



# Journal of Work and Organizational Psychology

<https://journals.copmadrid.org/jwop>



## Team Focus in Focus: Its Implications for Real Teams and Their Members

Kevin S. Cruz<sup>a</sup> and Jonathan Pinto<sup>b</sup>

<sup>a</sup>University of Richmond, VA, USA; <sup>b</sup>Imperial College Business School, London, United Kingdom

### ARTICLE INFO

*Article history:*  
Received 29 November 2018  
Accepted 9 May 2019

*Keywords:*  
Team focus  
Action identification  
Construal level  
Citizenship  
Deviance

*Palabras clave:*  
Enfoque de equipo  
Identificación de la acción  
Nivel de interpretación  
conceptual  
Civismo  
Desviación

### ABSTRACT

We develop and test a cross-level model of team focus on positive and negative discretionary team member behaviors. Using data collected from 405 team members across 76 teams and 15 organizations, we find that team focus is positively associated with interpersonal and organizational citizenship behaviors, and negatively associated with interpersonal deviance. We also find that team focus is positively associated with team members' level of action identification. Exploratory analyses suggest that team members' level of action identification might mediate the relationships between team focus, organizational citizenship, interpersonal deviance, and organizational deviance, respectively. We also find that real teams do not distinguish between outcome and process focus like lab and student teams do. Theoretical and managerial implications are discussed.

### El enfoque de equipo en el foco: sus implicaciones para los equipos reales y sus miembros

### RESUMEN

Desarrollamos y probamos un modelo transversal de enfoque del grupo sobre las conductas discrecionales positivas y negativas de los miembros del grupo. Usando datos de 405 miembros de equipo en 76 equipos y 15 organizaciones encontramos que el enfoque del equipo está asociado positivamente con los comportamientos cívicos interpersonales y organizacionales y negativamente con la desviación interpersonal. También encontramos que el enfoque del equipo se asocia positivamente con el nivel de identificación de las acciones por parte de los miembros del equipo. Los análisis exploratorios sugieren que el nivel de identificación de la acción podría mediar las relaciones entre el enfoque del equipo, el civismo organizacional, la desviación interpersonal y la desviación organizacional, respectivamente. También encontramos que los equipos reales no distinguen entre el enfoque de proceso y resultado como ocurre con los equipos de laboratorio y de estudiantes. Se discuten las implicaciones teóricas y para los managers.

### Team Focus Implications for Real Teams

Teams have become commonplace in modern organizations (Katzenbach & Smith, 1993; Salas, Sims, & Burke, 2005). They have been studied from a variety of perspectives, such as cognitive, interpersonal, motivational, affective, structural, and behavioral (Kozlowski & Ilgen, 2006). In this paper we adopt a cognitive perspective in order to better understand the influence team focus (Woolley, 2009a, 2009b) has on discretionary team member behaviors. Prior work on team focus indicates that it can lead to positive task outcomes (cf. Aggarwal & Woolley, 2013; Woolley 2009a, 2009b), but team members have a choice of which types of behaviors they engage in to achieve those positive task outcomes. Team members can choose to engage in organizational citizenship behaviors, which are discretionary behaviors that benefit the organization and its employees (McNeely

& Meglino, 1994). Alternatively, team members can choose to engage in deviant behaviors, which are discretionary behaviors that hurt the organization and its employees (Robinson & Bennett, 1995). Knowing whether team members engage in positive or negative discretionary behaviors is important because team members can theoretically achieve positive task outcomes by engaging in either forms of behavior. However, most organizations would like to encourage positive and discourage negative discretionary behaviors.

Research investigating the antecedents of citizenship and deviance has identified important individual (e.g., see Hoffman & Dilchert, 2012, for a review) and environmental (e.g., see Rotundo & Spector, 2017, for a review) characteristics that influence the degree to which individuals engage in positive and negative discretionary behaviors. The environment is particularly important given the changes taking place in today's work environment. As workplaces become more

Cite this article as: Cruz, K. S. & Pinto, J. (2019). Team focus in focus: Its implications for real teams and their members. *Journal of Work and Organizational Psychology*, 35, 123-133. <https://doi.org/10.5093/jwop2019a14>

Correspondence: [kevinscruz@yahoo.com](mailto:kevinscruz@yahoo.com) (K. S. Cruz).

ISSN: 1576-5962/© 2019 Colegio Oficial de Psicólogos de Madrid. This is an open access article under the CC BY-NC-ND license (<http://creativecommons.org/licenses/by-nc-nd/4.0/>).

diverse, consensus about organizational norms becomes harder to achieve. Furthermore, as work becomes increasingly knowledge-based and open-ended, workers are expected to make their own judgments about how to carry out their work. In such situations, specifying what is expected, or the boundaries around what constitutes citizenship and deviance, can become quite challenging. It can be especially challenging because employees, and the teams they are embedded within, can focus on different aspects of their work (Woolley, 2009a, 2009b).

Team focus refers to whether the team places cognitive emphasis on task outcomes, task processes, or both (Woolley, 2009a, 2009b). In outcome-focused teams, the outcome of the task takes precedence over the processes involved in obtaining the outcome, whereas in process-focused teams, the processes involved in doing the work take precedence over the outcome (Woolley, 2009a, 2009b). Teams that focus relatively equally on both outcomes and processes, termed as 'dual-focused' (as opposed to 'unfocused', which refers to teams that focus on neither), are "unusual" (Woolley, 2009a, p. 511). We believe that Woolley (2009a) reached this conclusion about dual-focused teams because extant work at the time (e.g., Woolley, 2009a, 2009b) had largely examined team focus in lab and student project teams. These teams have lower degrees of temporal stability, which is the degree to which they have worked together and expect to work together in the future (Hollenbeck, Beersma, & Schouten, 2012). Although these teams distinguished between outcome and process focus initially, the distinction between outcome and process focus diminished over time, even among these relatively short-lived teams (Woolley, 2009a). Thus, we believe that this distinction between outcome- and process-focused teams is an artifact of the research methodology and would not surface in real teams, or teams with large degrees of temporal stability (Hackman, 2002; Hollenbeck et al., 2012). In other words, we believe real teams will tend to be more dual-focused. We empirically examine this idea in real teams across multiple organizations.

identification can influence team members' discretionary behaviors. We therefore examine whether team focus is associated with not only team members' level of action identification, but also team members' organizational citizenship (McNeely & Meglino, 1994) and deviance (Robinson & Bennett, 1995). We also conduct exploratory analyses examining the possible mediating role of team members' level of action identification. Our cross-level theoretical model is presented in Figure 1.

We seek to make three important contributions by investigating whether team focus is associated with positive *behavioral* outcomes, like it is for *task* outcomes. First, examining whether real teams, who have relatively long life spans, can be characterized as outcome-focused or process-focused, like non-real teams (e.g., lab and student project teams), that often have relatively short life spans (Hackman, 2002; Hollenbeck et al., 2012), can provide an important boundary condition of empirical findings related to team focus. Second, we seek to add to the limited knowledge base of organizational antecedents that influence the degree of abstraction of employees' views in the workplace (Wiesenfeld, Reyt, Brockner, & Trope, 2017). Examining team focus in real teams can help increase our confidence that the influence of team focus on employees' views is a robust finding, irrespective of team life span. Finally, our understanding of how team-level factors may influence team member behaviors is rather limited, especially regarding deviant team member behaviors (O'Boyle, Forsyth, & O'Boyle, 2011). Investigating team focus as a possible antecedent of team member discretionary behaviors is an important step forward in furthering our limited understanding of these team-level factors.

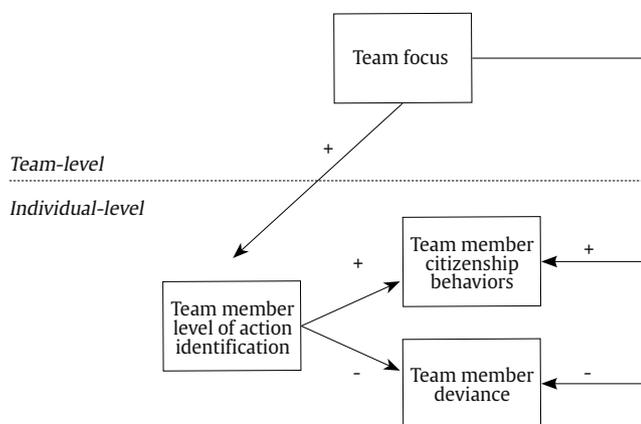
## Theory and Hypotheses

### Team Focus in Real Teams vs. Non-Real Teams

Woolley's (2009a) original research on team focus explored the phenomenon in laboratory teams. Of the 90 teams that participated in Woolley's (2009a) original research, 10 teams were in the control condition (i.e., they were not manipulated to be outcome- or process-focused). Three of these teams were classified as outcome-focused, five of these teams were classified as process-focused, and only two of these teams were not classified as outcome- or process-focused (i.e., they were dual-focused). These classifications were based on the consistency of focus measures over three points in time. For example, teams who had consistently higher scores on outcome focus measures than process focus measures across all three time points were classified as outcome-focused teams. This original work suggests that teams who focus on both outcome and process are the exception, rather than the rule.

However, a closer examination of these teams reveals two important patterns: (1) outcome focus across time becomes less correlated, so much so that outcome focus at the third time point is only marginally correlated with outcome focus at the first time point (the same effect is found for process focus) and (2) outcome and process focus become less negatively correlated over time, so much so that they are only marginally negatively correlated with each other at the third time point. The fact that these teams worked together for approximately one hour and this pattern was seen within a one hour time frame suggests that the temporal stability of teams (Hollenbeck et al., 2012) may impact the degree to which teams focus more on outcomes versus processes, or if they focus relatively equally on both.

Woolley's (2009b) subsequent work on team focus began to look at teams with higher levels of temporal stability than one-shot laboratory teams (Hollenbeck et al., 2012), and her work suggests that the relationship between outcome-focus and process-focus may be more nuanced than previously understood. Woolley's (2009b) first study used 35 student project teams that completed a project



**Figure 1.** Cross-Level Model of the Relationships between Team Focus, Team Members' Level of Action Identification, Citizenship, and Deviance.

Woolley (2009a, 2009b) also found that team focus influences the degree to which teams identify their actions. Action identification theory (Vallacher & Wegner, 1985, 1987) posits that individuals identify their actions on a continuum from a very abstract, or high level, meaning that they focus primarily on the outcomes of their actions, to a very concrete, or low level, meaning that they focus primarily on the actions themselves. The level at which individuals identify their actions is important because individuals attempt to behave in ways that are congruent with the respective level of action identification (Vallacher & Wegner, 1985, 1987). This suggests that outcome and process focus in teams can influence team members' level of action identification and team members' level of action

over a 14 week period. Team members completed survey measures of outcome and process focus two weeks into the semester and the measures were aggregated to the team level. Thirteen of these teams were identified as outcome-focused, 14 of these teams were identified as process-focused, and 8 of these teams were identified as dual-focused. *Prima facie* it appears that dual-focused teams were less common (though more than “unusual”) compared to the other two categories, concluding that they are rare and would not be correct for two reasons. First, in this study, outcome and process focus was more positively correlated (although not significantly) than in studies that involved lab teams. Second, one of the eight dual-focused teams exhibited both high outcome and process focus, which suggests that real teams may tend to have both higher outcome and process focus.

Woolley's (2009b) second study investigated a small number of short-term real teams: 10 American Red Cross teams. These teams were tasked with reviewing the operations of American Red Cross Chapters and making recommendations for improvement. Although the measures of team focus were administered to team members immediately following the first time these teams worked together (i.e., after their first conference call), the correlation between outcome and process focus was still positive (although not significant). More importantly, even when considering that these teams were more process-oriented because of their auditory nature, both outcome and process focus in these teams were relatively high. On a seven-point scale, outcome focus ranged from 4.00 to 5.33 and process focus ranged from 5.67 to 6.72. The positive correlation between outcome and process focus, as well as the relatively high scores for both outcome and process focus, in these real teams who worked together for a relatively short period of time suggests that real teams with higher degrees of temporal stability may be able to find even greater complementarities between outcome and process focus.

In sum, Woolley's (2009a, 2009b) work indicates that although lab teams distinguish between outcome and process focus, this distinction decreases over time, and teams with higher levels of temporal stability distinguish even less between outcome and process focus from the very beginning of their life cycles. Although an inference can be made that real teams with higher degrees of temporal stability distinguish even less, if at all, between outcome and process focus, a definitive answer cannot be made due to the limited research that is available on outcome and process focus in real teams. Accordingly, we seek to answer this question using a sample of real teams that have worked together for relatively long periods of time from a diverse sample of organizations.

Research Question: Do real teams distinguish between an outcome focus and a process focus like non-real teams do?

### Team Focus and Action Identification

Woolley's (2009a, 2009b) research indicates that teams develop focus through the discussions team members have with one another regarding the task. Outcomes teams may focus upon include organizational-level performance, team performance behaviors and outcomes, role-based performance, and team members' affect and viability (Mathieu, Maynard, Rapp, & Gilson, 2008). Processes teams may focus upon include transition processes, action processes, and interpersonal processes (Marks, Mathieu, & Zaccaro, 2001). Whereas outcomes are more psychologically distant because they represent some future point in time, processes are more psychologically close because they represent what needs to be done now or in the near future (Trope & Liberman, 2010). Psychological distance influences the degree of abstraction in which individuals see objects, such that more psychologically distant objects are seen in more abstract terms (Trope & Liberman, 2010). Thus, outcomes are more abstract and processes are more concrete, which is an aspect of action identification theory (Vallacher & Wegner, 1985, 1987).

Action identification theory (Vallacher & Wegner, 1985, 1987) suggests that the level of abstraction in which individuals see objects influences the level at which individuals identify their own behaviors. Higher-level action identities “signify why or with what effect the action is performed,” while lower-level action identities “specify how the action is performed” (Vallacher & Wegner, 1989, p. 660). For example, individuals may believe that the act of filling out a personality test reveals who they are, which is a high level action identity, or is simply answering questions, which is a low level action identity (Vallacher & Wegner, 1989).

Individuals identify their behaviors from a high level, by focusing on the outcomes of those behaviors, to a low level, by focusing on the behaviors themselves and this occurs through three fundamental principles. First, individuals behave in ways that correspond to the most salient action identity (Vallacher & Wegner, 1985, 1987). Second, the higher level action identity will be more salient when both higher level and lower level action identities are present (Vallacher & Wegner, 1985, 1987). Lastly, a lower level action identity becomes more salient when individuals cannot behave in ways that correspond to the higher level action identity. These principles are important in understanding how team focus influences the focus of individual team members.

Similar to social influence theories, such as social learning theory (Bandura, 1977) and the social information processing perspective (Salancik & Pfeffer, 1978), action identification theory suggests that contextual cues can play a powerful role in determining at which level individuals identify their own behaviors (Vallacher & Wegner, 1987, 1989). In a team context, discussion amongst team members regarding the relative emphasis of focus on outcomes versus processes provides cues to team members as to how they should identify their own behaviors (Woolley, 2009a, 2009b). Teams who place an emphasis on external or internal criteria of success, rather than how they will achieve success, leads team members to identify their behaviors at higher, more abstract levels (Woolley, 2009a, 2009b). In contrast, teams who place an emphasis on how they will achieve success, rather than external or internal criteria for success, leads team members to identify their behaviors at lower, more concrete levels (Woolley, 2009a, 2009b).

Real teams need both outcome and process focus because they need to know not only what outcomes they need to achieve, but also how they need to go about achieving those outcomes. For example, consulting teams frequently need to first identify the problem (i.e., an outcome) an organization is facing. However, a consulting team also needs to know what steps need to be taken (i.e., process) in order to resolve that problem. Although both an outcome focus and a process focus exist, consulting team members will identify their behaviors at a higher level because the more abstract outcome of identifying the problem, following the second principle of action identification theory (Vallacher & Wegner, 1987, 1989), takes mental precedence over the more concrete steps of how to resolve the problem. Thus, we hypothesize:

Hypothesis 1: Team focus is positively associated with a team member's level of action identification.

### Action Identification and Discretionary Team Member Behaviors

The level at which team members identify their own behaviors has implications for their subsequent behaviors because, according to the first principle of action identification theory, team members should attempt to behave in ways that are congruent with their respective levels of action identification (Vallacher & Wegner, 1985, 1987). Thus, action identification can be considered a trigger. Triggers are external events or internal perceptions that influence individuals to engage in certain behaviors (Marcus & Schuler, 2004). Action identification, as

a cognitive representation, can be considered an internal perception trigger because it is shaped by an individual's perception of cues within the surrounding social environment (Vallacher & Wegner, 1985, 1987).

Individuals who identify their actions at higher, more abstract levels should be triggered to engage in behaviors that serve their long-term employment interests, like organizational citizenship behaviors, rather than behaviors that do not serve their long-term interests, like workplace deviance, due to the productive thought processes that develop from higher action identities. Identifying actions at higher levels lead individuals to engage in more rational and longer-term thinking (Fujita, Trope, Liberman, & Levin-Sagi, 2006). Further, Fujita et al. (2006) found that individuals who thought in more abstract terms had more self-control than those who thought in more concrete terms. Team members who identify their actions at higher levels should therefore have more control of their discretionary workplace behaviors than those who identify their actions at lower levels. Additionally, individuals who see things in more abstract terms also engage in more moral thinking (Agerström & Björklund, 2009). Thus, team members who identify their actions at higher levels should not only have greater self-control over their discretionary behaviors, but also greater awareness of whether those behaviors are productive or destructive. We therefore hypothesize:

Hypothesis 2a: A team member's level of action identification is positively associated with team member citizenship.

Hypothesis 2b: A team member's level of action identification is negatively associated with team member deviance.

### Team Focus and Discretionary Team Member Behaviors

Our theory development suggests that there will also be a direct relationship between team focus and team member citizenship and deviance, respectively. We therefore hypothesize:

Hypothesis 3a: Team focus is positively associated with team member citizenship.

Hypothesis 3b: Team focus is negatively associated with team member deviance.

### Method

Spector (2019) identified several situations in which cross-sectional designs are the preferred method for empirical investigations. One such situation is when you do not know whether independent and dependent variables covary. As previously mentioned, prior research on team focus has concentrated on task outcomes of team focus and not behavioral outcomes (e.g., Aggarwal & Woolley, 2013; Woolley 2009a, 2009b). We therefore do not know whether team focus and discretionary team member behaviors will covary. A second condition is when you are conducting exploratory research. As previously mentioned, a limited amount of research investigating team focus in real teams precluded us from offering a formal hypothesis of team focus in non-real teams versus real teams. Thus, part of our research is exploratory in nature. A third condition is when you want to examine the effects of a naturally occurring independent variable. Real teams, like those that are the focus of our study, are usually formed and operating before a study begins. The final condition is when you want to rule out alternative explanations for the covariation between your independent and dependent variables. We wanted to do this in our study by controlling for several individual- and team-level variables. Based on meeting these four conditions, we determined a cross-sectional design would be an appropriate choice for our study.

All of the measures used in this study are based on self-report surveys. Self-report data were used in this study for several reasons. First, we wanted to most accurately capture our variables of interest. Carpenter, Berry, and Houston's (2014) meta-analysis indicated

that self-reports are a viable and preferred method of measuring citizenship behavior. Likewise, we used self-reports because they are a valid and more accurate method to measure deviant behaviors (Berry, Carpenter, & Barratt, 2012; Carpenter, Rangel, Jeon, & Cottrell, 2017). Second, an individual's level of action identification is an intra-individual cognitive state (Vallacher & Wegner, 1987), which can only be captured by asking individuals to report themselves at which level they identify their own actions (Vallacher & Wegner, 1989). Similarly, the degree to which a team focuses on outcomes or processes is most accurately captured by asking team member themselves how much their team focuses on each since they are the ones who discuss and develop clarity or certainty on focus issues within the team.

Although there is a debate as to whether self-report data leads to common method bias (cf. Conway & Lance, 2010; Podsakoff, MacKenzie, & Podsakoff, 2012; Spector, 2006), we adopted the procedural remedies recommended by Podsakoff et al. (2012) and Conway and Lance (2010) to reduce the effects of common method bias. These steps included creating psychological separation of the variables, ensuring respondent anonymity (e.g., explaining to respondents that organizations who qualified for results would only receive aggregated results), reducing evaluation apprehension (e.g., signaling to respondents that there were no right or wrong answers), and choosing well established scales in the literature to measure our constructs of interest. Perhaps most importantly, the data for the independent variable was technically from a different source than the data for the mediating and dependent variables: data for the independent variable was from the team as a whole (aggregated self-reports that included self-reports of individuals who were ultimately not included in the final sample) while the data for the other variables were from individual team members. With this said, we cannot completely rule out the possibility that common method bias is influencing our results upward or downward.

### Data and Sample

We wanted to use a diverse sample of organizations to ensure that our results would have a larger degree of external validity than if we would have used a single organization to answer our research question and to test our hypotheses. We therefore sought participation from organizations in different geographic locations and industries. Fifteen organizations across the United States of America participated in this study. These organizations ranged in size from 6 to 4,000 employees. The median organization size was 70 employees and the mean organization size was 368 employees. Four of the organizations were in the manufacturing industries and 11 of the organizations were in the services industries. The manufacturing organizations represented the business products and services, construction, machined components and mechanical parts, and magnetic industries. The service organizations represented the education, engineering, government, health, information technology, insurance, pest control, software, and travel and hospitality industries.

Consistent with our goal to have participating organizations in different geographic locations and industries to increase the external validity of our findings, we also wanted to capture the many different types and sizes of real teams that exist within organizations so that the answer to our research question and the results of our hypotheses would be more generalizable. Organizational representatives (e.g., Chief Executive Officer, Chief Operating Officer, Human Resources Manager) were therefore provided Cohen and Bailey's (1997, p. 241) broad definition of a team (i.e., "collection of individuals who are interdependent in their tasks, who share responsibility for outcomes, who see themselves and who are seen by others as an intact social entity embedded in one or more larger social systems [for example, business unit or the corporation], and who manage their relationships across organizational boundaries") to identify participating teams

within their respective organizations. Based on this definition of a team, organizational representatives identified 694 team members across 85 teams to participate in this study.

We mailed paper surveys and self-addressed postage-paid envelopes to the organizational representatives and the organizational representatives distributed them to their respective team members. Team members then mailed their completed surveys directly back to the principal investigator. Numerical coding was used to match members of the same team and organization. Responses were received from 477 team members (69% response rate) across 85 teams (100% response rate). Teams with less than two respondents were removed from the final sample. All available data for team-level variables were used in the calculation of the team-level variables (even if respondents were ultimately removed from the final sample) in order to most accurately measure our team-level variables. Missing values, when possible, were replaced with the mean of the remaining scale items if no more than 25% of the scale items were missing for the respective variable. After listwise deletion, the final sample consists of 405 team members across 76 teams and 15 organizations. The number of team members responding per team in the final sample ranges from 2 to 19 (team size ranges from 3 to 48), with a mean within-team response rate of 71%. More importantly, for the purposes of testing our research question, the average team member worked in his/her team for 3–4 years, indicating a relatively large degree of temporal stability of the teams.

### Individual-Level Measures

**Citizenship.** Employees can engage in interpersonal citizenship, which is directed towards other employees, as well as organizational citizenship, which is directed towards the organization (McNeely & Meglino, 1994). In order to be comprehensive in our tests of our hypotheses, we chose to measure how much individual team members engaged in each form of citizenship because team members can theoretically believe engaging in either form of citizenship can help achieve a team task outcome. Lee and Allen's (2002) 8-item interpersonal and 8-item organizational citizenship scales were used to measure each form of citizenship. Team members were asked to indicate the extent to which they had engaged in different citizenship behaviors since becoming members of their teams (1 = *never* to 5 = *all of the time*). Sample items of interpersonal citizenship are "Willingly give your time to help others who have work-related problems" and "Assist others with their duties", and sample items of organizational citizenship are "Offer ideas to improve the functioning of the organization" and "Take action to protect the organization from potential problems." Cronbach's  $\alpha$  for the interpersonal citizenship scale was .84 and Cronbach's alpha for the organizational citizenship scale was .88.

**Deviance.** Like citizenship, employees can engage in interpersonal deviance, which is directed towards other employees, as well as organizational deviance, which is directed towards the organization (Robinson & Bennett, 1995). Analogous to citizenship behaviors, we chose to measure how much individual team members engaged in each form of deviance because team members can theoretically believe engaging in either form of deviance can help achieve a team task outcome. Bennett and Robinson's (2000) 7-item interpersonal deviance scale was used to measure interpersonal deviance and Bennett and Robinson's (2000) 12-item organizational deviance scale was used to measure organizational deviance. Team members were asked to indicate the extent to which they had engaged in different deviant behaviors since becoming members of their teams (1 = *never* to 5 = *all of the time*). Sample items of interpersonal deviance are "Make fun of someone at work" and "Curse at someone at work", and sample items of organizational deviance are "Take additional or

longer breaks than is acceptable at your workplace" and "Intentionally work slower than you could work." Cronbach's  $\alpha$  for the interpersonal deviance scale was .73 and Cronbach's alpha for the organizational deviance scale was .68. Because the individual deviance responses did not exhibit normality, they were transformed to make them exhibit normality by using their reciprocal. These reciprocal values were then subtracted from one so that lower values indicated less deviance and higher values indicated greater deviance (range = .00–.80). The average team member reported a relatively low level of interpersonal deviance,  $M = .16$ ,  $SD = .17$ , and organizational deviance,  $M = .13$ ,  $SD = .13$ . This is in line with prior research examining deviant behaviors by team members (e.g., Glomb & Liao, 2003; Robinson & O'Leary-Kelly, 1998).

**Action identification.** Vallacher and Wegner's (1989) 25-item behavior identification scale was used to measure a team member's level of action identification. This scale measures the level at which individuals identify 25 different behaviors by choosing one of two options for each behavior. One option is the higher-level alternative, meaning the focus is on the outcome of the specific behavior, and the other option is the lower-level alternative, meaning the focus is on the action of the specific behavior. For example, team members were asked to identify whether they identified the behavior "Making a list" as "Getting organized" (higher-level alternative) or "Writing things down" (lower-level alternative). The higher-level alternatives team members chose were summated in order to arrive at a team member's level of action identification. The scale had a range of 0 (very low level of action identification) to 25 (very high level of action identification). Cronbach's alpha for this scale was .85. The average team member reported a relatively high level of action identification,  $M = 18.90$ ,  $SD = 4.79$ .

**Control variables.** We controlled for gender (reference group is male), age (1 = less than 20 to 6 = 60+), education (1 = some high school to 6 = doctoral degree or equivalent), and team tenure (1 = less than 1 year to 6 = 20+ years) based on prior research examining citizenship and deviance. For example, Lau, Au, and Ho's (2003) review of the workplace deviance literature indicates that gender and age are associated with various forms of workplace deviance and Robinson and O'Leary-Kelly's (1998) research indicates that education and group tenure are important variables to control for when predicting workplace deviance.

### Team-Level Measures

**Team focus.** Woolley (2009a) developed and validated measures of team outcome and process focus within a laboratory setting and these measures have been used in subsequent research on team outcome and process focus (e.g., Aggarwal & Woolley, 2013; Woolley, Bear, Chang, & DeCostanza, 2013). We used adapted versions of her 4-item team outcome and process focus scales in order to answer our research question and to test our hypotheses. The adaptations were (1) we used a five point scale (1 = *very uncertain* to 5 = *very certain*) rather a seven point scale (the anchors of our five point scale are the same as the seven point scale) so that the team focus scales aligned with our other five-point scales and (2) we changed the wording in the original scales from product, project, etc. to product/service to reflect the fact that real teams may produce a product or service within organizations. The two scales measure the extent to which a team has "discussed and developed clarity or certainty" on outcome- and process-related issues (Woolley, 2009a, p. 513). Sample items of team outcome focus are "What constitutes a 'successful performance' for the final product/service" and "What criteria will be used for evaluating the final product/service" and sample items of team process focus are "What each of the subtasks are that need to be completed" and "How the team should divide its time among the various subtasks."

Our research question of whether real teams distinguish between an outcome and process focus like non-real teams do follows prior research by treating team focus as a team-level variable. We therefore aggregated individual-level responses to the team level in order to most accurately answer our research question. As a first step in answering our research question, we examined the correlation between outcome focus and process focus and we found the correlation to be very high,  $r = .84, p < .01$ . As a second step, we conducted an exploratory factor analysis. A principal component analysis indicated that there was one component that accounted for 69.93% of the variance. The eigenvalue was 5.59 for the first component and 0.57 for the second component. All scale item loadings were equal to or greater than .76. The Kaiser-Meyer-Olkin measure of sampling adequacy was .91 and Bartlett's test of sphericity was  $\chi^2(28) = 450.58, p = .00$ . As a third step, we conducted one factor (outcome and process focus items loading on one latent factor) and two factor (outcome focus items loading on one latent factor, process focus items loading on a second latent factor, and allowing both latent factors to freely correlate) confirmatory factor analyses. The one factor solution,  $\chi^2(20) = 27.35, p = .13, CFI = .98, IFI = .98, GFI = .93, RMSEA = .07, AIC = 59.35$ , fits almost identically to the two factor solution,  $\chi^2(19) = 23.95, p = .20, CFI = .99, IFI = .99, GFI = .94, RMSEA = .06, AIC = 57.95$ , suggesting that the one factor solution should be preferred over the two factor solution. The results of these three different analyses suggest that the answer to our research question is that real teams do not distinguish between outcome and process focus like non-real teams do.

We therefore moved forward with a single team focus variable that included both outcome and process items. However, we wanted to examine whether there were any empirical justifications for aggregating individual-level responses in our sample to the team-level for this team focus variable. We first examined whether there was any significant between-team-variation in team focus and we did not find any,  $\chi^2(75) = 85.61, p = .19$ . We did not use this empirical result as the only empirical criterion because significant between-team variation is not a necessary condition for aggregation if there is theoretical justification for testing a team-level effect on an individual-level outcome variable (Snijders & Bosker, 2012). Thus, we decided to examine additional empirical criteria based on the aforementioned team focus research. We found the ICC(1) value for team focus in our sample to be .01. Although this ICC(1) value is relatively small, ICC(1) values larger than zero indicate a multilevel model will produce more accurate results than a single-level model (Bliese, Maltarich, & Hendricks, 2018; Tofghi & Thoemmes, 2014). As further support for aggregation, we found the mean  $r_{wg(j)}$  for team focus was .87. Although not perfect, we decided that the best course of action would be to aggregate individual-level responses to the team-

level because theory and the aforementioned empirical evidence suggests that it should be treated as a team-level variable. Cronbach's alpha for this scale was .92. The average team had a moderately high level of focus,  $M = 3.82, SD = 0.38$ .

**Control variables.** We controlled for team size since social influence theories, such as the social information processing perspective (Salancik & Pfeffer, 1978) and social learning theory (Bandura, 1977) suggest that team size may influence the degree to which team members engage in similar behaviors. Because team size did not exhibit normality, it was transformed using its natural log so that it did exhibit normality. We also controlled for close supervision because prior research indicates that it may influence the degree to which team members engage in various behaviors. For example, formal and informal constraints, like close supervision, may help reduce deviant behaviors (Hirschi, 1969; Hollinger & Clark, 1982). Close supervision was measured using Robinson's (1992) 6-item close supervision scale that measures the extent to which team members are closely supervised by superiors. Sample items include "We are frequently observed to make sure that we are performing adequately" and "Our performance on the job is often observed by management." Cronbach's alpha for this scale was .91. Individual-level responses were aggregated to the team level. Aggregation was supported by theory, significant between-team variation,  $\chi^2(75) = 182.07, p < .01$ , an ICC(1) value of .21, and a mean  $r_{wg(j)}$  of .86. The average team had a relatively moderate level of close supervision,  $M = 3.49, SD = 0.51$ .

**Data Analysis**

We used hierarchical linear modeling to test our hypotheses because hierarchical linear modeling controls for the non-independence of observations that is found in nested data (Raudenbush & Bryk, 2002; Snijders & Bosker 2012). We used a two-level hierarchical linear model of team members nested within teams, rather than a three-level hierarchical linear model of team members nested within teams nested within organizations, because our sample size of 15 organizations is not a sufficiently large enough sample size in a hierarchical linear model (González-Romá & Hernández, 2017; Snijders & Bosker, 2012). In our sample, a "null" model (equivalent to a one-way random-effects ANOVA model) suggested that there were significant differences between teams in terms of interpersonal citizenship,  $p < .01$ , organizational citizenship,  $p < .01$ , organizational deviance,  $p = .04$ , and action identification,  $p < .01$ , but no significant differences in terms of interpersonal deviance,  $p = .21$ . These results largely support our use of hierarchical linear modeling (Raudenbush & Bryk, 2002; Snijders & Bosker 2012).

**Table 1.** Descriptive Statistics and Correlations

Variable	M	SD	1	2	3	4	5	6	7	8
<i>Individual-level</i>										
1. Interpersonal citizenship	3.48	0.73								
2. Organizational citizenship	3.78	0.78	.52**							
3. Interpersonal deviance	0.16	0.17	.02	-.08						
4. Organizational deviance	0.13	0.13	-.13**	-.15**	.39**					
5. Gender	0.41	0.49	.07	-.13**	-.16**	-.10*				
6. Age	3.38	1.25	.18**	.30**	-.15**	-.06	-.16**			
7. Education	3.81	1.08	-.08	.07	.02	.15**	-.07	.04		
8. Team tenure	2.74	1.38	.19**	.23**	.03	.02	-.08	.34**	.11*	
9. Action identification	18.90	4.79	.15**	.27**	-.21**	-.26**	-.02	.24**	-.04	.13**
<i>Team-level</i>										
1. Team size	1.94	0.61								
2. Close supervision	3.49	0.51	-.14							
3. Team focus	3.82	0.38	-.04	.20						

\* $p \leq .05$ , \*\* $p \leq .01$ .

**Table 2.** HLM Results of the Relationship between Team Focus and Action Identification

<i>Individual-level</i>	
Control variables	
Gender	-0.07
Age	0.87**
Education	-0.34
Team tenure	0.16
<i>Team-level</i>	
Control variables	
Team size	0.55
Close supervision	-0.17
Independent variable	
Team focus	1.92*

\* $p \leq .05$ , \*\* $p \leq .01$ .

Multilevel models use predictor variables that are uncentered, group mean centered, or grand mean centered and the choice of which centering method to use should be guided by theory (Aguinis, Gottfredson, & Culpepper, 2013; Hofmann & Gavin, 1998; Raudenbush & Bryk, 2002; Snijders & Bosker, 2012). We grand mean centered all variables (except the dichotomous gender variable) prior to our analyses because our theoretical focus was on raw differences rather than differences relative to a group average. Thus, our results

show the effects of team- and individual-level variables in relation to the sample as a whole (Aguinis et al., 2013; Hofmann & Gavin, 1998; Raudenbush & Bryk, 2002; Snijders & Bosker, 2012). All models are estimated using restricted maximum likelihood because of the various advantages of restricted maximum likelihood relative to full maximum likelihood (see Snijders & Bosker, 2012, for a review) and all results use robust standard errors.

**Results**

Table 1 presents the individual- and team-level descriptive statistics and correlations. Table 2 presents the relationship between team focus and action identification. Table 3 presents the relationships between team focus, action identification, and team member citizenship, while Table 4 presents the relationships between team focus, action identification, and team member deviance.

**Team Focus and Action Identification**

In Table 2, we find that team focus is positively and significantly associated with a team member’s level of action identification,  $\gamma = 1.92$ ,  $SE = 0.88$ ,  $p = .03$ , supporting hypothesis 1. This suggests that teams who are more focused influence members of the team to have a higher level of action identification.

**Table 3.** HLM Results of the Relationships between Team Focus, Action Identification, and Team Member Citizenship

Variables	Interpersonal citizenship			Organizational citizenship		
	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
<i>Individual-level</i>						
Control variables						
Gender	0.17*	0.16*	0.16*	-0.05	-0.07	-0.06
Age	0.07**	0.09**	0.07**	0.11**	0.14**	0.11**
Education	-0.05	-0.06*	-0.06*	0.04	0.03	0.04
Team tenure	0.07**	0.07*	0.06*	0.05*	0.05*	0.05*
Mediating variable						
Action identification	0.02*		0.01*	0.04**		0.03**
<i>Team-level</i>						
Control variables						
Team size	-0.11	-0.10	-0.11	-0.23**	-0.21**	-0.23**
Close supervision	0.04	0.01	0.01	0.09	0.06	0.07
Independent variable						
Team focus		0.28*	0.26*		0.27*	0.20

\* $p \leq .05$ , \*\* $p \leq .01$ .

**Table 4.** HLM Results of the Relationships between Team Focus, Action Identification, and Team Member Deviance

Variables	Interpersonal deviance			Organizational deviance		
	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
<i>Individual-level</i>						
Control variables						
Gender	-0.06**	-0.06**	-0.06**	-0.03	-0.03	-0.03
Age	-0.02**	-0.03**	-0.02**	-0.01	-0.01*	-0.01
Education	-0.00	0.00	0.00	0.02**	0.02**	0.02**
Team tenure	0.01	0.01	0.01*	0.01	0.00	0.01
Mediating variable						
Action identification	-0.01**		-0.01**	-0.01**		-0.01**
<i>Team-level</i>						
Control variables						
Team size	-0.00	-0.01	-0.00	-0.02**	-0.03**	-0.02**
Close supervision	-0.01	-0.00	-0.00	-0.03**	-0.03**	-0.03**
Independent variable						
Team focus		-0.06*	-0.04		-0.01	-0.00

\* $p \leq .05$ , \*\* $p \leq .01$ .

## Action Identification and Discretionary Team Member Behaviors

Models 1 and 4, respectively, in Table 3 indicate that a team member's level of action identification is positively associated with interpersonal citizenship,  $b = 0.02$ ,  $SE = 0.01$ ,  $p = .03$ , and organizational citizenship,  $b = 0.04$ ,  $SE = 0.01$ ,  $p < .01$ . In contrast, Models 1 and 4, respectively, in Table 4 indicate that a team member's level of action identification is negatively associated with interpersonal deviance,  $b = -0.01$ ,  $SE = 0.00$ ,  $p < .01$ , and organizational deviance,  $b = -0.01$ ,  $SE = 0.00$ ,  $p < .01$ . Hypotheses 2a and 2b are therefore supported. These results suggest that team members who identify their actions at higher levels engage in higher levels of citizenship and lower levels of deviance.

## Team Focus and Discretionary Team Member Behaviors

Models 2 and 5, respectively, in Table 3 indicate that team focus is positively and significantly associated with interpersonal citizenship,  $\gamma = 0.28$ ,  $SE = 0.13$ ,  $p = .03$ , and organizational citizenship,  $\gamma = 0.27$ ,  $SE = 0.13$ ,  $p = .04$ . Hypothesis 3a is therefore supported and these results suggest that teams who are more focused influence members of the team to engage in higher levels of citizenship. In contrast, we only find partial support for hypothesis 3b. Models 2 and 5, respectively, in Table 4 indicate that team focus is negatively and significantly associated with interpersonal deviance,  $\gamma = -0.06$ ,  $SE = 0.02$ ,  $p = .02$ , and negatively, but not significantly, associated with organizational deviance,  $\gamma = -0.01$ ,  $SE = 0.02$ ,  $p = .54$ . These results suggest that teams who are more focused influence members of the team to engage in lower levels of interpersonal deviance, but not organizational deviance.

## Exploratory Analyses about the Possible Mediating Role of Action Identification

Our theory development suggests that the respective relationships between team focus and discretionary team member behaviors will be mediated by team members' level of action identification (Vallacher & Wegner, 1985; 1987). Team members should engage in higher levels of citizenship and lower levels of deviance because teams' outcome focus is more salient than process focus, this saliency leads team members to identify their actions at higher, more abstract levels, and this higher action identification leads team members to engage in thought processes that make long-term interests more salient than short-term interests. This theorizing corresponds with prior empirical work that has found action identification to mediate the relationships between team focus and various task outcomes (e.g., Aggarwal & Woolley, 2013; Woolley, 2009a, 2009b).

Unfortunately, our use of a cross-sectional field study precludes us from being able to draw any definitive empirical conclusions about mediation. As outlined by MacKinnon, Coxe, and Baraldi (2012), our cross-sectional field study lacks two important elements to empirically establish team member's level of action identification as a mediating variable. First, we did not randomize employees into team focus or action identification conditions. Second, we did not temporally separate our measurement of team focus, action identification, or discretionary team member behaviors. Because our study design lacks these two important elements, we chose not to offer a formal hypothesis regarding the mediating role of team members' level of action identification. However, we thought it might be beneficial to still test for mediation to explore whether there was at least an empirical possibility that action identification mediated the respective relationships between team focus and discretionary team member behaviors.

Our use of grand mean centering in our hierarchical linear models is consistent with Hofmann and Gavin's (1998) recommendation to

use grand mean centering for multilevel mediational models and is consistent with prior research examining multilevel mediational models (e.g., Cruz & Pil, 2011; Wang & Hsieh, 2013). We test for mediation following Zhao, Lynch, and Chen's (2010) guidelines, which have garnered more empirical support than previously established approaches (i.e., Baron & Kenny, 1986). Specifically, Zhao et al. (2010) indicate that a significant main effect is not a necessary requirement to test for and show mediation and the only requirement to show mediation is a significant indirect effect. Mediation can be demonstrated by the Sobel test or a more powerful bootstrap test. Bauer, Preacher, and Gil (2006) and Preacher, Zyphur, and Zhang (2010) used a parametric bootstrap to test for mediation in a multilevel model. Following Preacher et al. (2010), we test for mediation in our multilevel models by using Selig and Preacher's (2008) web-based utility for conducting parametric bootstrap tests. We used a 95% confidence interval and 20,000 repetitions. Support for mediation is found if zero falls outside of the confidence interval (Selig & Preacher, 2008).

Table 2, and Models 3 and 6, respectively, in Table 3 are used to test for the possible mediating effect of action identification for team focus and team member citizenship. A parametric bootstrap test suggests that action identification does not mediate the relationship between team focus and interpersonal citizenship, 95% CI[-0.002, 0.072], but does mediate the relationship between team focus and organizational citizenship, 95% CI[0.006, 0.142]. Table 2, and Models 3 and 6, respectively, in Table 4 are used to test for the possible mediating effect of action identification for team focus and team member deviance. A parametric bootstrap test suggests that action identification mediates the relationship between team focus and interpersonal deviance, 95% CI[-0.028, -0.001], and the relationship between team focus and organizational deviance, 95% CI[-0.027, -0.001]. The results of these exploratory analyses suggest there is an empirical possibility that action identification mediates the relationships between team focus and discretionary team member behaviors. We encourage future research to use study designs that allow for more definitive conclusions about the mediating role of action identification.

## Discussion

### Theoretical Implications

By examining whether real teams distinguish between outcome focus and process focus like non-real teams do and how a team's focus influences a team member's level of action identification and discretionary behaviors, we believe that we make several important theoretical contributions. First, we contributed to the limited body of knowledge examining how outcome and process focus in teams relate to one another (Woolley, 2009a) by empirically testing Woolley's (2009a, p. 511) speculation that "truly dual-focused teams are unusual." Few, if any, studies have been able to examine the relationships among these variables in longer standing organizational teams in the manner we have in our study and the teams in our study suggest that dual-focused teams are not as unusual as Woolley (2009b) speculated them to be. Rather, they are very common in organizational settings. It is likely that the teams in our study have found complementarities between outcome and process focus that have not been observed in shorter tenure teams (e.g., lab teams) because of the relatively long team tenure found among the team members within these teams. This suggests that temporal stability (Hollenbeck et al., 2012) is an important boundary condition of how outcome and process focus develop in teams. Our data do not allow us to empirically examine how team outcome and process focus develop to be complementary over time. We therefore encourage future research to explore this process, as well as other boundary conditions

that may impact when teams distinguish between an outcome focus and a process focus and when they do not.

Second, we add to the limited literature examining possible organizational antecedents of the degree to which employees view things in more abstract versus concrete terms by focusing on team focus as a possible organizational antecedent (Wiesenfeld et al., 2017). As we already discussed, prior work has examined team focus as an antecedent of action identification, but this work has largely been in an artificial setting (i.e., lab). Our study suggests that team focus might also be an antecedent of action identification in real teams. Thus, our findings may help triangulate prior findings and may help provide more confidence in saying the impact of team focus on action identification is a robust phenomenon. However, it is important for future research to begin exploring other possible organizational antecedents, whether they are other factors within a team or factors outside of a team, to further our understanding of construal-level within the field of organizational behavior.

Third, we build upon prior work that has focused on task outcomes of team focus by examining how team focus might impact the discretionary behaviors team members may engage in while accomplishing those task outcomes. Our study furthers our understanding of team-level factors that might influence team member behaviors, such as our limited understanding of how team-level factors influence workplace deviance (O'Boyle et al., 2011), by indicating that there might be similarly beneficial behavioral outcomes of team focus: more team member citizenship and less team member deviance. However, there may be conditions in which team focus may be detrimental, rather than beneficial. Gong and Medin's (2012) finding that individuals who see things in more abstract terms, analogous to a high-level action identity, are more tolerant of moral transgressions and see moral behaviors in a less positive light suggests that they may also be more accepting of adopting a bottom-line mentality under certain conditions. A bottom-line mentality is "one-dimensional thinking that revolves around securing bottom-line outcomes to the neglect of competing priorities" (Greenbaum, Mawritz, & Eissa, 2012, p. 343). This dynamic was illustrated in related research on management control systems which found that government administrators who were evaluated on the basis of statistical performance indicators (i.e., outcomes) behaved so as to increase their performance in terms of these indices even if the overall result was dysfunctional for the organization (Blau, 1955; Govindrajana & Gupta, 1985). It is therefore important for future research to examine the conditions in which team focus is good versus bad.

### Managerial Implications

We believe our results also have direct and meaningful managerial implications. Our results suggest that managers should ensure teams have a clear idea of what the outcomes of their work are and a clear idea of how they should achieve those outcomes because having a clear team focus can potentially increase team members' level of action identification, and influence team members to engage in more positive and less negative discretionary behaviors. Research on team mental models, which are "team members' shared, organized understanding and mental representation of knowledge about key elements of the team's relevant environment" (Mohammed, Ferzandi, & Hamilton, 2010: 879), suggests that team interventions, including planning, reflexivity, leadership, and training, are key ways to influence teams to have a clearer focus (Mohammed et al., 2010). Managers have a relatively wide variety of intervention options to choose from and we focus on two that seem particularly fruitful for team focus.

The first intervention is based on investigations of team focus in the lab. Woolley (2009a) successfully manipulated teams to

focus on outcomes or processes through a simple intervention: a worksheet that focused teams' attention on the outcomes or processes of their task. This manipulation suggests that managers may be able to influence their teams to have a clearer focus by simply priming their teams to more explicitly discuss the processes and/or outcomes of their work. This could be accomplished by using a similar style of worksheet as Woolley (2009a). It might also be accomplished by managers leading team discussions concerning the processes and outcome of their work. A second intervention, which could also help formalize the first intervention, is to require teams to codify teamwork activities, which are focused on how outcomes are accomplished, and task work, which is focused on the outcomes of teamwork activities (Mathieu & Rapp, 2009). The codification of teamwork and task work would help make team focus explicitly clear to the team. These are just two interventions, among many, that managers can implement to directly influence team focus in order to reap the potential benefits of team focus.

### Limitations and Directions for Future Research

There are several limitations of our study that need to be noted. First, the average team in our study focused on both the outcomes and processes of their work. According to action identification theory (Vallacher & Wegner, 1985, 1987), the presence of both outcome and process focus leads higher level action identities to be more salient than lower level action identities. However, Woolley (2009a, 2009b) showed that teams who focus primarily on the outcomes of their work or the processes of their work differentially affected task outcomes. The same may be true for behavioral outcomes. Future research should therefore try to examine real teams that tend to focus primarily on the outcomes of their work (e.g., project teams) or the processes of their work (e.g., quality control teams) in order to assess whether real teams who focus primarily on one aspect of their work differentially influence the degree to which team members engage in positive and negative discretionary behaviors.

Second, our use of cross-sectional data precluded us from establishing internal validity in our sample. Prior work indicates that team focus influences action identification and action identification influences task performance (e.g., Aggarwal & Woolley, 2013; Woolley 2009a, 2009b). The significant associations we found in our sample of real teams are similar to the associations found in this prior work that has primarily used lab teams and student project teams. We therefore encourage future research to conduct a longitudinal design of real teams in order to establish whether the associations we found in our study follow the same causal ordering as those found in prior studies of lab and student project teams. It may be that the extent to which team members, as a whole, engage in positive or negative discretionary behaviors affects the degree to which teams focus on the outcomes or processes of their work. Only a longitudinal design would allow one to have greater confidence of whether the relationships we found in our study are recursive or non-recursive. A longitudinal design would also allow for a more accurate test of the mediating role of action identification (MacKinnon et al., 2012).

### Conflict of Interest

The authors of this article declare no conflict of interest.

### References

- Agerström, J., & Björklund, F. (2009). Moral concerns are greater for temporally distant events and are moderated by value strength. *Social Cognition, 27*, 261-282. <https://doi.org/10.1521/soco.2009.27.2.261>
- Aggarwal, I., & Woolley, A. W. (2013). Do you see what I see? The effect of members' cognitive styles on team processes and performance.

- Organizational Behavior and Human Decision Processes*, 122, 92-99. <https://doi.org/10.1016/j.obhdp.2013.04.003>
- Aguinis, H., Gottfredson, R. K., & Culpepper, S. A. (2013). Best-practice recommendations for estimating cross-level interaction effects using multilevel modeling. *Journal of Management*, 39, 1490-1528. <https://doi.org/10.1177/0149206313478188>
- Bandura, A. (1977). *Social learning theory*. Upper Saddle River, NJ: Prentice Hall.
- Baron, R. M., & Kenny, D. A. (1986). The moderator-mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology*, 51, 1173-1182. <https://doi.org/10.1037/0022-3514.51.6.1173>
- Bauer, D. J., Preacher, K. J., & Gil, K. M. (2006). Conceptualizing and testing random indirect effects and moderated mediation in multilevel models: New procedures and recommendations. *Psychological Methods*, 11, 142-163. <https://doi.org/10.1037/1082-989X.11.2.142>
- Bennett, R. J., & Robinson, S. L. (2000). Development of a measure of workplace deviance. *Journal of Applied Psychology*, 85, 349-360. <https://doi.org/10.1037/0021-9010.85.3.349>
- Berry, C. M., Carpenter, N. C., & Barratt, C. L. (2012). Do other-reports of counterproductive work behavior provide an incremental contribution over self-reports? A meta-analytic comparison. *Journal of Applied Psychology*, 97, 613-636. <https://doi.org/10.1037/a0026739>
- Blau, P. M. (1955). *The dynamics of bureaucracy*. Chicago, IL: University of Chicago Press.
- Bliese, P. D., Maltarich, M. A., & Hendricks, J. L. (2018). Back to basics with mixed-effects models: Nine take-away points. *Journal of Business and Psychology*, 33, 1-23. <https://doi.org/10.1007/s10869-017-9491-z>
- 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, 547-574. <https://doi.org/10.1002/job.1909>
- Carpenter, N. C., Rangel, B., Jeon, G., & Cottrell, J. (2017). Are supervisors and coworkers likely to witness employee counterproductive work behavior? An investigation of observability and self-observer convergence. *Personnel Psychology*, 70, 843-889. <https://doi.org/10.1111/peps.12210>
- Cohen, S. G., & Bailey, D. E. (1997). What makes teams work: Group effectiveness research from the shop floor to the executive suite. *Journal of Management*, 23, 239-290. <https://doi.org/10.1177/014920639702300303>
- Conway, J. M., & Lance, C. E. (2010). What reviewers should expect from authors regarding common method bias in organizational research. *Journal of Business and Psychology*, 25, 325-334. <https://doi.org/10.1007/s10869-010-9181-6>
- Cruz, K. S., & Pil, F. K. (2011). Team design and stress: A multilevel analysis. *Human Relations*, 64, 1265-1289. <https://doi.org/10.1177/0018726711409264>
- Fujita, K., Trope, Y., Liberman, N., & Levin-Sagi, M. (2006). Construal levels and self-control. *Journal of Personality and Social Psychology*, 90, 351-367. <https://doi.org/10.1037/0022-3514.90.3.351>
- Glomb, T. M., & Liao, H. (2003). Interpersonal aggression in work groups: Social influence, reciprocal, and individual effects. *Academy of Management Journal*, 46, 486-496. <https://doi.org/10.2307/30040640>
- Gong, H., & Medin, D. L. (2012). Construal levels and moral judgment: Some complications. *Judgment and Decision Making*, 7, 628-638.
- González-Romá, V., & Hernández, A. (2017). Multilevel modeling: Research-based lessons for substantive researchers. *Annual Review of Organizational Psychology and Organizational Behavior*, 4, 183-210. <https://doi.org/10.1146/annurev-orgpsych-041015-062407>
- Govindarajan, V., & Gupta, A. K. (1985). Linking control systems to business unit strategy: Impact on performance. *Accounting, Organizations and Society*, 10, 51-66. [https://doi.org/10.1016/0361-3682\(85\)90031-5](https://doi.org/10.1016/0361-3682(85)90031-5)
- Greenbaum, R. L., Mawritz, M. B., & Eissa, G. (2012). Bottom-line mentality as an antecedent of social undermining and the moderating roles of core self-evaluations and conscientiousness. *Journal of Applied Psychology*, 97, 343-359. <https://doi.org/10.1037/a0025217>
- Hackman, J. R. (2002). *Leading teams: Setting the stage for great performances*. Boston, MA: Harvard Business School Press.
- Hirschi, T. (1969). *Causes of delinquency*. Berkeley, CA: University of California Press.
- Hoffman, B. J., & Dilchert, S. (2012). A review of citizenship and counterproductive behaviors in organizational decision-making. In N. Schmitt (Ed.), *The Oxford Handbook of Personnel Assessment and Selection* (pp. 543-569). New York, NY: Oxford University Press.
- Hofmann, D. A., & Gavin, M. B. (1998). Centering decisions in hierarchical linear models: Implications for research in organizations. *Journal of Management*, 24, 623-641. <https://doi.org/10.1177/014920639802400504>
- Hollenbeck, J. R., Beersma, B., & Schouten, M. E. (2012). Beyond team types and taxonomies: A dimensional scaling conceptualization for team description. *Academy of Management Review*, 37, 82-106. <https://doi.org/10.5465/amr.2010.0181>
- Hollinger, R. C., & Clark, J. P. (1982). Formal and informal social controls of employee deviance. *The Sociological Quarterly*, 23, 333-343. <https://doi.org/10.1111/j.1533-8525.1982.tb01016.x>
- Katzenback, J. R., & Smith, D. K. (1993). *The wisdom of teams*. New York, NY: McKinsey & Company.
- Kozlowski, S. W., & Ilgen, D. R. (2006). Enhancing the effectiveness of work groups and teams. *Psychological Science in the Public Interest*, 7, 77-124. <https://doi.org/10.1111/j.1529-1006.2006.00030.x>
- Lau, V. C. S., Au, W. T., & Ho, J. M. C. (2003). A qualitative and quantitative review of antecedents of counterproductive behavior in organizations. *Journal of Business and Psychology*, 18, 73-99. <https://doi.org/10.1023/A:1025035004930>
- Lee, K., & Allen, N. J. (2002). Organizational citizenship behavior and workplace deviance: The role of affect and cognitions. *Journal of Applied Psychology*, 87, 131-142. <https://doi.org/10.1037/0021-9010.87.1.131>
- MacKinnon, D. P., Coxé, S., & Baraldi, A. N. (2012). Guidelines for the investigation of mediating variables in business research. *Journal of Business and Psychology*, 27, 1-14. <https://doi.org/10.1007/s10869-011-9248-z>
- Marcus, B., & Schuler, H. (2004). Antecedents of counterproductive behavior at work: A general perspective. *Journal of Applied Psychology*, 89, 647-660. <https://doi.org/10.1037/0021-9010.89.4.647>
- Marks, M. A., Mathieu, J. E., & Zaccaro, S. J. (2001). A temporally based framework and taxonomy of team processes. *Academy of Management Review*, 26, 356-376. <https://doi.org/10.5465/AMR.2001.4845785>
- Mathieu, J., Maynard, M. T., Rapp, T., & Gilson, L. (2008). Team effectiveness 1997-2007: A review of recent advancements and a glimpse into the future. *Journal of Management*, 34, 410-476. <https://doi.org/10.1177/0149206308316061>
- Mathieu, J. E., & Rapp, T. L. (2009). Laying the foundation for successful team performance trajectories: The roles of team charters and performance strategies. *Journal of Applied Psychology*, 94, 90-103. <https://doi.org/10.1037/a0013257>
- McNeely, B. L., & Meglino, B. M. (1994). The role of dispositional and situational antecedents in prosocial organizational behavior: An examination of the intended beneficiaries of prosocial behavior. *Journal of Applied Psychology*, 79, 836-844. <https://doi.org/10.1037/0021-9010.79.6.836>
- Mohammed, S., Ferzandi, L., & Hamilton, K. (2010). Metaphor no more: A 15-year review of the team mental model construct. *Journal of Management*, 36, 876-910. <https://doi.org/10.1177/0149206309356804>
- O'Boyle, E. H., Forsyth, D. R., & O'Boyle, A. S. (2011). Bad apples or bad barrels: An examination of group- and organizational-level effects in the study of counterproductive work behavior. *Group & Organization Management*, 36, 39-69. <https://doi.org/10.1177/1059601110390998>
- Podsakoff, P. M., MacKenzie, S. B., & Podsakoff, N. P. (2012). Sources of method bias in social science research and recommendations on how to control it. *Annual Review of Psychology*, 63, 539-569. <https://doi.org/10.1146/annurev-psych-120710-100452>
- Preacher, K. J., Zyphur, M. J., & Zhang, Z. (2010). A general multilevel SEM framework for assessing multilevel mediation. *Psychological Methods*, 15, 209-233. <https://doi.org/10.1037/a0020141>
- Raudenbush, S. W., & Bryk, A. S. (2002). *Hierarchical linear models: Applications and data analysis methods* (2nd ed.). Thousand Oaks, CA: Sage.
- Robinson, S. L. (1992). *Retreat, voice, silence and destruction: A typology of behavioral responses to organizational dissatisfaction and an examination of their contextual predictors* (Unpublished dissertation).
- Robinson, S. L., & Bennett, R. J. (1995). A typology of deviant workplace behaviors: A multidimensional scaling study. *Academy of Management Journal*, 38, 555-572. <https://doi.org/10.2307/256693>
- Robinson, S. L., & O'Leary-Kelly, A. M. (1998). Monkey see, monkey do: The influence of work groups on the antisocial behavior of employees. *Academy of Management Journal*, 41, 658-672. <https://doi.org/10.2307/256963>
- Rotundo, M., & Spector, P. E. (2017). New perspectives on counterproductive work behavior including withdrawal. In J. L. Farr & N. T. Tippins (Eds.), *Handbook of Employee Selection* (2nd ed., pp. 476-508). New York, NY: Routledge.
- Salancik, G. R., & Pfeffer, J. (1978). A social information processing approach to job attitudes and task design. *Administrative Science Quarterly*, 23, 224-253. <https://doi.org/10.2307/2392563>
- Salas, E., Sims, D. E., & Burke, C. S. (2005). Is there a "big five" in teamwork? *Small Group Research*, 36, 555-599. <https://doi.org/10.1177/1046496405277134>
- Selig, J. P., & Preacher, K. J. (2008). *Monte Carlo method for assessing mediation: An interactive tool for creating confidence intervals for indirect effects* [Computer software]. Retrieved from <http://quantpsy.org/>
- Snijders, T. A. B., & Bosker, R. J. (2012). *Multilevel analysis: An introduction to basic and advanced multilevel modeling* (2nd ed.). London, UK: SAGE.
- Spector, P. E. (2006). Method variance in organizational research: Trust or urban legend? *Organizational Research Methods*, 9, 221-232. <https://doi.org/10.1177/1094428105284955>
- Spector, P. E. (2019). Do not cross me: Optimizing the use of cross-sectional designs. *Journal of Business and Psychology*, 34, 125-137. <https://doi.org/10.1007/s10869-018-09613-8>
- Tofighi, D., & Thoemmes, F. (2014). Single-level and multilevel mediation analysis. *Journal of Early Adolescence*, 34, 93-119. <https://doi.org/10.1177/0272431613511331>

- Trope, Y., & Liberman, N. (2010). Construal-level theory of psychological distance. *Psychological Review*, *117*, 440-463. <https://doi.org/10.1037/a0018963>
- Vallacher, R. R., & Wegner, D. M. (1985). *A theory of action identification*. Hillsdale, NJ: Erlbaum.
- Vallacher, R. R., & Wegner, D. M. (1987). What do people think they're doing? Action identification and human behavior. *Psychological Review*, *94*, 3-15. <https://doi.org/10.1037/0033-295X.94.1.3>
- Vallacher, R. R., & Wegner, D. M. (1989). Levels of personal agency: Individual variation in action identification. *Journal of Personality and Social Psychology*, *57*, 660-671. <https://doi.org/10.1037/0022-3514.57.4.660>
- Wang, Y.-D., & Hsieh, H.-H. (2013). Organizational ethical climate, perceived organizational support, and employee silence: A cross-level investigation. *Human Relations*, *66*, 783-802. <https://doi.org/10.1177/0018726712460706>
- Wiesenfeld, B. M., Reyt, J.-N., Brockner, J., & Trope, Y. (2017). Construal level theory in organizational research. *Annual Review of Organizational Psychology and Organizational Behavior*, *4*, 367-400. <https://doi.org/10.1146/annurev-orgpsych-032516-113115>
- Woolley, A. W. (2009a). Means vs. ends: Implications of process and outcome focus for team adaptation and performance. *Organization Science*, *20*, 500-515. <https://doi.org/10.1287/orsc.1080.0382>
- Woolley, A. W. (2009b). Putting first things first: Outcome and process focus in knowledge work teams. *Journal of Organizational Behavior*, *30*, 427-452. <https://doi.org/10.1002/job.578>
- Woolley, A. W., Bear, J. B., Chang, J. W., & DeCostanza, A. H. (2013). The effects of team strategic orientation on team process and information search. *Organizational Behavior and Human Decision Processes*, *122*, 114-126. <https://doi.org/10.1016/j.obhdp.2013.06.002>
- Zhao, X., Lynch, J. G., Jr., & Chen, Q. (2010). Reconsidering Baron and Kenny: Myths and truths about mediation analysis. *Journal of Consumer Research*, *37*, 197-206. <https://doi.org/10.1086/651257>