Co. 7 every day, but later on they would pick just one to discuss

each day (Manager 241).” Consistent with the other two conditions, the follow up occurred less for the condition that received both interventions. For example, an employee discussed how the “meetings slowed down” (Employee 136) and an assistant manager reflected a similar theme (Assistant Manager 221): “[the meetings] started to dwindle down. Maybe this is me but when you see that people are gaining it and understanding it, you feel the need less to do it, you understand?.. In the beginning, it was every day. Towards the second period, it was a couple of times a week.” This theme across all conditions is in line with the findings below in that there was not as much a need to meet to go over the citizenship standards and expectations later on since most employees were performing these behaviors regularly at these later stages in time.

Second, as mentioned in Study 1, there was only one instance of treatment diffusion where a supervisor in the control condition reported knowing of the Food Co. 7. Thus, the treatment was well contained to the intervention conditions. In this one instance, a supervisor reported how his small group in the control condition received part of the role clarification and part of the norm establishment interventions. That is, his group members mistakenly received the Food Co. 7 badges that employees wore and conducted several engagement meetings over the course of the interventions to discuss the Food Co. 7. However, this group did not receive the initial kick-off meeting nor was the supervisor trained on ways to promote and enforce OCB expectations from himself or from peers. Besides this one group, there was no other evidence from employees or supervisors in the control group of treatment diffusion (Shadish et al., 2002).

Next, I moved to exploring the effects of these different interventions on the processes and outcomes for OCB change. Overall, informants in all intervention conditions (i.e., not the control group) reported positive changes that occurred after their respective interventions were introduced. The differences, however, is *when* those positive changes were realized and *how* they were realized. Below, I discuss these findings.

### **Evidence for Changes in OCB**

**Role clarification changes in OCB.** The common theme revealed in the role clarification intervention is that citizenship behavior from employees improved, and it changed almost immediately after the intervention began. Many participants reported positive changes when asked about the first few weeks after the interventions were introduced. For example, an assistant manager (101) explains how he saw his group react differently to garbage on the floor after the intervention was introduced; “Before it was like ‘that’s sanitation’s job.’ Now, everybody would have picked it up and throw it in the trash.” Another employee saw changes right away regarding group members helping each other more (Employee 105):

“to me it was like everybody came together, you know, helping each other out a lot more...helping each other put their food in the tubes...helping clean up at the end of the shift... everybody pretty much just pitched in and helped get things done.”

Another employee in a different group reflected how he felt group members were more helpful to him shortly after the intervention began. He told a story about how his Spanish-speaking group members would now help him more to understand (Employee 106):

“I was the only non-Spanish [speaking] employee when I first got there. It was really hard for me to understand. After the Food Co. 7, a couple of guys took their time and

taught me a couple of words. They took the time and explained to me what was supposed to be done, and stuff like that. Before, it wasn't like that.”

Although respondents confirmed that the positive changes in OCB occurred soon after the introduction of the role clarification intervention, they also discussed how these positive changes remained and stayed the same at later stages in time. That is, informants talked about how OCB did not drop or improve later on in time, but instead, employees’ OCB became a routine. For example, Assistant Manager 101 talked about how later on “it was pretty consistent...everybody doing the same thing, going with the flow...it was very consistent. Employee 105 echoed this by saying, “It was still the same. Everything was still good. Everything still stayed the same.” Another employee (109) commented: “Around the holidays, the Food Co. 7 was still going strong though our workload wasn't as heavy...Everything was relatively smooth, everything was done on time, warehouse was nice and tidy and clean and everything that we were doing was on point.” Finally, one employee (205) talks about how his group changed early on, and it has remained the same ever since: “Everything's been different since then [the start of the intervention]...the change being there and it was still there. We are not the same group that we used to be back in the day. We all changed.”

The pattern of these answers largely aligns with the results from the quasi-experiment. Early on, the role clarification intervention had positive changes on employee OCB. However, after this initial increase, employees’ OCB remained at the same level at later stages in time.

**Norm establishment changes in OCB.** Similarly, in the norm establishment condition, informants reported positive changes in OCB. However, early on, the

answers were split. While some people felt there were positive changes, others felt that there were no changes right away. Starting with the former, an assistant manager (241) shared about beginning the intervention: “It brought a lot of stuff to light. A lot of things that people wouldn't normally think about on a daily basis while they're working...I think there was a better understanding of the way to treat people.” In addition, an employee (141) in another group reported some positive changes early on: “the cleanliness, like people were more clean and also the uniform, the way that they wore it...they would do things orderly, the way it needs to be done with proper sanitation.” Finally, one employee (208) admitted how before the introduction of the norm establishment intervention, he and his team members would leave maintenance issues for the night shift, “before, let's say a water hose is broken...[we] just leave it for night shift...too many people would leave it like that: ‘Night shift is gonna fix that.’” However, early on after the norm establishment intervention, they would no longer do this and started helping night shift: “Now, I see the broken hose...I or the other guys just shut it off, cover up the holes, put the clamp, boom, done.”

Although some respondents felt these changes occurred initially, others felt nothing really changed at first. For example, Employee 134 talks about how the improvements in OCB occurred much later on: “It definitely took time. It was very slow [early on] because like I said people didn't take it serious.” Another employee (233) agreed and recalled:

“In the first month, I feel like people were still not very committed with the Food Co. 7. For example with helping each other, some people were not very on board with helping each other still. They said like ‘well, why am I going to help you? I'm doing my job.’”

Finally, an assistant manager (132) discusses resistance from employees in trying to implement the norm establishment:

“People were concerned in the beginning...the attitudes at the beginning, like I said it was a little bit hard. They were saying that we ask and we ask but we never give them nothing...but things improved after that month...it took some time...like a month.”

While informants are split about the positive changes initially, all agreed that later on in time, most employees' behavior improved over time and demonstrated OCB. That is, regardless if they felt changes occurred initially or not, most reported that by the later time point, employees were exhibiting citizenship behaviors. For example, one supervisor (131) reported how employees' generalized compliance and voice behaviors improved: “they pay more attention to the produce that we are running. If they find something in the mango they say, ‘Oh wait, wait, wait, stop the line.’ They help me to keep up the quality.” The same assistant manager (132) that said the beginning was challenging, talked about the improvement later on:

“They are...more proactive, also clean, and also helping each other. That's the main one. They been helping each other more than they used to be before...for example, we had employees that they might need some days off and they help each other, ‘Oh, I will come in for you.’”

Another supervisor (236) reported much improvement over time:

“they're a lot more proactive and help each other...before I even have to tell them that we need to change the fruit, they're already working on it. They're also more fair [with each other]. Since there's some jobs that are more tasks, jobs that are more time consuming or harder, they, on their own, rotate to make it fair.”

Finally, Employee 141 thought that voice behaviors by employees also increased later on:

“we had some old pallet jacks...and they wouldn't work very well anymore. It was hard to push them or pull them...we talked about it, and [supervisors] were able to get new jacks that are working better. Also we gave suggestions about the way in which

we set up the line. Supervisors have heard them and...implemented our ideas. Now we're working better.”

Overall, informants in the norm establishment condition reported that many positive improvements in OCB occurred mostly at later stages during the intervention. Interestingly, this is in contrast to the role clarification condition where respondents said that everything remained the same after the changes occurred early on. This pattern of answers in the norm establishment condition seems to directly align with results from our survey measures. That is, early on, the norm establishment did not lead to many positive changes in OCB right away, but later on, it had significant positive effects on employee OCB.

**Both role clarification and norm establishment changes in OCB.** Although one employee (Employee 219) reported positive changes at first, the majority of informants in the condition that received both interventions said nothing changed at the beginning and that it took time for the changes to occur. Of all the experimental conditions, this condition had the greatest amount of references to how nothing really changed at the beginning period in time. For example, an employee (124) commented that how “no one can bring change within a short period of time...after conducting meetings several times, then [people] started improving, little by little.” Another employee had a similar reaction to the implementation of the intervention (Employee 136): “some people took a longer time to catch up. People...had certain complications so it was necessary to have a series of meetings.” Another employee (237) who began working right around the introduction of the interventions commented on how people were not very helpful to her early on: “at the beginning...the supervisor paid attention to me and would help me but other people



would not really help...some would actually kind of joke or laugh at me because I didn't know how to do the work.” A supervisor (220) even commented on how some of the same bad habits from before were still occurring early on:

“It took awhile. It took awhile for it to shift in...there's still bickering over items in the warehouse. ‘This is my pallet jack.’ ‘This is our pallet jack.’ ‘We need these totes.’ ‘You can't use them’...I mean, it's just stupid stuff like that.”

However, this changed later on as people reported significant improvements in employees' performance of OCB. For example, the same employee (237) who reported people did not really help her at first, talked about how everyone would help everyone later on in time:

“there was a lot change for the good. We would help each other more. For example, in the line we needed to put 4 tomatoes and for some reason one person only had 3 and somebody else, without even telling them, would go and get another [tomato] or if there wasn't enough cheese at the line...somebody else would go get cheese so we would have enough. Before, people wouldn't do that.”

Similarly, Supervisor 220 talked about one employee in her group who changed his behaviors substantially at the later period of time: “[the interventions] opened up their thought process...There was actually one in particular...he always had a bad attitude and always would gripe over this or gripe over that, but he's really changed his ways...he started helping.” Employee 217 felt his group members had strong improvements later on: “We were all learning new things. Everybody was giving a hundred percent. They were all respectful to each other.”

Notably, this main pattern of responses from informants in the experimental condition that received both interventions converges with the results of the quasi-experiment. That is, multiple sources reported how nothing really changed at first or

that it took time for the positive effects to emerge. In contrast, at later stages in time, people reported strong improvements in OCB among employees.

While the findings above are important because they help to confirm the results of the quantitative Study 1, what is more important is to shed light on how or why the changes occurred. Next, I present the findings for the theoretical mechanisms across conditions.

### **Exploration of Theoretical Mechanisms for Changes in OCB**

**Role clarification: Strong supervisor expectations.** The main driver behind the initial positive changes in the role clarification seemed to come from the strong expectations and responsibility employees now felt for performing citizenship. For example, an employee (103) discusses the changes in expectations he felt that occurred early on after the intervention began:

“If I could say one thing that's changed a lot is that you're expected [to help] now, it's not just [if] you're a nice guy, you help others...even the guys that don't really want to do it, do it now. Whereas before it didn't happen. I remember a guy, he just never wanted to do it, he would just do all his stuff. You can't really do that anymore, that's the biggest change. It's not really a choice to help, you have to. If someone sees someone that needs help, and you're just sitting around, that's an issue now, whereas before it was like, well...who cares.”

Another employee (104) also discusses the changes in expectations, and why it helped increase citizenship:

“Once we started following [the Food Co. 7], it actually made us better to a certain extent, like, this is what [supervisors] expect from us, so now we have to do it. When something is not expected from people, then they won't do it. But it's like, okay you expect us to be this way, now we have to do it or our job is at stake. So when people grasp onto that concept it was just jelling, it was a good experience.”

Additionally, these expectations for OCB largely came from supervisors, who were the ones driving them in the role clarification intervention. As Employee 205

recalled: “basically your supervisor and your manager was looking on ...they already know what the Food Co. 7 is so...they're going to force that hard so you just got to do it.” As Table 4 shows, these expectations were strongly promoted and reinforced by supervisors. Similarly, Employee 109 noted: “there was a follow through. We all were pulled aside, asked to recite the [Food Co.] 7. [supervisors] wanted us to know that's something they took seriously and how each individual felt they were complying with the [Food Co.] 7.” Supervisors also confirmed the follow up regarding the OCB expectations, such as Supervisor 101 spoke about how they used to hold employees accountable to the new citizenship standards, “If we walk by and somebody says something bad to somebody we would say, that's not being courteous. That was a way to say – ‘Number 7 be respectful – you got to be respectful’ ...Somebody's standing on the pallet, we be like ‘Number 4 [be safe].’ We used the numbers as reference points.”

This constant follow up and enforcement by supervisors seemed to create strong expectations in employees that they should be good citizens at the workplace. These actions by supervisors had an immediate effect on employees’ expectations for OCB, which presumably increased their performance of OCB. In addition, supervisors’ promotion of citizenship at Food Co. had another, unexpected effect on employees. That is, supervisors acted as role models to employees in terms of holding one another accountable to citizenship behaviors. Although supervisors did not actively encourage and train employees to hold each other accountable (which they did in the other two interventions), employees seemed to have followed their supervisors’ lead in enforcing OCB from each other. For example, Assistant Manager 202 accounts how they set the tone among supervisors and managers in calling out employees:

“We played a lot of games where we call somebody out on something...they could be doing something they shouldn't be doing and we go up to them and say, ‘Number five. What's up with number 5? Why are you not being clean?’ Or, ‘Number 7. Why are you not respecting?’ Call them out on it. We made it a game.”

He continued to say that after managers and supervisors started holding people accountable, that employees began to catch on and started doing so as well:

“Fred and I, we started it, and it went through our department...among the whole crew.” These behaviors seemed to catch on among some employees as they also would hold team members accountable to the OCB expectations. For example,

Employee 138 discusses how this occurred early on:

“everybody participated to follow the Food Co. 7. If we see somebody, for example, and they're not wearing their uniform properly, we would tell them like, 'Hey, you're not wearing it properly. You have to go and change.' It would come from us, as well as from the supervisor. The supervisor is sometimes busy doing something else and that's more often the time when we will say something.”

This unexpected finding of peers' role modeling their supervisors in terms of holding each other accountable to OCB also may have had an effect on the positive changes that occurred in employees OCB earlier on. While most employees commented that they felt the expectations and responsibility coming mostly from supervisors, this peer pressure that occurred at times could have also added to accountability group members felt in performing citizenship. Overall then, it is clear that the role clarification intervention increased employees expectations for citizenship early on, which then positively influenced their performance of OCB, and these changes remained throughout the later stages of the intervention.

**Norm establishment: Overcoming discomfort and resistance in peer-to-peer expectations.** After going through the transcripts, it became clear that employees were not very comfortable accepting their new role to monitor and call out

peers regarding their citizenship behavior at the initial stages of the norm establishment. For example, shortly after the norm establishment was introduced, Employee 208 remembers an encounter with a fellow group member about how his colleague was cleaning a machine (which required a lot of water) but failed to be courteous or helpful. However, Employee 208 did not confront him:

“One guy, he just put water everywhere in my tools...Oh man, I was going to kill this guy. I was so mad...I found my tools full of water...I just walked out, come back to clean my tool, fix the machine, that's it. What can I do? What can I say?”

Another employee (239) recalled an event where he noticed someone not being safe, but failed to say anything: “one of the pallet lift drivers was doing something, and [I thought] ‘man, do I say something to him? I don't want him to think that I'm an asshole.’ I just wanted him to know you really shouldn't be doing that.”

This employee expanded on his observation:

“when [we] started it [the norm establishment intervention], it was like someone would mess up or someone would do something that wasn't right and other people...they wouldn't necessarily say it to that person...it is uncomfortable...when you got to call someone out...any type of confrontation is usually uncomfortable.”

It appears that this lack of comfort from peers to monitor and enforce citizenship expectations resulted from two reasons that occurred early on. The first is that this new role for peers went against the previous norms and habits of the organization, which was that supervisors were responsible for correcting behaviors. For example, Supervisors 232 talks about how early on, employees would still go to her when their group members were not following the OCB expectations instead of confronting them directly:

“some of the members weren't following the Food Co. 7...it was mostly about cleanliness, about washing their hands or disinfecting their hands. The other group

members...would go directly to me to ask me to tell them that they were not following the Food Co. 7. Most of the time, they would come to me.”

The second reason is that, early on, when peers tried to confront colleagues, it was not always well-received. In other words, some members resisted enforcement of citizenship expectations from peers. For example, Employee 233 talks about how some members tried to encourage other members to help out more, but it was not taken well: “We would sometimes say ‘hey, you should help,’ but in general they would take it wrong...For example, if somebody wasn’t being helpful or helping one another, if someone told him you should help, he wouldn’t take it well.” A similar situation occurred for Employee 235 who talks about times when he or other members in his group would call people out for not changing their gloves or washing their hands correctly, and how their peers initially resisted their commands:

“Sometimes they would say ‘Why? You are not my boss. Why are you telling me?’”

Finally, a supervisors (234) recalls the initial stages of the intervention on how the peer enforcement was occurring:

“there was some people that wouldn't follow the Food Co. 7 and they would tell them, and they would also tell me...a specific example is...dressing appropriately. When somebody doesn't do it correctly and [their peers] tell them, they say, 'It's not your problem. What do you care?' If I, as the supervisor, tell them, they do it. They don't even talk back or anything.”

Part of the reason employees may have resisted their peers more earlier on is because they were less skilled or convincing in enforcing the OCB expectations. For example, Supervisor 236 noted that employees would listen to him more earlier on when he would enforce OCB expectations more so than group members because he would provide better rationale: “they would listen to me more...because I would say

to follow [the Food Co. 7] with examples like, ‘We should do it this way because if you do it this way, this might happen.’”

The net effect of these themes seemed to be that (a) peers were less likely to promote and confront other peers early on about their OCB and (b) expectations for OCB were less strong. This seems to explain then why the norm establishment intervention was not effective in changing OCB at initial stages. However, over time, this initial lack of comfort and effectiveness in peer-to-peer OCB enforcement seemed to dissipate as multiple informants talk about how, later on, employees significantly increased their communication to peers regarding OCB. For example, starting with the first employee (208) who failed to call out his group member for failing to be courteous and helpful, Employee 208 had a much different response when the same incident occurred later on during the interventions:

“the same guy. He put water everywhere again. I just went to him...I showed [him] my toolbox ‘Yo, this is the second time...you have to pay attention what you’re doing’ He said, ‘Oh, I’m sorry. Never gonna happen. I’m sorry.’ ...Next time he was doing the same thing. You know what he did? He went for plastic bag, he covered all my gear, my tool box, and then he cleaned it. He learned because I talked to him”

Reflecting on these changes, Supervisor 232 also notes the changes she saw in the employees’ peer-to-peer accountability later on:

“before, people sometimes would go in [the production room] and maybe because of a mistake they forgot to put their hairnet on, and they would go all the way inside and nobody would say anything. If I realized, I would say something. But, at the time in December, I didn’t really have to intervene because people were, group members would tell them, ‘Hey you forgot this’ or ‘You should put this on’... I do feel that they have also changed the way that they receive [direction]...if a group member tells them, they’ll go and change or do it properly. They no longer need it to be the supervisor to tell them.”

Not only did employees speak up to their group members later on in time during the norm establishment interventions, but it also appeared that group members were more receptive to their influence and direction. For example, Employee 107 said “One of the guys was working on a dicer knife and I noticed that he wasn't wearing gloves...I pointed to his hand and said, ‘Make sure you get your gloves on’ and he said, ‘Oh, thank you.’ He put his gloves on and he was safe when he did it...I called him out on it and he was respectful of it. He was like, ‘Oh yeah, thank you,’ and he put them on.”

Employee 235, who earlier commented on how employees initially resisted his influence, noted the changes later on in time: “People were more relaxed, more laid back. When you would tell them something, they wouldn't jump back at you.”

These changes in peers enforcement and receptivity of citizenship expectations (i.e., peer norms for OCB) seemed to result from continuous reinforcement from the norm establishment engagement meetings. As shown in Table 4, these groups constantly met to discuss the OCB expectations, and supervisors consistently promoted that peers need to hold one another accountable to the standards. In all likelihood, acceptance of these peer norms (both to enforce and receive) took time and practice to gain the comfort and confidence to do so. The interviews revealed how the meetings seemed to facilitate both of these aspects. For example, Employee 239, who was hesitant at first to call people out, talked about his experience with gaining confidence:

“we talk about it every day and it keeps it fresh in your mind...The daily meetings they definitely help you because it keeps it fresh and you're constantly talking about it so...[you're] just actually doing it [calling people out on the Food Co. 7]. It's like, ‘okay, well it wasn't so bad. You don't think I'm a dick either’... everything I was worried about is nothing...It definitely gets easier to say stuff to people.”



Employee 134 talked about how these meetings served as a safe practice grounds to call one another out on issues that occurred from people not following the OCB expectations:

“It was pretty much like the 15 minutes laid everything on the table that you had to say, anything happened the day before we talk about it today, get rid of it, and then move forward...It was pretty much like an open discussion. People felt comfortable.”

The net result of this occurring over time is that employees began to develop comfort and confidence in holding each other accountable to OCB expectations. For example, Supervisor 232 talks about how she pursued exactly that goal for her employees – that is, to use the meetings to challenge more shy employees to speak up to promote OCB expectations:

“There was a person that because of the way she is, she's very timid, very introverted, and she would never speak up in the meetings, and everybody said, ‘Hey. She never talks. She never talks.’...What I did was kind of challenged her like, ‘Hey. You need to really learn about [the Food Co. 7] and speak up because tomorrow ... You're the one that's going to be leading the meeting and telling us about the Food Co. 7.’ It worked and now she talks more. She communicates more. She lost the fear after that day.”

Interestingly, the reinforcement and practice of calling each other out increased employees’ comfort and confidence so much that, at later stages in time, they were even willing to call out non-peers when they were not following the OCB expectations. For example, an assistant manager (132) laughs when remembering how, later on, employees would sometimes call out their supervisors to be more respectful: “some supervisors are loud, they're not being disrespectful, but they're loud and employees can take it the wrong way...so they would tell [the supervisors] ‘remember the Food Co. 7’” Another employee (235) got very courageous and even called out a member from upper management when he was on the production floor:

“one time, one of the owners, he came into the room. I saw that he didn't wash his hands. I actually called on him and was like 'you didn't wash your hands!’”

Altogether, the informants' answers from multiple sources point to the broad theme of how employees initially resisted enforcing and receiving expectations from one another, but over time, the acceptance of this grew as employees would promote and hold each other accountable to OCB. As a result, it is likely that the positive changes in OCB that occurred later on in the norm establishment condition coincide with these changes in peer-to-peer expectations.

**Both role clarification and norm establishment: Overcoming confusion in understanding expectations and discomfort in peer-to-peer expectations.** As shown in Table 4, informants talked about how supervisors promoted and enforced citizenship expectations as well as encouraged employees to do the same with their peers. Similar to role clarification condition, employees reported how expectations were coming from supervisors early on. For example, Employee 118 mentioned how supervisors would tell employees they need to follow the citizenship expectations: “The supervisors...they talked about the Food Co. 7...'hey, you gotta do this one; you gotta be proactive; you need to follow the Food Co. 7 at this company.’” Similarly, Employee 237 remarked: “during the day they [supervisors] would still talk to us and say like, ‘Remember those rules and help each other.’ They would reinforce it during the day.”

However, unlike the role clarification condition, there seemed to be greater confusion or lack of understanding from employees initially. That is, the main reason for why it seemed employees OCB did not change at initial stages is that there

seemed to be more confusion and misunderstanding among employees in the group receiving both interventions. For example, an assistant manager (221) spoke up

“Here’s what I noticed. As far as the culture here and them being educated on what we’re trying to do, they really didn’t have a grasp of it [early on]...everybody was confused right after the introduction, like ‘what the hell was going?’...Earlier on, there was not much change.”

A supervisor (223) expanded on this:

“At first, I didn’t see the vast difference...it takes time to catch on with the rules and regulations [of the Food Co. 7]...at first, they were, ‘Oh no, this doesn’t make any sense’... they used to forget. They were trying, but it was difficult. They used to forget.”

From an employee’s (216) perspective, although she felt she understood the new expectations, she commented on how the lack of changes in behavior that occurred at first were because her group members were not understanding the citizenship expectations even when she tried to inform them:

“At the beginning, no, because...there’s a language barrier in here. A lot of them...because I speak real firm, they think I’m being too aggressive. I try to tell them and speak clear and slow so they can understand...but if they don’t understand, they be looking at me like I’m trying to be smart to them, and I’m not.”

Thus, it seems that employees did not really have a strong understanding of what was being expected of them initially in terms of their OCB. Adding to this confusion was a similar theme that was found in the norm establishment condition; that is, most employees did not speak up to promote or hold each other accountable to OCB early on. For example, Employee 217 commented on the lack of helping and speaking up between group members at earlier stages:

“There was really no communication like, ‘You go here. You do this.’...nobody was really talking to each other. We were really just waiting for somebody to do something. [For example,] if we’re running out of product, they would wait and not saying anything.”

Assistant Manager 221 reflected a similar observation: “back then first time around...if something would go wrong, things ain't coming by the right away, quality issues, something like that, nobody would say anything, it would just happen.”

Despite these initial challenges, informants talked about how, over time, employees began to understand the OCB expectations. For example, Employee 136 discussed the improvement and understanding that occurred later on:

“Everybody is aware what to do, what not to do...much improvement because people knew now what you do...you have to watch the line, how to treat your gloves. We knew what to do, what not to do, because we have the meeting frequently so people were getting very abreast of the [Food Co. 7].”

Employee 124 talked about how at the later stages, “Nobody forgot about [the Food Co. 7]. Everybody remembers it and implements it their job.” Finally, Assistant Manager 221 commented on how people understood and took responsibility of citizenship later on:

“definitely after the second time, they started really understanding what’s going on and what we’re looking for...mainly the [Food Co. 7] principles but those principles translate into everything that we're looking for as far as our deadlines, quality issues, our safety issues. It all ties into the stuff we saw...without us even saying something...they would see something and yeah, I want to say they owned it... they just started owning things more”

These changes were attributed to the clarity and understanding that comes with repetition and reinforcement of expectations. For example, Employee 136 mentioned this in how understanding gradually improves over time: “I think after the series of meetings, I think things picked up a little bit faster... once you do something and you do it gradually and do it frequently, people can pick up.” Assistant Manager 221 reiterated this theme as well:

“At first...they just didn’t understand what we were trying to do...it took us reiterating this every day: 'You guys have got to learn it; you guys have got to

understand what's going on; it's going to help you.' That they finally got it, understood, and it's just been improving.”

Another supervisor (229) describes how the reinforcement of OCB expectations in the meetings and follow up by supervisors has helped make the changes in understanding over time: “it's been constant. That's why it has helped a lot...if it's constant and if you're listening to it and working on it all the time, [their behaviors] eventually will come out naturally.” Finally, Supervisor 223 reflected on how at later stages, employees seemed to feel more accountability from the Food Co. 7 and supervisors: “they were forced by the policy as well as by the supervisors, from my force as well as from the force of [other] supervisors, we pushed people to obey and to be helpful with everybody.”

This trend in improved understanding and accountability to the OCB expectations helped improve these behaviors in the later stages of the interventions. In addition, informants also reflected similar themes found in the norm establishment regarding how and why employees began holding each other accountable to and speaking up about OCB. For example, one supervisor (223) talked about how the meetings helped facilitate employees holding each other accountable at later points in time: “from the meetings...that's why when one would forget, having the other people to just help them, ‘Hey, you forgot this one; you need to follow this one.’ They would teach one another.” Assistant Manager 221 also noticed changes in the peer-to-peer communication surrounding OCB and attribute it to them needing to gain comfort: “At first they're shy but the more you deal with them, the more they get comfortable with... asking questions and...giving feedback...I guess that they just had to come out of their shells.” Furthermore, Employee 217 reflected a similar theme in the norm

establishment condition on how group members opened up more and were more respectful to one another with their peer-to-peer communication, which helped with promoting and enforcing the OCB expectations:

“I would say things changed...there was more communication, people just more open to allow people to do different things. People were more respectful towards each other...[for example] asking people politely ... 'Hey, can you grab this for me or do that for me?' People were just more open to each other.”

In the condition that received both the role clarification and norm establishment, it is clear that clarity of expectations and peer promotion and enforcement became much stronger at later stages in time. Initially, informants discussed some confusion regarding the expectations as well as a lack of peer enforcement. These trends seem to parallel the reported changes in OCB of employees; although there seemed to be no changes early on, this intervention helped to create significant improvements in employee OCB later on.

### **Control Condition Findings**

A few notable comparisons emerged from the control group. First, when asked about the important values and behaviors that are expected work, informants from the control group focused mostly on sanitation-compliance (i.e., context-specific compliance) and safety. For example, Supervisor 111 said “we have to really clean and make sure...the food can go out clean and healthy...for the people out there” and Employee 214 mentioned “Safety...It is very important because you have to watch and pay attention.” The focus on these two citizenship behaviors is not surprising given that these are often discussed in onboarding and trainings that occur sporadically at the company. However, besides these, informants rarely discussed other types of citizenship behaviors that were expected (e.g., helping, initiative,

courtesy, voice). Thus, this comparison helps show that the intervention conditions helped expand the breadth OCB expectations among employees.

The second major theme is how informants discussed that supervisors, and not group members, were the ones who held employees accountable to performance, sanitation, and safety standards. For example, Employee 115 commented on the chain of repercussions if someone is not performing to the standards they are expected to: “[the first time], supervisors will let it be known that you can’t be doing that...they see it again, then [it’s a] second warning. The third time they’ll ask them to clock out, go home.” This reinforces that the norm of the organization is to have supervisors be in charge of setting and enforcing expectations. It helps to further explain why the two intervention conditions that encouraged peers to take over this monitoring and enforcement role may have had some initial problems and resistance.

## Chapter 6: General Discussion

The goal of this dissertation was to explore how time plays a critical role in shaping the effects of supervisor-driven versus peer-based interventions for OCB. I made progress toward this aim as findings across two studies suggest that role clarification and norm establishment interventions uniquely and jointly impact OCB depending on time. This dissertation provides a number of contributions to knowledge on OCB, time, and social influence.

### **Theoretical Contributions**

First, I contribute to research on OCB by building theory for how different sources of expectations uniquely and jointly influence performance of citizenship. Past research on OCB implicitly assumes that (a) source of expectations for these behaviors do not matter (Jiao et al., 2013); (b) that leader sources of expectations matter most (Yaffe & Kark, 2011); or (c) that peers have the strongest influence in eliciting these behaviors from employees (Chen et al., 2013). However, each of these perspectives is incomplete. To address this, my dissertation suggests two key insights. One is that through role clarification, supervisors are more quickly able to establish expectations for OCB and elicit these behaviors than peers can through norm establishment interventions. As the findings from the Study 2 show, employees felt immediate responsibility and strong expectations from supervisors early on in the role clarification. In contrast, employees in the norm establishment condition reported feeling uncomfortable or unable to hold one another accountable to OCB early on, thus lowering the expectations in norm establishment. Therefore, a more complete



picture of the relative effects of supervisor versus peer expectations in changing OCB can come from considering when each of these effects are likely to occur.

The other insight is how supervisor and peer sources of expectation can work in a complementary or competing fashion depending on time. That is, organizations should not assume that promoting OCB expectations from both supervisors and peers will always elicit the highest levels of these behaviors. In fact, early on, the confusion caused by trying to have both supervisors and peers promote and hold employees accountable to OCB seemed to erase the strong effects found in the supervisor-based role clarification intervention. The findings from Study 2 helped to show that employees were greatly confused from trying to understand both their own role and their team member role (Kozlowski et al., 1999) in relation to OCB. Later on in time, however, once employees better understood their own OCB expectations as well as had a greater understanding and comfort in enforcing peer norms for OCB, I found a complementary effect when both supervisor and peer expectations were utilized to enhance OCB. The overall implication is that considering both *when* in time expectations for OCB are trying to be established and from *whom* the expectations are coming from enables us to develop precision in predicting the effects they will have in employees' performance of these critical work behaviors. These results also speak to theories investigating how leaders should intervene and when (Hackman & Wageman, 2005). For example, our findings suggest that leaders may want to focus on helping employees simply understand their own expectations early on and to facilitate team member bonds and relationships, and only later on in time, is it more

appropriate to add more complicated aspects of the team environment and social roles of monitoring and enforcing expectations amongst one another.

Second, this dissertation adds to theoretical progress in understanding the important role of time in organizational research (George & Jones, 2000; Mitchell & James, 2001; Shipp & Cole, 2015). Specifically, it highlights how when considering the relationship between expectations and OCB, scholars should take time into account such as considering whether expectations are in the forming or formed stages of development (Mitchell & James, 2001). For example, when attempting to form new or change existing expectations for OCB, supervisors or leaders may be more reliable sources in achieving this faster. However, once the new expectations for OCB have been established, both supervisors and peers may be effective in eliciting these behaviors from employees. In addition, by explicitly modeling time as variable in my theoretical model, I am able to examine changes in OCB, which contributes to emerging research examining the antecedents of OCB over time (Lemoine et al., 2015). Specifically, I highlight how change in OCB is differentially impacted by supervisor and peer expectations at different points in time.

Third, I contribute to research on knowledge on social influence (Barker, 1993; Ehrhart & Naumann, 2004; Ilgen & Hollenbeck, 1991; Ilies et al., 2007; Katz & Kahn, 1978a). My findings suggest that not only do supervisors and peers have different effects on impacting OCB depending on time, but that these sources also differentially react to a new role of promoting and enforcing OCB. For example, Study 2 findings showed that while supervisors seemed to immediately adopt their new role of encouraging OCB and holding others accountable, group members took

some time to develop comfort and ability to take on this role (Barker, 1993; Ehrhart & Naumann, 2004). This suggests that organizations need to consider the different approaches that may need to be taken in enabling and empowering supervisors versus peers in their promotion and enforcement of citizenship expectations.

### **Practical Implications**

Organizations must constantly weigh the benefits and costs to different interventions to improve their functioning, and in this specific case, the citizenship among its employees. This can be challenging as a multitude of interventions and processes could be employed in an attempt to increase and sustain employee accountability and citizenship (Bolino & Turnley, 2003). This dissertation provides empirical guidance to managers looking to increase employee citizenship as I demonstrate when role clarification and norm establishment interventions, separately and jointly, can be effective at different points in time in changing OCB.

### **Limitations and Future Research**

Despite the strengths of this research, a number of limitations and associated future research directions should be noted. First, although quasi-experiments have improved internal validity over other methodologies (Shadish et al., 2002), they still lack some causal inference given that participants were not randomly assigned to treatment conditions. In other words, the results in this study could be confounded by systematic differences in the natural groups that exist in the organization. Although I utilized several sophisticated aspects of quasi-experiments, such as coherent pattern matching, a control group, pre- and post-test measures, key control variables that rule out individual differences and departmental grouping explanations (Rosenbaum &

Rubin, 1983), and limited treatment diffusion, all of which strongly enhances causal claims (Shadish et al., 2002), a stronger design would be to run a true field experiment with random assignment.

Second, another limitation of Study 1 is that OCB was solely reported by supervisors. Because supervisors were involved with the intervention process, it is possible differences across intervention conditions systematically influenced supervisors' perceptions of OCB as opposed to actual changes in employee behaviors. While this is less likely given the use of coherent pattern matching as well as the Study 2 findings from different sources (employee and managers) that match the results in Study 1, a stronger quasi-experimental design could use multiple sources during the experiment.

Third, it is possible that treatment was diffused into either the control group or different experimental conditions. For example, I found evidence that a small group of employees in the control condition part of the norm establishment intervention. In addition, although employees primarily worked and interacted within their own respective departments, they did see others from different departments in the cafeteria. While this is a necessary tradeoff of field experiments, and in fact would reduce the chances of finding the proposed effects among conditions, a stronger design might be to run a field experiment where such treatment diffusion could not possibly occur (e.g., multiple sites).

Fourth, field experiments also increase external validity as it tests processes in actual workplaces. However, questions remain to whether or not the effects of the interventions in this dissertation on OCB would generalize to other contexts. For

example, groups in this study were moderately interdependent, and thus certain OCB behavior such as helping may be seen as more extra-role than other companies where groups are highly interdependent. In addition, the baseline for OCB was relatively low in this context of food assembly workers. This may explain why the implementation of OCB standards were mostly seen in a positive light from company employees. For instance, compared to other contexts where OCB may already have a higher baseline rate, further expectations from supervisors and peers may lead to increased stress and strain (Barker, 1993; Bolino, Klotz, Turnley, & Harvey, 2013). Future studies may investigate boundary the conditions where increases in OCB expectations from different sources lead to more positive versus negative outcomes.

Fifth, there are other ways of intervening to establish supervisor and peer expectations than the interventions chosen for this research. Different interventions could produce similar or different effects. Thus, future studies should investigate these interventions in other contexts, investigate other interventions to elicit supervisor and peer expectations for OCB, and also probe for possible moderators of the effects found in this study.

Sixth, although I intentionally chose to conduct Study 2 interviews after the Study 1 field experiment to reduce the possible biases it could cause in the ongoing field experiment (Creswell & Plano Clark, 2011), this choice does raise the issue of possible recall bias from informants. This issue was mitigated by the use of factual manifestations, concrete examples, and even tracking techniques in the interviews (Miller et al., 1997; Vuori & Huy, In-press). Furthermore, given the variance in responses and different patterns across conditions, this gives me more confidence in

the veracity of the reports. However, future studies may choose to qualitatively examine theoretical processes on an ongoing basis as they unfold (Creswell & Plano Clark, 2011).

Finally, while qualitative data and analysis can provide insight into theoretical mechanisms, causal inference is limited in this approach (Creswell & Plano Clark, 2011; Edmondson & McManus, 2007). Although, in this specific case, qualitative data was embedded to understand the results of a quasi-experiment (Creswell & Plano Clark, 2011), future research should further test the prediction that supervisor and peer expectations serve as causal mechanisms for changes in OCB.

## **Conclusion**

This dissertation highlights three pathways to changing OCB of employees: organizations can improve performance of OCB through the expectations of supervisors, peers, and both these sources, but their effects differentially occur across time. My hope is that the insights provided in this dissertation will help inform organizations on how they can manage expectations to create and sustain organizational citizenship from its employees.

# Appendices

## Appendix A: Portion of Post-Experiment Interview Protocols

### *Protocol for Intervention Conditions*

1. Can you describe the training you went through in September about the Food Co. 7?
2. What (if any) changes were made after the training?
3. Within the few weeks after the training when you learned about the Food Co. 7...
  - a. What happened? What were some positive changes that occurred (if any)?
  - b. What were some of the challenges that you faced in the beginning (if any)?
  - c. How did you feel about Food Co. 7?
  - d. What about your group members? Did their behaviors change (if at all)?
  - e. [Employees Only] What about your supervisors? What did they do regarding the Food Co.7 (if anything)?
  - f. Can you think of an example when someone in your group did something that was against or did not follow one of the Food Co.7 principles? What happened?
4. Later on, in December, around the time of the Holiday Lunch Event, I'm interested to know about your experiences then regarding the Food Co.7 and your group.
  - a. How was the Food Co.7 initiative working at this later point in time?
  - b. Were there any changes since that first month right after the training?
  - c. Were there the same challenges? Any new challenges?
  - d. How did your feelings about the Food Co.7 change (if at all)?
  - e. What about your group members? Did anything change about them compared to the first month after the training?
  - f. [Employees Only] What about your supervisors? What were they doing regarding the Food Co.7 at this later point in time? Did anything change compared to earlier?
  - g. At this later time, can you think of an example when someone in your group did something that was against or did not follow the Food Co.7 principles? What happened?

### *Interview Protocol for Control Condition*

1. Were there any specific training that you went through between September and December? If so, can you describe what happened?

2. Can you describe any values of the Company or the things that are important at work?
3. How do you feel about these types of values?
4. What about your group members? How do they seem to feel about these values?
5. What does your company do to make sure that employees follow these values at work?
6. [Employees Only] What about your leads? What do they do?
7. Can you think of one example when someone in your group did something that was against these values? What happened?



## Tables

**TABLE 1**  
**Means, Standard Deviations, and Correlations among Study 1 Variables**

Variable	M	SD	1	2	3	4	5	6
1. Job Tenure	307.27	207.49	-					
2. OCB Role Clarification <sup>a</sup>	.50	.50	-.06	-				
3. OCB Norm Establishment <sup>b</sup>	.48	.50	.26***	.07	-			
4. OCB T0	3.85	.63	.08	-.12*	-.08	(.98)		
5. OCB T1	3.95	.56	.21***	.14*	-.04	.42***	(.98)	
6. OCB T2	4.18	.62	.26***	.01	.08	.35***	.66***	(.99)

Note: Interventions were disaggregated to the individual level when computing the correlation table. Full data was used to calculate correlations ( $n$  is between 183 and 436).

a: dummy coded 0 = did not receive role clarification; 1 = received role clarification.

b: dummy coded 0 = did not receive norm establishment; 1 = received norm establishment.

\*  $p < .05$

\*\*  $p < .01$

\*\*\*  $p < .001$

**TABLE 2**  
**Analysis of Effects of Interventions on OCB Change Using Random Coefficient Modeling**

	<b>OCB T1</b> <i>Model 1</i>	<b>OCB T1</b> <i>Model 2</i>	<b>OCB T1</b> <i>Model 3</i>	<b>OCB T2</b> <i>Model 4</i>	<b>OCB T2</b> <i>Model 5</i>	<b>OCB T2</b> <i>Model 6</i>
Intercept	3.92 (.05) <sup>***</sup>	3.63 (.19) <sup>***</sup>	3.61 (.02) <sup>***</sup>	4.17 (.05) <sup>***</sup>	3.92 (.10) <sup>***</sup>	3.90 (.03) <sup>***</sup>
<i>Level-1 Variables</i>						
Job Tenure	.00 (.00) <sup>*</sup>	.00 (.00) <sup>*</sup>	.00 (.00) <sup>*</sup>	.00 (.00)	.00 (.00)	.00 (.00)
OCB T0	.30 (.08) <sup>***</sup>	.31 (.09) <sup>**</sup>	.31 (.09) <sup>**</sup>	.19 (.06) <sup>***</sup>	.20 (.06) <sup>***</sup>	.21 (.06) <sup>***</sup>
OCB T1				.51 (.09) <sup>***</sup>	.49 (.09) <sup>***</sup>	.50 (.09) <sup>***</sup>
<i>Level-2 Variables</i>						
Role Clarification <sup>a</sup>		<b>.60 (.26)<sup>*</sup></b>	.95 (.10) <sup>***</sup>		<b>.11 (.11)</b>	-.03 (.08)
Norm Establishment <sup>b</sup>		<b>-.04 (.23)</b>	.25 (.07) <sup>***</sup>		<b>.34 (.12)<sup>**</sup></b>	.22 (.09) <sup>*</sup>
Role Clarification × Norm Establishment			<b>-1.12 (.15)<sup>***</sup></b>			<b>.50 (.20)<sup>*</sup></b>
<i>Pseudo- R<sup>2</sup></i>	.19	.26	.30	.44	.47	.48
<i>Pseudo- ΔR<sup>2</sup></i>		.07	.04		.03	.01

Note: Level-2  $n = 40$  and Level-1  $n = 230$  (T1); Level-2  $n = 35$  and Level-1  $n = 150$  (T2); 6 department dummy variables included as controls for all models but left out of table for simplicity in reporting; Job tenure is number of days employees worked at company; Standard errors are provided in parentheses next to parameter estimates; pseudo-  $\Delta R^2$  values indicate percentage of the total variance (i.e., between and within group variance) in the dependent variable accounted by the step; pseudo- $R^2$  value indicates percentage of the total variance (i.e., between and within group variance) in the dependent variable accounted by all the variables in the model together (cf. Snijders & Bosker, 1999).

a: dummy coded 0 = did not receive role clarification; 1 = received role clarification

b: dummy coded 0 = did not receive norm establishment; 1 = received norm establishment

\*  $p < .05$ ; \*\*  $p < .01$ ; \*\*\*  $p < .001$

**TABLE 3**  
**Coding OCB and Theoretical Mechanisms**

Code	T1 Agreement Rate	T2 Agreement Rate	Illustrative Example
<b>OCB</b>			
Context-specific compliance (hygiene and sanitation)	87%	89%	“Before it's like, that's sanitation's job now everybody would have picked it up and throw it in the trash.”
Generalized compliance	90%	87%	“So some people would stay late to make sure everything got done, like me, I don't like to leave until the work is done.”
Helping	92%	95%	“We still have stuff going like people helping each other out. If somebody got a ten-toter, they used to be doing that by themselves, but now it's like, ‘you need help with your ten-toter?’ ‘I'll help you.’”
Initiative	93%	96%	“If I had to say what one thing we were really doing the most it would definitely be proactive, because there's not many of us down there, and we had to adjust on the fly.”
Courtesy toward others	97%	95%	“A lot of people like I said they started respecting ... there's a more respect now than there was before in my opinion.”
Safety behaviors	93%	95%	“...everybody's cautious with the totes now...because they know they can hurt somebody.”
Voice	91%	94%	“Now it's when they get together in a group, a lot more people felt more comfortable to speak up and voice their opinion.”
<b>Theoretical Mechanisms</b>			
Employees feeling responsible for OCB expectations	77%	78%	“Nowadays you're accountable for the stuff you do...we're more accountable for mistakes”
Lack of clarity in OCB expectations	95%	97%	“People were confused about what was going on, trying to make them understand what was going on was a little bit hard.”
Moderate clarity in OCB expectations	84%	81%	“[there was] sort of a little more structure to follow.”
Very clear OCB expectations	90%	92%	“having [the Food Co. 7] outlined is good because that way, you can just reference it and say, ‘Look, this is what the expectation is, this is what we need from you,’ and that's it. You can't say that somebody doesn't understand that.”
Employee enforcing OCB expectations	92%	91%	“Whenever they saw somebody that wasn't doing something correctly or the way they should or was not the Food Co. way, other employees would go to him and tell him like, ‘Hey, you're not doing this right.’”
Employee tell supervisors of deviance in OCB expectations	95%	94%	“If somebody wouldn't listen, then they would go and speak with the supervisor for the supervisor to talk to them.”
Employee does not enforce OCB expectations	98%	99%	“when [we] started it [the Food Co. 7], it was like someone would mess up or someone would do something that wasn't right and other people...they wouldn't necessarily say it to that person.”
Supervisor enforces OCB	89%	89%	“it's just basically my supervisor would come to us a couple of times during the week, ask us about the Food

expectations			Co. 7, what was the fifth one or something like that, quiz us on it and stuff.”
Descriptive group norms for OCB	79%	78%	“Everybody sees everyone [helping out], even the guys that don't really want to do it, do it now”
Resisting OCB expectations	75%	78%	“there's some people like, ‘Oh, I don't know why I have to do this [follow the Food Co. 7]’...but some people... they're not looking to change.”

---

**TABLE 4**  
**Manipulation Checks for Ongoing Interventions**

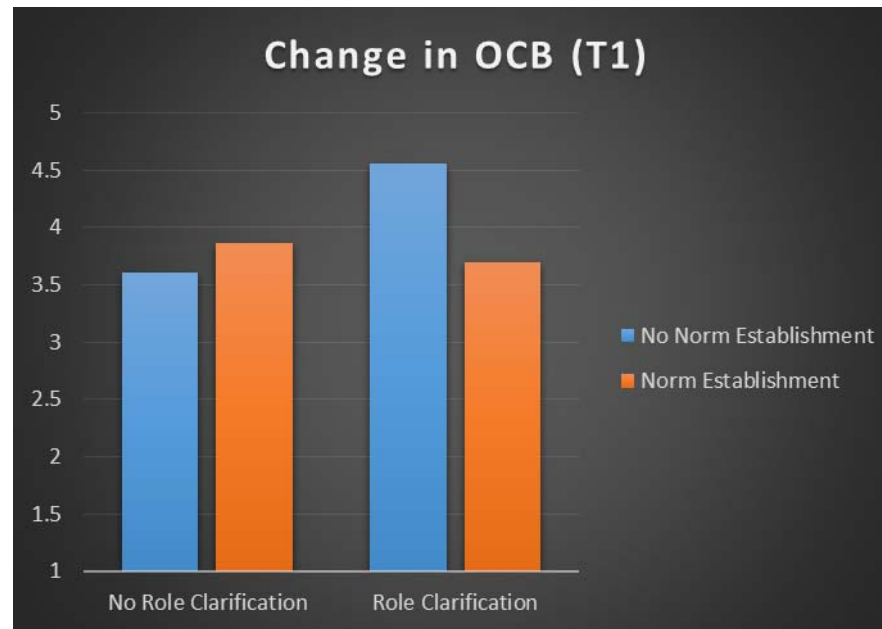
Condition	Evidence of Treatment Alignment
<p style="text-align: center;"><b>Role Clarification</b></p>	<p><b>Employees received Food Co. 7 badges/cards</b></p> <ul style="list-style-type: none"> <li>• Employee 105: “Oh, yeah, yeah, they have the Food Co. 7 badges. [Supervisors] told us we're supposed to have it.”</li> <li>• Employee 106: “Yeah. It was mandatory that we wear the Food Co. 7 badges.”</li> <li>• Employee 140: “[supervisors] gave me the card, and they told me that I was responsible for it. We always had to have it with us at all times.”</li> </ul> <p><b>Supervisors regularly promoted and held individual employees accountable to OCB expectations</b></p> <ul style="list-style-type: none"> <li>• Employee 103: “it's just basically my supervisor would come to us a couple of times during the week, ask us about the Food Co. 7, what was the fifth one or something like that, quiz us on it and stuff.”</li> <li>• Employee 104: “Our supervisor spoke with us. He spoke with everyone one-on-one...the main thing [he said] was helping people because not everybody can work at the same pace and not everybody is the same worker. So, we talked about that and giving 100% and taking initiative.”</li> <li>• Employee 110: “Yeah, the supervisors, they would make sure, they would kind of quiz you, they would just pop up on you and say, "Give me the Food Co. 7." Because you're supposed to know them, remember them...they would just pop quiz you around that time. Made sure of course that you had your badge, we had the clips with string to wear around the neck, to make sure it was shown.”</li> <li>• Employee 204: “[Supervisors] would go around and make sure everybody remembered the Food Co. 7 and actually they would bring it up as much as they could. At times when it didn't look like people were following the Food Co. 7. They would come in and be like, ‘hey be more respectful or be more safe, think about your coworkers.’”</li> <li>• Supervisor 209: “Yeah. I did the one-on-ones and then I would catch guys on the floor randomly and we would talk about it. I asked them how they felt how they were doing with the Food Co. 7s and we would talk about the different things where they thought they were with all of them... We would talk about what Food Co. 7 thing they could work on, what could be their focus.”</li> </ul>
<p style="text-align: center;"><b>Norm Establishment</b></p>	<p><b>Teams held engagement meetings regularly</b></p> <ul style="list-style-type: none"> <li>• Employee 134: “Every morning we would get into a group discussion, go over the Food Co. 7 step by step...it was pretty much every day. Everybody would get together [for about] 5, 10, maybe 15 minutes.”</li> <li>• Employee 135: “we had a meeting each day early in the morning between 5, 10 minutes about the Food Co. 7. [We discussed] how to help each other, how to wash, how to be careful, how to clean up.”</li> <li>• Supervisor 131: “[we] start in the morning with the meeting, explain to people what the Food Co. 7 means. Every day, we choose a different person to talk about the Food Co. 7.”</li> </ul> <p><b>Supervisors encouraged team members to promote and hold each other accountable to OCB expectations</b></p> <ul style="list-style-type: none"> <li>• Employee 233: “he [supervisor] took it very seriously and he would push everybody to help each other with the Food Co 7.”</li> <li>• Employee 239: “My supervisor would tell us 'It's just everyone's responsibility. It's not just my responsibility, it's not just his responsibility, it's everyone as a whole has to adhere to the Food Co. 7 and has to let the person next to you know if they're doing something wrong. You got to let them know.’”</li> <li>• Supervisor 232: [in response to what happens when someone does not follow OCB expectations]: “If by any chance they come and tell me, I say 'Hey, you should tell them.' 'You also have to. As a colleague you have to tell them. I don't have to be the only one to tell them.’”</li> <li>• Supervisor 234: “Yes, I motivated them to talk about the Food Co. 7. As an example, I would tell them to talk to each other if anybody was missing something, 'Hey, you're missing this or you're a missing glove.’”</li> </ul>

<b>Both Role Clarification &amp; Norm Establishment</b>	<p><b>Employees received Food Co. 7 badges/cards</b></p> <ul style="list-style-type: none"> <li>Employee 136: “Yeah...I'm still wearing the badge.”</li> <li>Employee 216: “Everybody had to wear their card...you had to have your card with your ID.”</li> <li>Employee 217: “[supervisors] were bringing each different line [work group], explaining the Food Co. 7, giving us all the card.”</li> <li>Supervisor 120: “After the meetings and sometimes in break time, when I talk to them about the Food Co. 7 card...Like, 'can I see your Food Co. 7 card?' And I used to ask, 'what does that one mean?’”</li> </ul> <p><b>Supervisors promoted and held individual employees accountable to OCB expectations</b></p> <ul style="list-style-type: none"> <li>Employee 116: “[Supervisors] just tried to make sure that we understood them. We have to learn these Food Co. 7 and apply them to us, as a group. They tried to, not enforce, that's too hard...but try to get you to apply them to work.”</li> <li>Employee 219: “in the morning, or sometime when we're dressing and we just come in, our supervisors would say 'Good morning' and 'Remember your Food Co. 7?'...They would ask, 'How you guys doing?' Great? I hope you guys remember your Food Co. 7.”</li> <li>Employee 237: “even during the day, they [supervisors] would have a meeting and afterwards during the day they would still talk to us and say like, 'Remember [the Food Co. 7] rules and help each other.' They would reinforce it during the day.”</li> </ul> <p><b>Teams held engagement meetings regularly</b></p> <ul style="list-style-type: none"> <li>Employee 216: I remember the meetings...they [supervisors] talked about safety, respecting one another, helping one another, if you see something that's out of place, call a supervisor....we had [meetings] twice, sometimes three times a week.”</li> <li>Employee 217: “[Meetings] was constantly. It was every other couple days. Sometimes back to back days. They just wanted to explain...the Food Co. 7 and for each one, they'd just ask. Instead of telling us what the Food Co. 7 were, they was asking us 'what were they?' and each of us had to get up telling one.”</li> <li>Employee 219: “They would ask questions about the Food Co.7. They would say first... 'everybody keep their card' and...ask questions like 'what is number one, number two, number three?' [What about] teamwork, and how best you can acquire that?' They talked about respect, and how you can do that, to respect your teammate.”</li> </ul> <p><b>Supervisors encouraged team members to promote and hold each other accountable to OCB expectations</b></p> <ul style="list-style-type: none"> <li>Employee 216: “When we had our meetings, we'd sit there and he'd [the supervisor] say, ‘Who can give me a good example for a safety rule?’ I said, ‘The hose on the floor, you shouldn't run inside and where it's wet, watch the fallen pallets’ and stuff like that. He'll say, ‘Okay, good.’ We had to give him an examples because a lot of people were shy about speaking out.”</li> <li>Supervisor 229: “I saw, for example, if somebody was not doing something that the Food Co. 7 said, others would go to me and tell me, 'This person is not doing this'...but I would also motivate them to tell them, “You can tell them yourself as well. I don't have to be the only one.””</li> <li>Assistant Manager 221: “We let them know that...we're not forcing you to talk, we just tried to instill the fact that we're just trying to change the culture and get things better...we always try to get them to understand that ‘it's not me or [manager name's] room, it's all of ours. If you see something wrong, let us know because at the end of the day it's our job, everybody's job.”</li> </ul>
<b>Control</b>	<p><b>Received job-specific training, but did not receive training or information on the Food Co. 7</b></p> <ul style="list-style-type: none"> <li>Employee 112: “They showed us how to clean properly, and the slicers, and the incline. That's pretty much it.”</li> <li>Employee 119: “What do you mean by the [Food Co. 7]? I've never heard it.”</li> <li>Supervisor 211: “we had multiple trainings...a little bit of everything. Safety, P.P.E...that is protective clothing that you wear... We had courses on management. Things like that.”</li> </ul>

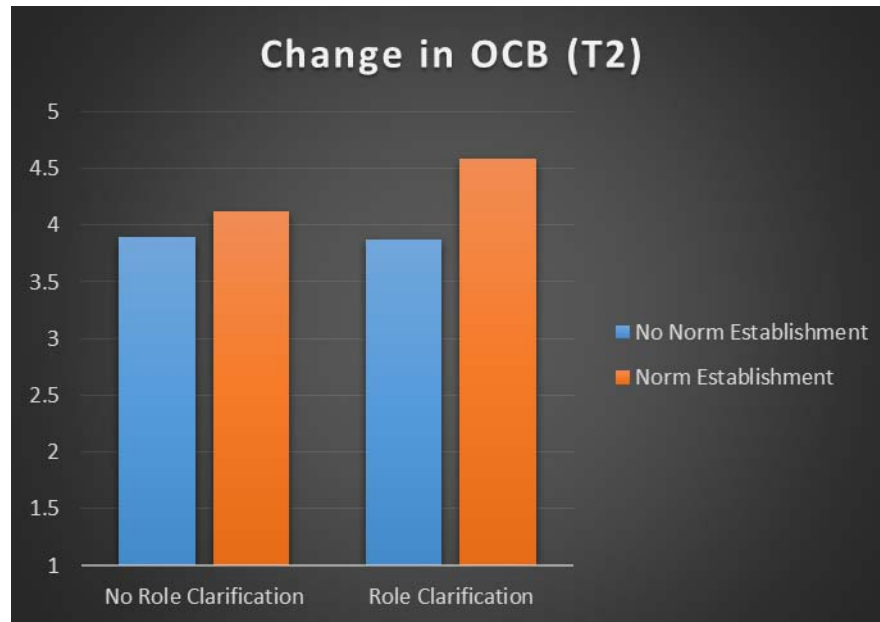
## Figures

**FIGURE 1**

**Interactive Effects of Role Clarification and Norm Establishment on Change in OCB 1 Month into the Intervention (T1)**



**FIGURE 2**  
**Interactive Effects of Role Clarification and Norm Establishment on Change in OCB 3 Months into the Intervention (T2)**





## Bibliography

- Barker, J. R. 1993. Tightening the iron cage: Concertive control in self-managing teams. *Administrative Science Quarterly*, 38(3): 408–437.
- Bettenhausen, K. L., & Murnighan, J. K. 1985. The emergence of norms in competitive decision-making groups. *Administrative Science Quarterly*, 30(3): 350–372.
- Bettenhausen, K. L., & Murnighan, J. K. 1991. The development of an intragroup norm and the effects of interpersonal and structural challenges. *Administrative Science Quarterly*, 36(1): 20–35.
- Bliese, P. D. 2002. Using multilevel random coefficient modeling in organizational research. In F. Drasgow & N. W. Schmitt (Eds.), *Advances in measurement and data analysis*: 401–445. San Francisco, CA: Jossey-Baas.
- Bolino, M. C., Klotz, A. C., Turnley, W. H., & Harvey, J. 2013. Exploring the dark side of organizational citizenship behavior. *Journal of Organizational Behavior*, 34(4): 542–559.
- Bolino, M. C., & Turnley, W. H. 2003. Going the extra mile: Cultivating and managing employee citizenship behavior. *Academy of Management Executive*, 17(3): 60–71.
- Bommer, W. H., Miles, E. W., & Grover, S. L. 2003. Does one good turn deserve another? Coworker influences on employee citizenship. *Journal of Organizational Behavior*, 24(2): 181–196.
- Carpenter, N. C., Berry, C. M., & Houston, L. 2014. A meta-analytic comparison of self-reported and other-reported organizational citizenship behavior. *Journal of Organizational Behavior*, 35(4): 547–574.
- Charmaz, K. 2006. *Constructing grounded theory: A practical guide through qualitative analysis*. London, UK: Sage.
- Chatman, J. A., & Flynn, F. J. 2001. The influence of demographic heterogeneity on the emergence and consequences of cooperative norms in work teams. *Academy of Management Journal*, 44(5): 956–974.
- Chen, Z., Takeuchi, R., & Shum, C. 2013. A social information processing perspective of coworker influence on a focal employee. *Organization Science*, 24(6): 1618–1639.
- Chiaburu, D. S., & Harrison, D. A. 2008. Do peers make the place? Conceptual synthesis and meta-analysis of coworker effects on perceptions, attitudes, OCBs, and performance. *Journal of Applied Psychology*, 93(5): 1082–1103.
- Cialdini, R. B., & Trost, M. R. 1998. Social influence: Social norms, conformity and compliance. In D. T. Gilbert, S. T. Fiske, & L. Gardner (Eds.), *Handbook of social psychology*: 151–192. New York, NY: McGraw-Hill.
- Creswell, J. W., & Plano Clark, V. L. 2011. *Designing and conducting mixed*

- methods research* (Second.). Thousand Oaks, CA: Sage.
- Darley, J. M., & Latané, B. 1968. Bystander intervention in emergencies: Diffusion of responsibility. *Journal of Personality and Social Psychology*, 8(4): 377–383.
- Dekas, K. H., Bauer, T. N., Welle, B., Kurkoski, J., & Sullivan, S. 2013. Organizational citizenship behavior, version 2.0: A review and qualitative investigation of OCBs for knowledge workers at Google and beyond. *Academy of Management Perspectives*, 27(3): 219–237.
- Dyer, N. G., Hanges, P. J., & Hall, R. J. 2005. Applying multilevel confirmatory factor analysis techniques to the study of leadership. *Leadership Quarterly*, 16(1): 149–167.
- Edmondson, A. 1999. Psychological safety and learning behavior in work teams. *Administrative Science Quarterly*, 44: 350–383.
- Edmondson, A. C., & McManus, S. E. 2007. Methodological fit in management field research. *Academy of Management Review*, 32(4): 1155–1179.
- Ehrhart, M. G., & Naumann, S. E. 2004. Organizational citizenship behavior in work groups: A group norms approach. *Journal of Applied Psychology*, 89(6): 960–974.
- Feldman, D. C. 1984. The development and enforcement of group norms. *Academy of Management Review*, 9(1): 47–53.
- Fine, G. A., & Elsbach, K. D. 2000. Ethnography and experiment in social psychological theory building: Tactics for integrating qualitative field data with quantitative lab data. *Journal of Experimental Social Psychology*, 36(1): 51–76.
- Frese, M., Fay, D., Hilburger, T., Leng, K., & Tag, A. 1997. The concept of personal initiative: Operationalization, reliability and validity in two German samples. *Journal of Occupational and Organizational Psychology*, 70(2): 139–161.
- George, J. M., & Jones, G. R. 2000. The role of time in theory and theory building. *Journal of Management*, 26(4): 657–684.
- Gersick, C. J. G., & Hackman, J. R. 1990. Habitual routines in task-performing groups. *Organizational Behavior and Human Decision Processes*, 47(1): 65–97.
- Grant, A. M., & Patil, S. V. 2012. Challenging the norm of self-interest: Minority influence and transitions to helping norms in work units. *Academy of Management Review*, 37(4): 547–568.
- Grant, A. M., & Wall, T. D. 2008. The neglected science and art of quasi-experimentation: Why-to, when-to, and how-to advice for organizational researchers. *Organizational Research Methods*, 12(4): 653–686.
- Hackman, J. R., & Wageman, R. 2005. A theory of team coaching. *Academy of Management Review*, 30(2): 269–287.
- Hofmann, D. A., & Gavin, M. B. 1998. Centering decisions in hierarchical linear models: Implications for research in organizations. *Journal of Management*, 24(5): 623–641.

- Hofmann, D. A., Morgeson, F. P., & Gerras, S. J. 2003. Climate as a moderator of the relationship between leader-member exchange and content specific citizenship: Safety climate as an exemplar. *Journal of Applied Psychology*, 88(1): 170–178.
- Ilggen, D. R., & Hollenbeck, J. R. 1991. The structure of work: Job design and roles. In M. D. Dunnette & L. M. Hough (Eds.), *Handbook of industrial and organizational psychology*: 165–207. Palo Alto, CA: Consulting Psychologists Press.
- Ilies, R., Nahrgang, J. D., & Morgeson, F. P. 2007. Leader-member exchange and citizenship behaviors: A meta-analysis. *Journal of Applied Psychology*, 92(1): 269–277.
- Jiao, C., Richards, D. A., & Hackett, R. D. 2013. Organizational citizenship behavior and role breadth: A meta-analytic and cross-cultural analysis. *Human Resource Management*, 52(5): 697–714.
- Jick, T. D. 1979. Mixing qualitative and quantitative methods: Triangulation in action. *Administrative Science Quarterly*, 24(4): 602–611.
- Kaplan, S. 2016. Mixing quantitative and qualitative approaches. In R. M. Kramer & K. D. Elsbach (Eds.), *Handbook of qualitative organizational psychology*: 421–433. Routledge.
- Katz, D., & Kahn, R. L. 1978a. The taking of organizational roles. *The Social Psychology of Organizations*: 185–221. New York, NY: Wiley.
- Katz, D., & Kahn, R. L. 1978b. Defining characteristics of social organizations. *The social psychology of organizations*: 35–68. New York, NY: Wiley.
- Kim, Y. J., Van Dyne, L., Kamdar, D., & Johnson, R. E. 2013. Why and when do motives matter? An integrative model of motives, role cognitions, and social support as predictors of OCB. *Organizational Behavior and Human Decision Processes*, 121(2): 231–245.
- Kozlowski, S. W. J., Gully, S., Nason, E., & Smith, E. 1999. Developing adaptive teams: A theory of compilation and performance across levels and time. In D. R. Ilggen & E. D. Pulakos (Eds.), *The changing nature of work performance: Implications for staffing, personnel actions, and development*: 240–292. San Francisco, CA: Jossey-Baas.
- Kozlowski, S. W. J., & Klein, K. J. 2000. A multilevel approach to theory and research in organizations: Contextual, temporal, and emergent processes. In K. J. Klein & S. W. J. Kozlowski (Eds.), *Multilevel theory, research, and methods in organizations: Foundations, extensions, and new directions*: 3–90. San Francisco: Jossey-Baas.
- Lam, S. S. K., Hui, C., & Law, K. S. 1999. Organizational citizenship behavior: Comparing perspectives of supervisors and subordinates across four international samples. *Journal of Applied Psychology*, 84(4): 594–601.
- Lemoine, G. J., Parsons, C. K., & Kansara, S. 2015. Above and beyond, again and again: Self-regulation in the aftermath of organizational citizenship behaviors. *Journal of Applied Psychology*, 100(1): 40–55.

- LePine, J. A., Erez, A., & Johnson, D. E. 2002. The nature and dimensionality of organizational citizenship behavior: A critical review and meta-analysis. *Journal of Applied Psychology*, 87(1): 52–65.
- Lepine, J. A., & Van Dyne, L. 2001. Peer responses to low performers: An attributional model of helping in the context of groups. *Academy of Management Review*, 26(1): 67–84.
- Liang, J., Farh, C. I. C., & Farh, J.-L. 2012. Psychological antecedents of promotive and prohibitive voice: A two-wave examination. *Academy of Management Journal*, 55(1): 71–92.
- Locke, K., & Golden-Biddle, K. 2002. An introduction to qualitative research: Its potential for industrial and organizational psychology. In S. G. Rogelberg (Ed.), *Handbook of research methods in industrial and organizational psychology*: 99–118. Malden, MA: Blackwell Publishers.
- Maris, E. 1998. Covariance adjustment versus gain scores—revisited. *Psychological Methods*, 3(3): 309–327.
- McAllister, D. J., Kamdar, D., Morrison, E. W., & Turban, D. B. 2007. Disentangling role perceptions: How perceived role breadth, discretion, instrumentality, and efficacy relate to helping and taking charge. *Journal of Applied Psychology*, 92(5): 1200–1211.
- Miles, M. B., & Huberman, A. M. 1994. *Qualitative data analysis*. Thousand Oaks, CA: Sage.
- Miller, C. C., Cardinal, L. B., & Glick, W. H. 1997. Retrospective reports in organizational research: A reexamination of recent evidence. *Academy of Management Journal*, 40(1): 189–204.
- Miller, D. T., & Prentice, D. A. 2016. Changing norms to change behavior. *Annual Review of Psychology*, 67: 339–361.
- Mitchell, T. R., & James, L. R. 2001. Time and the better theory: Building of when things happen specification. *Academy of Management Review*, 26(4): 530–547.
- Morris, M. W., Hong, Y., Chiu, C., & Liu, Z. 2015. Normology: Integrating insights about social norms to understand cultural dynamics. *Organizational Behavior and Human Decision Processes*.
- Morrison, E. W. 1994. Role definitions and organizational citizenship behavior: The importance of the employee's perspective. *Academy of Management Journal*, 37(6): 1543–1567.
- Morrison, E. W., & Phelps, C. C. 1999. Taking charge at work: Extrarole efforts to initiate workplace change. *Academy of management Journal*, 42(4): 403–419.
- Muthén, L. K., & Muthén, B. O. 2010. *Mplus User's Guide* (6th ed.). Los Angeles, CA: Muthén & Muthén.
- Naumann, S. E., & Ehrhart, M. G. 2011. Moderators of the relationship between group helping norms and individual helping. *Small Group Research*, 42(2): 225–248.

- Neal, A., & Griffin, M. A. 2006. A study of the lagged relationships among safety climate, safety motivation, safety behavior, and accidents at the individual and group levels. *Journal of Applied Psychology*, 91(4): 946–53.
- Organ, D. W. 1997. Organizational citizenship behavior: It's construct clean-up time. *Human Performance*, 10(3): 85–97.
- Organ, D. W., Podsakoff, P. M., & Mackenzie, S. B. 2006. *Organizational citizenship behavior: Its nature, antecedents, and consequences*. Sage Publications.
- Podsakoff, N. P., Whiting, S. W., Podsakoff, P. M., & Blume, B. D. 2009. Individual- and organizational-level consequences of organizational citizenship behaviors: A meta-analysis. *Journal of Applied Psychology*, 94(1): 122–141.
- Podsakoff, P. M., MacKenzie, S. B., Moorman, R. H., & Fetter, R. 1990. Transformational leader behaviors and their effects on followers' trust in leader, satisfaction, and organizational citizenship behaviors. *Leadership Quarterly*, 1(2): 107–142.
- Podsakoff, P. M., Mackenzie, S. B., Paine, J. B., & Bachrach, D. G. 2000. Organizational citizenship behaviors: A critical review of the theoretical and empirical literature and suggestions for future research. *Journal of Management*, 26(3): 513–563.
- Raver, J. L., Ehrhart, M. G., & Chadwick, I. C. 2012. The emergence of team helping norms: Foundations within members' attributes and behavior. *Journal of Organizational Behavior*, 33(5): 616–637.
- Rosenbaum, P. R., & Rubin, D. B. 1983. The central role of the propensity score in observational studies for causal effects. *Biometrika*, 70(1): 41–55.
- Schaubroeck, J., Ganster, D. C., Sime, W. E., & Ditman, D. 1993. A field experiment testing supervisory role clarification. *Personnel Psychology*, 46(1): 1–25.
- Schwartz, S. H., & Clausen, G. T. 1970. Responsibility, norms, and helping in an emergency. *Journal of Personality and Social Psychology*, 16(2): 299–310.
- Shadish, W. R., Cook, T. D., & Campbell, D. T. 2002. *Experimental and quasi-experimental designs for generalized causal inference*. Belmont, CA: Wadsworth.
- Shipp, A. J., & Cole, M. S. 2015. Time in individual-level organizational studies: What is it, how is it used, and why isn't it exploited more often? *Annual Review of Organizational Psychology and Organizational Behavior*, 2(1): 237–260.
- Smith, C. A., Organ, D. W., & Near, J. P. 1983. Organizational citizenship behavior: Its nature and antecedents. *Journal of Applied Psychology*, 68(4): 653–663.
- Snijders, T. A. B., & Bosker, R. J. 1999. *Multilevel analysis: An introduction to basic and advanced multilevel modeling*. London, UK: Sage.
- Tepper, B. J., Lockhart, D., & Hoobler, J. 2001. Justice, citizenship, and role definition effects. *Journal of Applied Psychology*, 86(4): 789–96.
- Tepper, B. J., & Taylor, E. C. 2003. Relationships among supervisors' and

- subordinates' procedural justice perceptions and organizational citizenship behaviors. *Academy of Management Journal*, 46(1): 97–105.
- Van Dyne, L., Cummings, L. L., & Parks, J. M. 1995. Extra-role behaviors: In pursuit of construct and definitional clarity (a bridge over muddied waters). In L. L. Cummings & B. M. Staw (Eds.), *Research in Organizational Behavior*: 215–285. Greenwich, CT: JAI Press.
- Van Dyne, L., Kamdar, D., & Joireman, J. 2008. In-role perceptions buffer the negative impact of low LMX on helping and enhance the positive impact of high LMX on voice. *Journal of Applied Psychology*, 93(6): 1195–1207.
- Vuori, T. O., & Huy, Q. N. In press. Distributed attention and shared emotions in the innovation process: How Nokia lost the smartphone battle. *Administrative Science Quarterly*.
- Yaffe, T., & Kark, R. 2011. Leading by example: The case of leader OCB. *Journal of Applied Psychology*, 96(4): 806–826.