RESEARCH ARTICLE

Employee performance and abusive supervision: The role of supervisor over-attributions

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Summary

To understand the relationship between employee performance and abusive reactions from supervisors, we examine the role of supervisors' attributions about employees' performance. Drawing on the fundamental attribution error, we argue that supervisors over-attribute lower levels of performance to employees' internal factors (i.e., conscientiousness), which then triggers higher levels of abusive supervision. In Study 1, we collected data from 189 supervisor–employee dyads. The results indicated that lower levels of supervisor-rated employee performance related to supervisor biased attributions to employee conscientiousness, which in turn resulted in employee-rated abusive supervision. In Study 2, we combined a recall task with a vignette design to replicate and extend our findings. We demonstrated that after adjusting for the baseline level of employee conscientiousness, supervisors over-attributed poor performance to employee conscientiousness and then engaged in higher levels of abusive behaviors. Further, consistent with premises of fundamental attribution error, we found that in the absence of information about who was at fault for poor performance, supervisors over-attributed poor performance to internal factors (employee) as compared to external factors (software malfunction). Taken together, our findings demonstrate that biased attributions about employee conscientiousness help explain the relationship between employee performance and abusive supervision.

KEYWORDS
abusive supervision, attributions, conscientiousness, fundamental attribution error, leadership, performance

1 | INTRODUCTION

Abusive supervision represents a range of negative behaviors directed at employees (Tepper, 2002). Not surprisingly, previous research has demonstrated an array of adverse consequences related to abusive behaviors from supervisors, including reduced employee well-being, lower job satisfaction, higher levels of work–family conflict, increased depression, and higher levels of emotional exhaustion (Hershcovis & Barling, 2010; Mackey et al., 2017). Recognizing that even a low-base phenomenon can significantly damage employee and organizational outcomes, research on abusive supervision has exploded in recent years (see Tepper et al., 2017). Notwithstanding recent advancements in this area of research, we have much to learn about the mechanisms that help explain abusive behaviors (see Zhang & Bednall, 2016).

In this paper, we consider a cognitive mechanism for explaining abusive supervisory reactions: We posit that supervisors may engage

in abusive behaviors based on potentially biased attributions of observed behaviors (employee performance) to employee personality (employee conscientiousness). More specifically, we explore whether supervisors over-attribute performance issues to employee lower conscientiousness yielding higher levels of abusive supervision.[1] We theorize that it is not necessarily actual employees' conscientiousness, but rather how supervisors make sense of employees' behaviors that explains higher levels of abusive supervision. Drawing on the fundamental attribution error (FAE, Ross, 1977), we theorize that supervisors, like all of us, are prone to make biased attributions of observed behaviors to internal factors. These attributions, in turn, can give rise to negative behaviors such as abusive supervision directed at the employee. Thus, we demonstrate that supervisors may engage in higher levels of harming their employees as a result of unconscious perceptual biases.

The FAE argues that people over-attribute negative outcomes (e.g., poor performance) to factors internal to the employee. Consistent with research on performance and personality, we focus on employee conscientiousness as our focal internal factor. Across all personality dimensions, conscientiousness exhibits the strongest and most consistent relationship with performance (Barrick & Mount, 1991; Hurtz & Donovan, 2000). In a quantitative summary of 15 meta-analyses, Barrick et al. (2001) found that conscientiousness was the only personality trait that consistently related to performance regardless of occupation or performance measure. Therefore, when supervisors evaluate performance to be lower, the most likely internal factor that may explain this performance is conscientiousness.

This paper contributes to research on abusive supervision in three related ways. First, we examine not only the performance determinants of abusive supervision but also an attributional mechanism that explains the relationship between employee performance and abusive reactions. As a result, this paper provides a better understanding of how observed behaviors might trigger more abusive supervisory reactions. Previous research has focused on target characteristics and behaviors that predict abusive supervision (e.g., Milam et al., 2009; Scott et al., 2013) without considering a mechanism that explains supervisors' negative reactions. Examining the mechanism of over-attributions is important because it shifts the responsibility from the target's behavior (performance) to the supervisor's interpretation (biased attribution) of the behavior. Second, scholars (e.g., Cortina et al., 2018; Kluemper et al., 2019) have called for more research that examines mechanisms of abusive supervision. While some researchers argue that supervisors intentionally prey on certain targets (e.g., perpetrator predation as an explanation for mistreatment behaviors, Cortina et al., 2018), we suggest that the relationship is in fact more complex. That is, supervisors may unconsciously make biased attributions for observed performance to employee internal characteristics (conscientiousness), which may explain the relationship between employee performance and abusive behaviors. Third, we consider how performance can be misunderstood and result in more abusive reactions. Research has suggested that targets' dispositional traits relate to experienced mistreatment (e.g., Aquino & Byron, 2002; Henle & Gross, 2014; Tepper et al., 2011; Zhang & Bednall, 2016). In

this paper, we theorize that supervisors' cognitive processes (i.e., biased attributions) may cause their own abusive behaviors. This investigation points to ways that interventions might help to further reduce abusive supervision, including making supervisors aware of the importance of perspective taking in making sense of employees' behaviors (Harvey et al., 2006).

2 | THEORETICAL BACKGROUND AND HYPOTHESES

Individuals search for causes for their own and others' actions, particularly in relation to unexpected or negative outcomes (Weick, 1995; Wong & Weiner, 1981). According to attribution theory, people assess outcomes of an event by making causal attributions (Heider, 1958; Kelley, 1973). Weiner et al. (1987) identified three dimensions of causal attributions: externality (i.e., what caused the outcome?), controllability (i.e., was the behavior controllable?), and intentionality (i.e., was the behavior intentional?). Among the three dimensions, externality relates to the locus of causality (Heider, 1958; Weiner et al., 1987) and is the most relevant to assigning responsibility for outcomes (Kelley, 1973; Martinko et al., 2002). For example, among the three dimensions, supervisors' judgments of externality related most strongly to determining responsibility for workplace accidents (LaCroix & Dejoy, 1989).

To determine responsibility for an outcome, people tend to make one of two types of attributions: external or internal. External attributions assign causality to factors outside the person. For example, attributions to bad luck, lack of training, or equipment failure are external to the focal individual, whereas internal attributions assign causality to factors within the person, such as their personality. Whether external or internal, attributions do not necessarily provide an accurate reflection of reality. Importantly, attributional inferences about observed behaviors represent a fast and unconscious process (Posner & Snyder, 1975). This is because individuals have limited processing capabilities leading to cognitive shortcuts when explaining other's behaviors, including work-related behaviors (DeNisi et al., 1984).

FAE represents an attributional bias in the context of observed behaviors (Ross, 1977). This bias refers to individuals' tendency to underestimate situational (external) factors and overestimate dispositional (internal) factors when explaining behaviors of others. As supervisors observe at least some performance-related behaviors of their employees, they are likely to make attributions for the observed behavior. This attributional process occurs in two steps (Green & Mitchell, 1979): first, supervisors make attributions about employee's performance, and second, these attributions have implications for supervisor's behaviors toward the employee.

According to FAE (Ross, 1977), individuals infer dispositional characteristics (e.g., personality traits) from observed behaviors. The tendency to infer internal factors for the behavior of others is robust and holds even when individuals encounter evidence that the behavior is externally driven (Miller et al., 1990). In a classic

experiment, Jones and Harris (1967) demonstrated that individuals are susceptible to the FAE. They asked participants to assess a person's pro- or anti-Castro feelings based on an essay written by that person. The results showed that, even when participants knew that fellow participants were assigned to write either pro- or anti-Castro essays, they still attributed the essay to internal factors (i.e., writers' attitudes). Subsequent research has continued to support the tendency for people to attribute observed more negative behaviors to individuals' internal characteristics (e.g., Forgas, 1998; O'Sullivan, 2003; Winter & Uleman, 1984). We assert that this same tendency holds when supervisors try to make sense of employee performance.

2.1 | Employee performance and abusive supervision

Research has largely examined employee performance as a consequence of abusive supervision (e.g., Aryee et al., 2007; Harris et al., 2007; Xu et al., 2012). Providing an alternative view, Tepper et al. (2011) suggested that employee performance may also predict abusive supervisory behaviors. Tepper and colleagues contended that supervisors view lower performing employees as threatening and as having "low utility" (p. 282), which in turn puts those employees at a higher risk of abuse. Using data from supervisor–employee dyads, they demonstrated that supervisor-rated employee performance related to employee perceptions of abusive supervision. Khan et al. (2018) replicated the finding showing that lower levels of performance led to higher abusive supervision.

Many factors can contribute to low performance. For example, low performance can result from poorly functioning technology, inadequate equipment, lack of training, or insufficient effort. Although supervisors may react constructively in an effort to improve performance (i.e., providing constructive feedback or training), they may also take more destructive actions (i.e., abusive supervision). We propose that how supervisors make sense of performance has implications for their actions. More specifically, we expect that if supervisors attribute lower performance to factors internal to their employees, they may react more abusively toward these individuals because they perceive that the responsibility for lower performance lies within the employee.

Rotundo and Sackett (2002) conceptualized job performance as behaviors that are controllable by the employee and related to organizational goals. They argued that job performance consists of three dimensions: task performance, counterproductive work behavior (CWB), and organizational citizenship behavior (OCB). Rotundo and Sackett found empirical evidence to support the argument that raters consider task performance, CWB, and OCB when making performance judgments, suggesting the importance of these three constructs as indicators of employee performance. In the next section, we theorize the mediating role of supervisors' perceptions of employee conscientiousness in the relationship between employee performance and abusive supervision.

2.2 | Mediating role of perceived conscientiousness

We theorize that supervisor perceptions of employee conscientiousness explain the relationship between employee performance and abusive supervision. As described earlier, when employees demonstrate lower levels of performance, supervisors may make sense of low performance by attributing such performance to employees' internal factors. Personality is the most salient internal factor about an employee; therefore, supervisors may explain employees' performance by making inferences about employees' personality. Among the Big Five personality traits (i.e., openness to experience, conscientiousness, extraversion, agreeableness, and neuroticism)—the most widely used model to assess personality (Azucar et al., 2018)—conscientiousness exhibits the strongest and most consistent relationship with job performance indicators (Barrick & Mount, 1991; Hurtz & Donovan, 2000; Neal et al., 2012).

Several meta-analyses have shown that conscientiousness is the only Big Five personality dimension that consistently relates to performance across job performance criteria and occupation types (Barrick et al., 2001; Barrick & Mount, 1991). In fact, Barrick and colleagues have suggested that conscientiousness is the dimension of personality that encompasses traits vital to performance across tasks. Compared to those lower in conscientiousness, individuals higher in conscientiousness are more reliable, trustworthy, achievement-focused (Mount et al., 1999), dependable, hardworking (Hurtz & Donovan, 2000), cooperative, and display more self-discipline (Peeters et al., 2006). By extension, those lower in conscientiousness are less likely than their more conscientious counterparts to complete work on time, are less detail-oriented, and are more likely to make mistakes. In this way, lower performance is likely to result in supervisors' judgments about employee's conscientiousness (LePine & Van Dyne, 2001).

Each person has mental boundaries that separate more deserving (i.e., morally included) from less undeserving (i.e., morally excluded) individuals (Opotow, 1990). Individuals who are excluded from the mental boundary of "moral community" or "scope of justice" (Opotow, 1990, p. 3) are at a higher risk of being subjected to adverse treatment (Mitchell et al., 2015). Excluded targets encounter various forms of negative behaviors that can range from relatively minor to more severe. Perceptions of utility represent an important factor of whether a person falls within the boundaries of moral community, and utility perceptions stem from considerations about subjective value of the person (Opotow, 1990). Supervisor perceptions about employee conscientiousness may lead supervisors to make conclusions about anticipated future performance. Viewing an employee as someone who is more disorganized, has lower levels of attention to detail, is less diligent, and is likely to relate to supervisors' conclusions that the employee will demonstrate lower levels of performance in the future. As such, supervisor perceptions of employee conscientiousness have implications for an employee's perceived utility. Supervisors who attribute lower performance to internal factors may view employees as having lower utility and are more likely to exclude the employee from

the boundaries of moral community (Opotow, 1990), thus increasing the likelihood that they will subject these employees to abusive behaviors (Tepper et al., 2011).

Taken together, we argue that supervisors' perceptions of employee performance are likely to initiate an attribution process. We posit that lower levels of employee performance are likely to trigger an attributional process in which supervisors attribute lower employee performance to employee dispositional characteristics. Because conscientiousness is the personality trait most related to performance, we suggest that supervisors will perceive lower performing employees as being lower in conscientiousness, which will prompt abusive responses. Further, in line with FAE, we expect that supervisor attributions to employee conscientiousness will be biased. That is, supervisor assessment of employee conscientiousness might not reflect actual level of employee conscientiousness.

> **Hypothesis 1.** (H1): Employee task performance (H1a), OCB (H1b), and CWB (H1c) will relate to abusive supervision via supervisors' attributions to employee conscientiousness.

3 | STUDY 1

3.1 | Method

3.1.1 | Participants and procedure

The sample comprised supervisor-employee dyads obtained from the following sources: three organizations, retail stores located at three shopping malls, and a convenience subsample. First, the three organizations were a multifamily property management company headquartered in the mid-west United States, an online bank headquartered in the northeast United States, and a real estate investment trust headquartered in the Canadian prairies. To match supervisors to employees, we used employee numbers for the property management organization and email addresses for the bank and real estate investment organizations. Across these three organizations, we collected a total of 186 supervisor surveys and 516 employee surveys, resulting in 75 matched cases. Second, the malls comprised 109 retail stores located in three shopping malls in the northeast United States. The three malls were all of a similar size, within the same metropolis, with similar retail stores. We distributed surveys in the retail stores; of the stores we cold-called, approximately 50% agreed to take the survey. Of the individuals in these retail stores who initially agreed to take the survey, approximately 60% ultimately completed the survey. As such, we collected a total of 115 supervisor and 115 employee surveys, amounting to 104 matched dyads from the mall source. Finally, we collected a small convenience subsample from 11 supervisor–employee dyads who were working acquaintances of the second author and worked in a university environment. We matched each supervisor with only one employee.

After combining the samples and removing cases with incomplete data, 189 supervisor–subordinate dyads remained. Of the supervisors, 34% were male, 35% were less than 30 years old, 29% were between 30 and 39 years old, 21% were between 40 and 49 years old, and 15% were 50 years old or older. The supervisor sample was 63% Caucasian/White, 12% African American/Black, 9% Hispanic, and 4% Asian. Of the employees that responded to demographic questions, 33% were male, 51% were less than 30 years old, 27% were between 30 and 39 years old, 13% were between 40 and 49 years old, and 10% were 50 years old or older. The employee sample was 47% White, 23% African American/Black, 13% Hispanic, and 7% Asian. In terms of employee–supervisor tenure, 45% reported working together from 6 months to 2 years, 23% worked together from 2 to 5 years, 14% worked together for more than 5 years, and 18% worked together for 6 months or less.

3.1.2 | Measures

Supervisors rated employee task performance, OCB, CWB, and perceived employee conscientiousness. Employees provided ratings of their conscientiousness and perceived abusive supervision. Due to access limitations (i.e., a requirement to keep the questionnaire under 10 minutes), we used shortened measures to assess task performance, OCB, and CWB. We used a combination of qualitative and quantitative strategies to shorten each scale (see Stanton et al., 2002). More specifically, we focused on the highest-loading items and also considered whether they were representative of the variable, were clearly written, and could be answered with relative ease by our respondents.

Task performance
We adapted four items from Williams and Anderson's (1991) six-item scale to measure supervisor-reported employee task performance. Items anchors ranged from "does not meet job requirements" to "routinely exceeds job requirements" on a 7-point scale (i.e., 1 = *does not meet job requirements*, 4 = *meets job requirements*, to 7 = *routinely exceeds job requirements*; anchors taken from Morgeson et al., 2005). Supervisors rated a specific employee's performance over the last month when answering questions. A sample item includes: "completes assigned duties" ($\alpha = .96$).

Organizational citizenship behavior
We measured supervisor-rated employee interpersonal and organizational citizenship behaviors using eight items from Lee and Allen's (2002) interpersonally oriented organizational citizenship behavior (OCB-I) and organizationally oriented organizational citizenship behavior (OCB-O) measures. We asked respondents to think about the last month and indicate their responses on a 7-point scale (1 = *never* to 7 = *always*). An example OCB-I items was "helped others who were absent" and an example OCB-O item was "offered ideas to improve the functioning of the organization" ($\alpha = .84$).

Counterproductive work behavior

We measured supervisor-rated employee counterproductive work behaviors using four interpersonal deviance (CWB-I) and four organizational deviance (CWB-O) items from Bennett and Robinson's (2000) measures. We asked respondents to indicate how often a specific employee engaged in certain behaviors over the last month (1 = *never* to 5 = *daily*). A sample CWB-I item was "acted rudely toward someone at work". A sample CWB-O item was "put little effort into his or her work" (α = .76).

Conscientiousness

We obtained ratings of conscientiousness from two sources: supervisor perceptions of employee conscientiousness and employee ratings of their own conscientiousness. We used the 10 conscientiousness items from HEXACO model of personality for both other- and self-ratings of conscientiousness (Ashton & Lee, 2009). Supervisors and employees were asked to indicate their agreement on a 5-point Likert scale (1 = *strongly disagree* to 5 = *strongly agree*) with items such as "This employee often pushes him/herself very hard when trying to achieve a goal" (supervisor ratings of employee conscientiousness; α = .86) and "People often call me a perfectionist" (employee ratings of conscientiousness; α = .79).

Perceptions of abusive supervision

We measured employee perceptions of abusive supervision using 10 items from Tepper's (2000) scale: five passive–aggressive items and five active–aggressive items as validated by Mitchell and Ambrose (2007). We prefaced statements with "This past month, my supervisor …" using a 5-point scale (1 = *never*, 2 = *rarely*, 3 = *sometimes*, 4 = *most of the time*, and 5 = *always*). Sample items included: "Puts me down in front of others" and "Ridicules me" (α = .95).

Control variables

Research on perceptions of abusive supervision has demonstrated that employee trait negative affectivity relates to higher perceptions of abusive supervision (Mackey et al., 2017). We therefore measured employee trait negative affectivity using 10 PANAS items (Watson et al., 1988). Sample items include "upset" and "nervous" (α = .89). Participants reported how they feel in general across most situations (1 = *almost never*, 5 = *almost always*). To ensure the robustness of our findings, we conducted the analysis with and without control variables (Becker et al., 2016). Appendix A presents estimates for equations with control variables.

3.1.3 | Analytic approach

Equality of data sources

Before combining data from different sources (i.e., three organizations, retail stores in shopping malls, and a convenience sub-sample), we conducted mean comparisons and tested for equality of correlation matrices. A series of one-way ANOVAs demonstrated that there were no significant differences in mean scores of task performance (F[4, 183] = 1.49, p = .206), CWB (F[4, 184] = .61, p = .658), supervisor-rated conscientiousness (F[4, 182] = 1.07, p = .372), or perceptions of abusive supervision (F[4, 173] = .27, p = .900); however, there was a significant difference on OCB (F[4, 183] = 5.62, p < .001). A post hoc analysis indicated that employees from retail stores had higher levels of OCB compared to two of the organizations (i.e., bank and real estate investment firms). Next, we tested for the equality of the correlation matrices using Barlett's test of sphericity. The results indicated that there were no significant differences, χ^2(10) = 15.04, p = .131.

Discriminant validity of the measures

To establish discriminant validity of the measures, we conducted confirmatory factor analyses using Mplus version 8 (Muthén & Muthén, 2017). Following Little et al.'s (2002) recommendations, we used item parceling. Parceling produces more reliable latent estimates by reducing item-specific random errors and decreasing the necessary sample-size-to-parameter ratio. We created parcels for scales with a relatively large number of items, namely, OCB, CWB, perceived employee conscientiousness, and perceptions of abusive supervision, by randomly distributing the items in each scale to create three indicators for each latent variable. The hypothesized five-factor model fits the data well, χ^2(94) = 117.62, p < .001, comparative fit index (CFI) = 0.99, Tucker–Lewis index (TLI) = 0.99, root mean square of approximation (RMSEA) = 0.04. Further, the hypothesized model was significantly better than the seven-factor model (i.e., both OCB and CWB modeled as two-dimensional constructs) ($\Delta\chi^2$[174] = 322.47, p < .001; χ^2[278] = 440.09, p < .001, CFI = 0.94, TLI = 0.93, RMSEA = 0.06), the three-factor model (i.e., a combination of task performance, OCB, and CWB) ($\Delta\chi^2$[7] = 332.13, p < .001; χ^2[101] = 449.75, p < .001, CFI = 0.84, TLI = 0.80, RMSEA = 0.14), the two-factor model (i.e., OCB, CWB, and task performance combined in one factor, and perceived employee conscientiousness and perceived abusive supervision as the second factor) ($\Delta\chi^2$[9] = 561.47, p < .001; χ^2[103] = 679.09, p < .001, CFI = 0.72, TLI = 0.67, RMSEA = 0.17), and the one-factor model (i.e., all items loaded on a single construct) ($\Delta\chi^2$[10] = 927.84, p < .001; χ^2[104] = 1045.46, p < .001, CFI = 0.56, TLI = 0.49, RMSEA = 0.22).

Endogeneity testing

We examined the endogeneity of the mediating mechanism to ensure that supervisor perceptions of employee conscientiousness did not systematically relate to unobserved antecedents of perceived abusive supervision. We used the Hausman specification test (Hausman, 1978). This test explores whether the error terms of equations predicting perceptions of abusive supervision and supervisor perceived employee conscientiousness are significantly correlated. The Hausman specification test did not reveal endogeneity of supervisor perceived employee conscientiousness (F[1, 182] = 2.49, p = .116).

Calculating attributed conscientiousness

Our general argument is that supervisors make biased attributions of employee lower performance (i.e., observed behaviors) to employee's

lower consciousness (i.e., dispositional trait). Hence, to show that it is supervisors' perceptions of employee conscientiousness rather than employees' actual level of conscientiousness that explains the relationship between performance and abusive supervision, we needed to account for employee scores of their conscientiousness in the analysis. Importantly, personality research suggests that in a low-stakes confidential environment, such as participating in an anonymous survey, self-ratings of personality generally represent a reliable and accurate assessment of personality (Ashton & Lee, 2009).

To account for employee self-ratings of conscientiousness, we followed a criterion residual approach proposed by Paulhus and John (1998). Rather than taking a difference score, this approach is based on residual scores obtained from an equation in which supervisor ratings of employee conscientiousness are regressed on self-ratings of conscientiousness. This approach removes "all the valid criterion variance" from the supervisor perceptions of employee conscientiousness (Paulhus & John, 1998, p. 1032). In other words, the residual scores represent other-report perceptions after the shared variance is removed. For example, lower scores indicate under-rating employee conscientiousness relative to self-rating criterion. Appendix B includes results with supervisors' conscientiousness ratings as the mediator while controlling for the employee level of conscientiousness (instead of using the residual score approach).

Analytical approach

To test the mediation hypothesis, we conducted structural equation modeling in Mplus version 8 (Muthén & Muthén, 2017). We tested indirect effects using Bayesian estimation with 20,000 iterations. We used a Bayesian approach instead of maximum likelihood estimation as it provides more accurate estimates compared to the maximum likelihood when testing mediation with relatively small sample sizes (Koopman et al., 2015; Zyphur & Oswald, 2015) and is robust to non-normal distributions (Huang & Dagne, 2011; Wagenmakers et al., 2018). Estimates were obtained using diffuse priors (i.e., default option in Mplus; see Muthén, 2010).

We report unstandardized coefficients and 95% credibility intervals. We modeled all variables as latent variables. To provide an indication of model fit, the Bayesian approach relies on interpreting the posterior predictive p value (PPP). A PPP value less than .05 indicates poor model fit, values greater than .05 indicate acceptable model fit, and values greater than .5 indicate excellent model fit (Zyphur & Oswald, 2015).

3.1.4 | Testing the hypotheses

Table 1 presents means, standard deviations, and intercorrelations among the study variables.

The hypothesized model provided acceptable model fit (PPP = .374; χ^2 95% confidence interval [CI] [−34.27; .46.27]) (Zyphur & Oswald, 2015). We also tested a mediation model with direct paths from each performance indicator (i.e., task performance, OCB, and CWB) to perceptions of abusive supervision. That model provided acceptable but poorer fit, as indicated by lower PPP value (PPP = .327, χ^2 95% CI [−31.30; 50.61]) and the difference in the Bayesian information criterion (BIC) (ΔBIC = 15.87; Raftery, 1995). Hence, we report estimates from the mediation model that does not contain direct paths from performance indicators to perceived abusive supervision (Figure 1).

Task performance was positively related to attributed employee conscientiousness ($B = .32$, $SD = 0.06$, 95% CI [0.21; 0.44]), and attributed employee conscientiousness was negatively related to employee perceptions of abusive supervision ($B = −.38$, $SD = 0.10$, 95% CI [−0.58; −0.20]). Attributed employee conscientiousness mediated the relationship between task performance and perceptions of abusive supervision ($B = −.12$, $SD = 0.04$; 95% CI [−0.20, −0.05]), providing support for Hypothesis 1a. OCB was not related to attributed employee conscientiousness ($B = .08$, $SD = 0.04$, 95% CI [−0.008; 0.15]), and the indirect effect of OCB on perceptions of abusive supervision via attributed employee conscientiousness was not significant ($B = −.03$, $SD = 0.02$; 95% CI [−0.07, 0.004]), failing to support Hypothesis 1b. Finally, CWB was negatively related to attributed employee conscientiousness ($B = −.27$, $SD = 0.07$, 95% CI [−0.42; −0.13]). In support of Hypothesis 1c, attributed employee conscientiousness mediated the relationship between CWB and perceptions of abusive supervision ($B = .10$, $SD = 0.04$; 95% CI [0.03, 0.17]). An inclusion of employee negative affect as a control variable in the analysis did not change the pattern or significance of our findings (see Appendix A for detailed results).

4 | STUDY 2

Study 1 examined the mediating role of supervisor attributions to employee conscientiousness in the relationship between supervisor-rated employee performance and employee-perceived abusive supervision. The results demonstrated that lower levels of employee performance related to higher employee perceptions of abusive supervision through supervisor attributions of employee conscientiousness. We calibrated supervisor ratings of employee conscientiousness with employees' own ratings of their conscientiousness. Given that in a low-stakes environment, self-ratings of conscientiousness generally represent an accurate assessment of personality (Ashton & Lee, 2009), these results provide preliminary evidence in support of our argument that as a response to lower employee performance supervisors make biased attributions to lower levels of employee conscientiousness.

Although we collected data from two sources (i.e., supervisors and employees), Study 1 design did not allow us to make causal conclusions. This is particularly important because previous research has demonstrated that abusive supervision leads to lower performance (e.g., reduced levels of creativity, Han et al., 2017). Further, while we provided preliminary support for supervisors' biased attributions, we could not directly test FAE because the definition of this perceptual bias suggests that observers attribute behaviors to internal rather than external factors (Ross, 1977), thus implying a direct comparison

TABLE 1 Means, standard deviations, and intercorrelations of study variables (Study 1)

	M	SD	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.
1. Supervisor gender	1.67	0.47												
2. Supervisor age group	2.19	1.13	−.02											
3. Supervisor race	0.64	0.48	−.03	.07										
4. Employee gender	1.66	0.47	.22**	−.12	.08									
5. Employee age group	1.81	1.05	.02	.42**	.04	.03								
6. Employee race	0.48	0.50	−.03	.12	.29**	−.10	.20*							
7. Employee negative affect	1.93	0.64	.10	.13	−.10	.09	−.07	.05						
8. Task performance	4.51	1.04	.18*	−.08	−.12	.09	−.10	.01	−.06					
9. OCB	4.59	1.43	.14	−.14	−.08	−.03	−.08	.11	.06	.47**				
10. CWB	1.59	0.84	−.04	−.02	.12	.05	−.08	−.09	.01	−.30**	−.23**			
11. Supervisor-rated conscientiousness	3.69	0.65	.11	.05	−.03	.10	.11	.19	−.09	.59**	.42**	−.44**		
12. Self-rated conscientiousness	3.91	0.58	.11	.11	.06	.15	.18*	.02	−.17*	.14	.17*	−.12	.27**	
13. Abusive supervision	1.39	0.72	−.07	.07	.00	.02	.02	.00	.27**	−.20**	−.17*	.11	−.30**	−.29**

Note: N = 189. Abusive supervision = perceptions of abusive supervision; gender: male = 1, female = 2; race: White = 1, non-White = 0; age group: 1 = under 30, 2 = 30–39, 3 = 40–49, 4 = 50–59, 5 = 60 or older.

Abbreviations: CWB, counterproductive work behaviors; OCB, organizational citizenship behaviors.
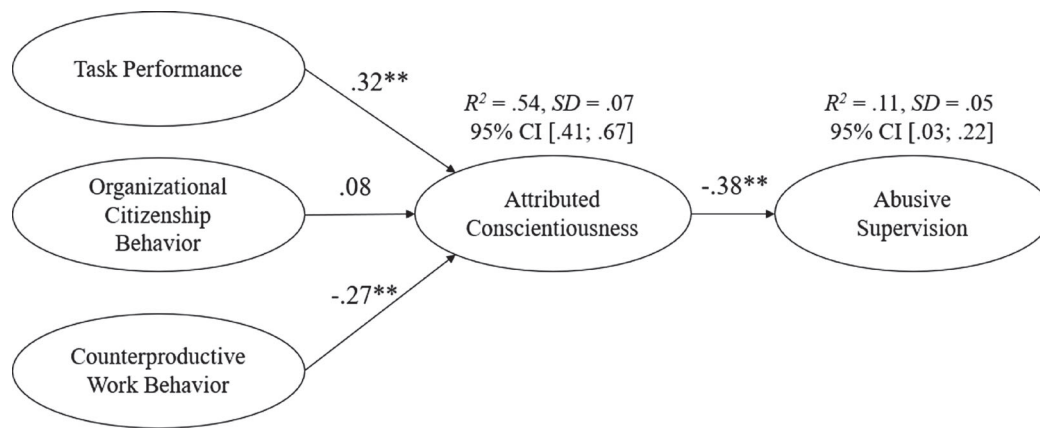
*p < .05. **p < .01.

FIGURE 1 Structural equation modeling results (Study 1). *Note.* N = 189. Effect sizes are estimated using Bayesian estimation with 20,000 iterations; diffused prior is used. Ratings of attributed conscientiousness represent residual values obtained from an equation where supervisor ratings of employee perceived conscientiousness are regressed on employee ratings of their own conscientiousness. **$p < .001$

between internal and external factors. To address these limitations, we attempt to replicate findings from Study 1 and extend them by empirically examining whether supervisors attribute more blame to internal factors rather than external factors when encountering an incident of poor performance.

Poor performance is likely to be a result of some combination of internal and external factors. For example, an employee might underperform because of a computer malfunction and because they did not put in sufficient effort. As noted earlier, people make internal or external attributions to explain behavioral outcomes (Kelley, 1973). When a behavior is negative or unexpected (e.g., poor project performance), individuals are more likely to overestimate internal factors when explaining others' behaviors (Ross, 1977). Such over-attribution occurs because the individual who is performing the behavior is more salient than the external factors (Heider, 1958). As such, we argue that following an incident of poor performance supervisors will over-attribute poor performance to employees' internal factors (i.e., conscientiousness). We propose that supervisor over-attribution of employee conscientiousness explains the relationship between performance and abusive supervision. This is because individuals are motivated to explain observed behaviors (Moskowitz, 2005), especially negative behavior and tend to ignore external factors in favor of internal characteristics of the actor (Heider, 1958). Consistent with our earlier theorizing around FAE, we argue that following an incident of poor performance supervisors attribute the observed behavior to employee lower conscientiousness and subsequently engage in higher levels of abusive behaviors. Overall, when supervisors perceive that an employee is *fully* or *partially* responsible for poor performance, they will be more likely to engage in abusive supervision because of over-attributing an employee's behavior to lower conscientiousness.

> **Hypothesis 2.** (H2): After accounting for the baseline level of employee conscientiousness, poor performance will positively relate to abusive behaviors via attributed employee conscientiousness.

Perceptual biases, including FAE, result from the need to reduce cognitive complexity (DeNisi et al., 1984). FAE is more likely to occur when individuals encounter negative events and lack sufficient information (Schyns & Hansbrough, 2008). Rather than engaging in a more cognitively taxing task and considering all possible factors that could have led to poor performance, individuals make mental shortcuts by attributing responsibility to internal factors rather than external factors (Ross, 1977). Consistent with the definition of FAE (Ross, 1977), we further posit that in the absence of information about the cause of poor performance supervisors will over-attribute the outcome (i.e., poor project performance) to internal rather than external factors.

> **Hypotheses 3.** (H3): In the absence of information about the cause of poor performance, individuals will attribute more blame to internal rather than external factors.

4.1 | Method

We conducted a two-part study incorporating elements of a recall approach and a vignette design. We recruited supervisors via Prolific panel provider (see Peer et al., 2017). Panel members were eligible to participate in the study if they were 18 years of age or older, employed, and at the time of the data collection held a supervisory position.

4.1.1 | Procedure

At Time 1, we recruited supervisors and asked them to think of one of their employees. We used a random letter generator procedure to ensure that supervisors randomly recalled one of their employees (instead of, for example, recalling their most or least favorite employee). Qualtrics survey platform randomly generated a letter for

each supervisor, and we asked each supervisor to "think of one of your employees that you supervise whose first name starts with the letter [randomly generated letter] or the closest other letter to this letter." We asked supervisors to enter a nickname or the first name of that person and provide a short description of that person. We then asked supervisors to rate employee's conscientiousness to obtain a baseline measure of conscientiousness.

At Time 2, one week later, we contacted supervisors who completed the first part of the survey. We used an authentication function in Qualtrics to link responses from Time 1 and pipe in the employee's name provided by the supervisor at Time 1. To ensure that supervisors remember the employee they recalled at Time 1, we explicitly asked whether they recall this person. Only those supervisors who could recall the employee (98.9% of survey respondents) could proceed with the survey. Next, we presented supervisors with a scenario that described an incident of poor project performance. We explained that the employee they recalled worked with software. Supervisors then read about an incident of poor project performance. Each supervisor randomly received one of four attribution conditions: internal factors condition (i.e., the employee is responsible), external factors condition (i.e., the software is responsible), combined condition (i.e., internal and external factors were equally responsible), and control condition. Appendix C presents a full description of the vignette and attribution manipulations. After reading the vignette, supervisors rated employee level of conscientiousness (i.e., attributed conscientiousness). We used a behavioral measure for abusive behaviors by asking supervisors to write feedback for the employee. Prior to recruiting participants, we conducted a power calculation using G*Power (Faul et al., 2009), and found that we would require 360 participants for the study (alpha = .05, power = .90, Cohen's f = .20) to test our hypotheses.

4.1.2 | Participants

Overall, 561 supervisors attempted the survey at Time 1; 560 consented to participate, of which 499 completed the survey in full. At Time 2, we sent a participation request to those who completed the first part of the survey, and 460 supervisors attempted the second part of the survey (92.2% retention rate). Of those, one supervisor declined to participate. To ensure that supervisors were attentive, we embedded four attention checks in the survey: 99.6% passed the first attention check, 100% correctly identified the second attention check, 99.8% passed the third attention check, and 96.9% passed the fourth attention check. For the purposes of data analysis, we retained cases with all four attention checks passed (Desimone et al., 2015), with our final sample consisting of 443 supervisors. The mean age of supervisors was 37.25 years (SD = 10.07), and they worked on average 38.11 h/week (SD = 9.30). Supervisors (55.3% female) worked in a wide range of industries, including education (16%), healthcare (13%), retail (12%), banking/finance (10%), government (9%), hospitality (6%), and manufacturing (4%). The majority of supervisors had a university degree (42%) or a professional/post-graduate degree (29%).

Supervisors represented three countries: the United Kingdom (80%), Canada (11%), and the United States (9%).

4.1.3 | Measures

Employee conscientiousness

We measured supervisor-rated employee conscientiousness using the 10 conscientiousness items from HEXACO model of personality (Ashton & Lee, 2009) used in Study 1. We prefaced the statements with "Thinking about [employee name], to what extent do you agree or disagree with the following: …." A sample item includes "[employee name] makes a lot of mistakes because they don't think before acting" (reverse-coded). We used the same measure in both Time 1 (baseline rating of employee conscientiousness) and Time 2 (attributed conscientiousness). All items were measured on a 7-point scale (1 = *strongly disagree* to 7 = *strongly agree*) (Time 1: α = .92; Time 2: α = .95).

Abusive behaviors

We asked supervisors to provide project performance feedback to the employee. Two research assistants blind to the study hypotheses coded feedback for the presence of abusive behaviors. The first author trained research assistants and calibrated their assessments during the coding process. Research assistants were provided with a coding spreadsheet that contained performance feedback from supervisors and detailed instructions. The coding process was done in six rounds with two random subsamples of 10% of emails used in the first two rounds of coding, and 20% of emails for the rest. After each round of coding, rating discrepancies were discussed to build a shared understanding between coders of abusive supervision behaviors (Saldaña, 2015). Coders rated items from an adapted version of the abusive supervision scale (Tepper, 2000), as some items were not relevant to the written feedback context (e.g., "gives silent treatment," "invades privacy," and "breaks promises"). The abusive behavioral checklist contained the following items: "ridicules the employee," "blames the employee," "expresses anger at the employee," "rude to the employee," "tells the employee they're incompetent," and "threatened the employee with consequences," "annoyed at the employee," "expressed disappointment at the employee/tell the employee they are disappointed in them."

Research assistants coded each comment for the presence (present = 1, absent = 0) of eight abusive behaviors. We summed up abusive behaviors for each feedback to represent the overall abusive behavior measure. Thus, each comment received a rating that ranged from 0 to 8 from each rater. Coders demonstrated high level of agreement (Spearman's ρ = .90). We used averaged coder scores for comments with one-point discrepancies (Syed & Nelson, 2015). After the coding was completed, we merged ratings with the dataset using unique respondent identifiers.

In their feedback to the employee, respondents engaged in various abusive behaviors ranging from less to more abusive. On average, participants wrote 347 characters. Some excerpts from full comments include the following: "You are unable to perform your basic job

requirements. It does not make sense to employ someone who cannot do the job." [control condition]; "You can either try to get better at it or find another line of career that is a better fit for you." [external condition]; "I am disappointed with your performance and feel you have let yourself and the company down. If you were struggling with the project work you should have come to me instead of submitting shoddy work." [combined condition]; "You were the wrong person for this task and [I] will not be looking forward to working with you in the future." [internal condition]; and "Your overall performance at work as it is becoming blatantly clear that it is your lack of effort ... This has to change with immediate effect or you will have to be prepared to face the inevitable consequences." [internal condition]. Appendix D contains a frequency table for each of the eight behaviors across four study conditions.

Over-attributions

To measure whether supervisors assign more blame to the internal factors (i.e., employee) rather than external factors (i.e., software), we asked supervisors to assign percentage of blame to the employee and the software (presented in a random order): "Thinking about the poor project performance, please indicate what percentage of blame you would assign to [employee name] and the software. Please note that the total percentage must add up to 100%. Out of 100%...".

Control variables

Several variables might contribute to supervisors' propensity to be more or less abusive. Following previous research on the role of trait negative affect (e.g., Hershcovis et al., 2007) and attribution styles (e.g., Martinko et al., 2011), we measured those variables at Time 1 as potential confounding variables. We measured supervisors' trait negative affect with 10 items from PANAS (Watson et al., 1988) by asking supervisors to indicate how they feel in general across most situations ($1 = almost\ never$, $5 = almost\ always$). We used a six-tem measure of hostile attributions style (Adams & John, 1997). A sample item include: "I have often found people get jealous of my good ideas just because they had not thought of them first" ($1 = strongly\ disagree$, $7 = strongly\ agree$). Several factors can also affect how supervisors attribute employee performance. More specifically, we measured supervisor liking for the employee and employee competence. To measure liking, we asked supervisors to indicate the extent to which three items— "likeable," "nice," and "friendly"—are accurate in describing the employee ($1 = not\ at\ all\ accurate$, $5 = very\ accurate$). Finally, we used four items from Fiske et al. (2002)—"competent," "confident," "independent," and "intelligent"—to measure supervisors' assessment of employee competence ($1 = not\ at\ all\ accurate$, $5 = very\ accurate$). To ensure that the robustness of our findings, we conducted the analysis with and without control variables (Becker et al., 2016). Appendix A presents estimates for equations with control variables.

4.1.4 | Results

Table 2 provides means, standard deviations, and intercorrelations of the study variables. Means and standard deviations across the four conditions appear in Table 3. We performed all post hoc comparisons using Bonferroni corrections (adjusted p value = .008).

Manipulation check

We checked the validity of our manipulations by measuring the extent to which participants attributed poor project performance to the employee (i.e., internal attribution: "[employee name] is to blame for the bad outcome," "[employee name] may have done something to cause the poor project performance," and "[employee name] is responsible for what happened", $\alpha = .93$) and to the software (i.e., external attribution: "The software is to blame for the unsatisfactory result," "The software is responsible for what happened," and "The software may have caused the poor project performance", $\alpha = .93$). We measured all items on a 7-point scale ($1 = strongly\ disagree$ to $7 = strongly\ agree$). As expected, participants' scores varied across the conditions for attributing poor project performance to the employee ($F[3, 439] = 104.37$, $p < .001$, partial $\eta^2 = .42$) and to the software malfunction ($F[3, 439] = 145.37$, $p < .001$, partial $\eta^2 = .50$). Post hoc comparisons demonstrated that scores among the conditions were significantly different, with the differences in the expected direction. Participants in the internal attribution condition were significantly more likely to attribute poor project performance to the employee compared to the control ($t[209] = 5.85$, $p < .001$), external ($t[202] = 16.61$, $p < .001$), or combined ($t[212] = 4.19$, $p < .001$) attribution conditions. Compared to the combined attribution condition, participants were less likely to attribute poor performance to the employee in the control ($t[237] = 4.04$, $p < .001$) or the external ($t[230] = 13.37$, $p < .001$) conditions. The difference between the control and external conditions was statistically significant ($t[227] = 9.34$, $p < .001$).

Participants in the external attribution condition were significantly more likely to attribute poor project performance to the software malfunction than in the control ($t[227] = 13.78$, $p < .001$), combined ($t[230] = 4.77$, $p < .001$), or internal ($t[202] = 18.73$, $p < .001$) attribution conditions. Participants in the internal attribution condition were less likely to attribute poor project performance to the software malfunction than in both control ($t[209] = 5.85$, $p < .001$) and combined ($t[202] = 14.54$, $p < .001$) attribution conditions. Finally, the difference between the control and combined attribution conditions was significant ($t[237] = 9.24$, $p < .001$).

Main effects

We investigated the differences across the conditions using a series of one-way ANOVAs. After controlling for baseline levels of employee conscientiousness, attributed conscientiousness varied by the condition ($F[3, 438] = 26.78$, $p < .001$, partial $\eta^2 = .16$), as well as scores of abusive behaviors ($F[3, 438] = 10.13$, $p < .001$, partial $\eta^2 = .07$). Removing baseline measures of employee conscientiousness did not change the pattern or direction of the results: the effect of condition was still significant for attributed conscientiousness ($F[3, 439] = 24.01$, $p < .001$, partial $\eta^2 = .14$) and abusive behaviors ($F[3, 439] = 11.44$, $p < .001$, partial $\eta^2 = .07$).

TABLE 2 Means, standard deviations, and intercorrelations of study variables (Study 2)

	M	SD	1.	2.	3.	4.	5.	6.	7.	8.
1. Supervisor age	37.25	10.07								
2. Supervisor gender	1.55	0.50	0.00							
3. Supervisor race	0.82	0.38	.16**	.08						
4. Employee age group	3.05	1.22	.31**	−.04	.10*					
5. Employee gender	1.55	0.50	−.05	.36**	.11*	.00				
6. Employee race	0.78	0.41	.08	.05	.36**	.03	.00			
7. Baseline conscientiousness	4.57	1.36	.11*	−.02	.01	.01	.08	−.05		
8. Attributed conscientiousness	3.97	1.33	.02	.02	−.02	−.06	.10*	−.06	.65**	
9. Abusive behaviors	1.49	1.50	.01	−.11*	.02	.03	−.11*	.02	−.21**	−.40**

Note: N = 443. Gender: 1 = male, 2 = female; employee age group: 1 = under 20, 2 = 20–29, 3 = 30–39, 4 = 40–49, 5 = 50–59, 6 = 60 or more; race: 1 = White, 0 = non-White.
*p < .05. **p < .01.

TABLE 3 Means and standard errors across experimental conditions (Study 2)

	Control condition n = 118		External condition n = 111		Combined condition n = 121		Internal condition n = 93	
	M	SE	M	SE	M	SE	M	SE
Attributions to the employee[a]	4.29	0.13	2.83	0.13	4.90	0.09	5.58	0.10
Attributions to a software malfunction[a]	3.51	0.12	5.62	0.12	4.89	0.09	2.56	0.12
Attributed conscientiousness	4.35[b]	0.09	4.36[b]	0.09	3.62[b]	0.09	3.47[b]	0.10
Abusive behaviors	1.35[b]	0.13	0.95[b]	0.14	1.85[b]	0.13	1.84[b]	0.15

Note: All pairwise comparisons reported in the text are based on Bonferroni adjustment (adjusted p value = .008).
[a]Manipulation check measure.
[b]Means adjusted for the baseline level of employee conscientiousness (M = 4.57).

We report all pairwise comparisons because we did not make specific hypotheses about the main effects. The analyses adjusted for the covariate (i.e., baseline level of employee conscientiousness), and hence we report adjusted means for each condition (see Table 3). Compared to the control condition, the mean score of attributed conscientiousness was significantly lower in the internal (t[209] = 6.67, p < .001) and combined (t[237] = 6.01, p < .001) attribution conditions, but not the external attribution condition (t[227] = .11, p = .915). Compared to the external condition, the internal condition (t[202] = 6.69, p < .001) and the combined condition (t[230] = 6.03, p < .001) had significantly lower levels of attributed conscientiousness. The difference between combined and internal attribution conditions was not statistically significant (t[212] = 1.09, p = .275). Figure 2 depicts significant differences.

Abuse in the control condition did not differ from the internal condition (t[209] = 2.48, p = .014) or the external condition (t[227] = 2.13, p = .034) but was significantly lower than in the combined condition (t[237] = 2.71, p = .007). Compared to the external condition, respondents were more abusive in the combined (t[230] = 4.82, p < .001) and internal (t[202] = 4.45, p < .001) conditions. The combined condition did not statistically differ from the internal condition (t[212] = .05, p = .959). Figure 3 depicts significant differences.

Relative indirect effects

To test the relative indirect effects of attribution (i.e., manipulated condition) on abusive behaviors via attributed conscientiousness (Hypothesis 2), we used Hayes and Preacher's (2014) method for models with multicategorical independent variables. We calculated 95% CIs based on bias-corrected bootstrap analysis with 5,000 repetitions. We coded the independent variable into three dummy variables. Control condition functioned as the reference group, D_1 represented a comparison between control and external attribution conditions (control = 0, external = 1, combined = 0, internal = 0), D_2 compared control and combined attribution conditions (control = 0, external = 0, combined = 1, internal = 0), and D_3 compared control and internal attribution conditions (control = 0, external = 0, combined = 0, internal = 1) (Table 4). We used the baseline measure of employee conscientiousness as a covariate in all equations.

Relative to the control attribution condition, we found a significant negative effect of both combined (B = −.73, SE = 0.12, 95% CI [−0.97, −0.49]) and internal (B = −.87, SE = 0.13, 95% CI [−1.13, −0.61]) conditions on attributed conscientiousness. In both the internal and combined conditions, respondents rated the employee as less conscientious than in the control condition, after adjusting for the baseline level of employee conscientiousness. Compared to the
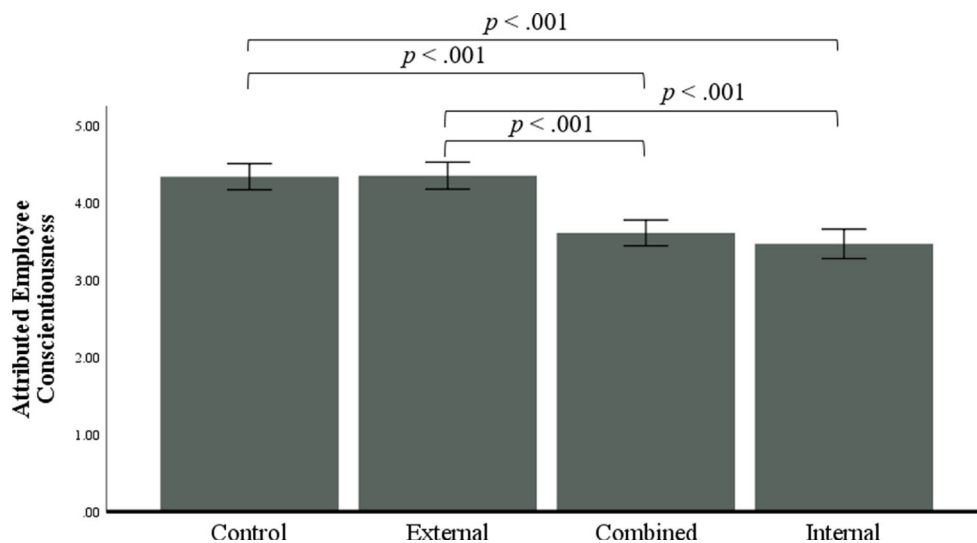
FIGURE 2 Differences in attributed employee conscientiousness across conditions (Study 2). *Note.* N = 443. Means adjusted for the baseline level of employee conscientiousness (M = 4.57). Error bars represent 95% confidence intervals. All pairwise comparisons reported in the text are based on Bonferroni adjustment (adjusted *p* value = .008) [Colour figure can be viewed at wileyonlinelibrary.com]
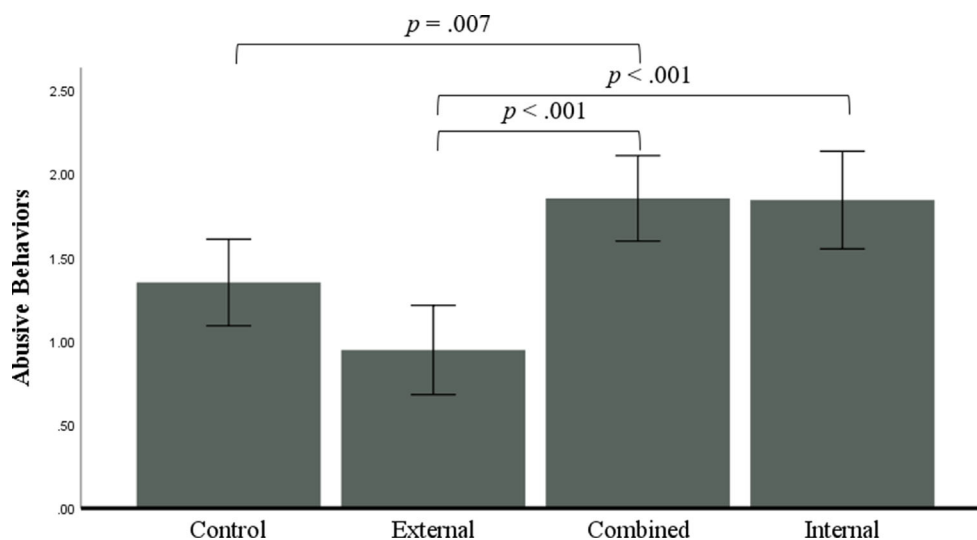

FIGURE 3 Differences in abusive behaviors across conditions (Study 2). *Note.* N = 443. Means adjusted for the baseline level of employee conscientiousness (M = 4.57). Error bars represent 95% confidence intervals. All pairwise comparisons reported in the text are based on Bonferroni adjustment (adjusted *p* value = .008) [Colour figure can be viewed at wileyonlinelibrary.com]

control condition, the effect of the external condition was not significant (B = .01, SE = 0.12, 95% CI [−0.23, 0.26]). Attributed conscientiousness significantly related to abusive behaviors (B = −.44, SE = 0.07, 95% CI [−0.58, −0.31]). The covariate—baseline level of employee conscientiousness—did not significantly relate to abusive behaviors (B = .08, SE = 0.06, 95% CI [−0.06, 0.19]). The relative direct effects of condition on abusive behaviors were not significant for the combined (B = .18, SE = 0.18, 95% CI [−0.18, 0.54]) and internal (B = .10, SE = 0.20, 95% CI [−0.29, 0.50]) conditions. Relative to the control condition, the direct effect of the external condition on abusive behaviors was significant and negative (B = −.40, SE = 0.18, 95% CI [−0.75, −0.04]).

The relative indirect effects of condition on abusive behaviors via attributed conscientiousness were positive and significant for both the combined (B = .33, SE = 0.08, 95% CI [0.18, 0.50]) and internal (B = .39, SE = 0.10, 95% CI [0.22, 0.59]) conditions relative to the control group. The relative indirect effect of the external condition on

abusive behaviors was not significant (B = −.01, SE = 0.05, 95% CI [−0.11, 0.10]). Relative to the control condition, those assigned to both the internal and combined conditions demonstrated higher levels of abusive behaviors as a result of lower perceptions of employee conscientiousness, after adjusting for the baseline level of conscientiousness. Removing the baseline level of employee conscientiousness from the analysis did not change significance of pattern of the results. An inclusion of control variables—supervisor trait negative affect, supervisor hostile attributions, liking for the employee, and employee competence—in the analysis did not change the pattern or significance of our findings (see Appendix A for detailed results). These results support Hypothesis 2.

Over-attributions
As a measure of over-attribution, we subtracted percentage of blame assigned to the software from the percentage of blame assigned to the employee. Thus, a positive value indicates an attribution of blame

TABLE 4 Relative direct and indirect effects of attribution condition on abusive behaviors (Study 2)

	Attributed conscientiousness		Abusive behaviors	
	B (SE)	95% CI	B (SE)	95% CI
Covariate				
Baseline level of conscientiousness	.60 (0.03)	[0.53; 0.66]	.07 (0.06)	[−0.06; 0.19]
Study variables				
D_1	.01 (0.12)	[−0.23; 0.26]	−.40 (0.18)	[−0.75; −0.04]
D_2	−.73 (0.12)	[−0.97; −0.49]	.18 (0.18)	[−0.18; 0.54]
D_3	−.87 (0.13)	[−1.13; −0.61]	.10 (0.20)	[−0.29; 0.50]
Attributed conscientiousness			−.45 (0.07)	[−0.58; −0.31]
	$R^2 = .51^*$		$R^2 = .18^*$	
Relative indirect effects of condition on abusive behaviors via attributed conscientiousness				
	B (SE)		95% CI	
D_1	−.006 (0.05)		[−0.11; 0.10]	
D_2	.33 (0.08)		[0.18; 0.50]	
D_3	.39 (0.10)		[0.21; 0.59]	

Note: N = 443. 5,000 bootstrap samples. CI = confidence interval; D_1 = control condition (0), external condition (1), combined condition (0), internal condition (0); D_2 = control condition (0), external condition (0), combined condition (1), internal condition (0); D_3 = control condition (0), external condition (0), combined condition (0), internal condition (1).
*$p < .01$.

to the employee (i.e., internal attribution) versus the software (i.e., external attribution), whereas a negative value represents an attribution of blame to the external rather than internal factors. The value of this measure ranged from −100 (i.e., all blame assigned to the software) to 100 (i.e., all blame assigned to the employee).

After controlling for the baseline level of employee conscientiousness, our results indicated that percentage of attributed blame varied by the condition ($F[3, 438] = 132.32$, $p < .001$, partial $\eta^2 = .48$). Further, we calculated 95% CI estimates around each adjusted mean: control condition ($M = 13.44$, 95% CI [5.59; 21.30]), external condition ($M = −59.28$, 95% CI [−67.34; −51.19]), combined condition ($M = 1.85$, 95% CI [−5.90; 9.60]), internal condition ($M = 60.45$, 95% CI [51.59; 69.13]). In support of Hypothesis 3, supervisors attributed more blame to the employee rather than the software in the absence of information of the cause of poor project performance (i.e., control condition). That is, adjusted mean estimate in the control condition was positive and 95% confidence internal did not cross zero, suggesting that 19 times out of 20 supervisors assigned more blame to the employee rather than the software.

Additional evidence of over-attributions

We conducted additional analysis to test the argument that, in the absence of information about who is at fault, participants over-attribute poor performance to the employee. For this analysis, we used measures of attributions to the employee and the software described in the manipulation checks. We conducted a paired sample t test to compare the extent to which individuals attributed poor performance to the employee versus the software in the absence of information about who was at fault for the poor project performance (i.e., control condition). Within the control condition, participants were

more likely to attribute poor performance to the employee ($M = 4.29$, 95% CI [4.02; 4.52]) than the software ($M = 3.51$, 95% CI [3.28; 3.73], $t(117) = 4.02$, $p < .001$). That is, when attributions for poor performance were unclear (i.e., absence of information about who is at fault; control condition), individuals assigned more blame to the employee as compared to the software. These results provide additional evidence for the argument of over-attributions.

5 | GENERAL DISCUSSION

In this paper, we provide support for the proposition that supervisors make biased attributions of employee performance to employee conscientiousness, with such attributions relating to higher levels of abusive behaviors. Further, we provide a direct test of FAE by showing that in the absence of information about the cause of an incident of poor performance, supervisors tend to assign more blame to internal (i.e., employee) rather than external (i.e., software) factors (Study 2). Our findings are consistent with our contention that a supervisor's attribution of employee behavior to employee conscientiousness plays a key role in explaining the relationship between employee performance and abusive supervision. Extending previous research on triggers of abusive behaviors, we argue and empirically demonstrate that supervisors, like everyone else, are prone to making attributions about observed behaviors, and these attributions may relate to abusive supervision. Further, these attributions are not necessarily accurate, and perceptual biases (i.e., FAE) may impair supervisors' judgments of observed employee behaviors.

This research helps extend our understanding of abusive supervision in several ways. First, the present research looks beyond the

predictors of abusive supervision and demonstrates an attributional mechanism linking employee performance to abusive supervision. Existing research has tried to answer the question "what contributes to higher levels of abusive supervision?", and we find that one of the answers may be supervisor attributional processes related to lower employee performance. The present study reveals a possible explanation for this relationship: we argue that supervisors' attributions of employees' performance can explain the relationship between lower employee performance and higher levels of abusive supervision. That is, supervisors perceive that lower performance is driven by the employee's lower levels conscientiousness, resulting in more abusive supervisory behaviors.

Second, we argue that the way supervisors make sense of employees' performance relates to abusive supervision. Although employee behavior may play a role in triggering a supervisor's attribution process, this process leads to unjustified perceptions of lower employee conscientiousness and subsequently to higher levels of abusive reactions from the supervisor. Our results suggest that attributing lower performance to employee lower conscientiousness relates to higher levels of employee-reported supervisory abuse (Study 1) and higher levels of abusive behaviors toward the employee (Study 2). These findings are important in light of research that centers on the target's role in their own abuse (e.g., Chan & McAllister, 2014; Henle & Gross, 2014; Marr et al., 2012). Our results from Study 2 also suggest that supervisors assign more blame to employees than external factors in the absence of information about the cause of poor performance. Specifically, we found that when no information was provided about the cause of the poor performance, supervisors blamed the incident of poor performance on the employee rather than an external cause (i.e., a software malfunction). Across two tests of over-attributions, we found consistent evidence for the argument that when it is unclear who or what caused poor performance, supervisors over-attribute blame to the employee. Thus, we offer a nuanced view of triggers of abusive supervision by arguing that supervisors' biased attributions for employee performance explain higher levels of abusive supervision. This finding still places blame on supervisors for their abusive actions but acknowledges that these actions may not only arise from actively trying to control or prey on targets (Cortina, 2017), but rather from biased attributions that given rise to destructive reactions.

While biased attributions might provide an explanation for supervisors' increased abusive reactions to their employees' lower performance, it does not justify abusive behaviors. We concur with Cortina's (2017) assertion that no target behavior should excuse abusive behaviors; however, the empirical reality is that supervisors attempt to make sense of observed events by making attributions and committing attributional errors. It is therefore important to consider supervisor-focused strategies that reduce instances of abusive behaviors. Although sense-making processes and cognitive biases can be difficult to overcome, supervisors can choose more effortful civil and respectful responses rather than abusive behaviors.

One strategy to reduce instances of abusive supervision is to reduce the strength of attributional biases. The tendency to attribute

internal causality to others is strong, even when observers are aware of behavioral constraints (Snyder & Jones, 1974), except for when observers are held accountable for their causal interpretations. When evaluators expected to be accountable for their causal interpretations, these evaluators are more likely to consider how external factors affected the actions of others (Tetlock, 1985). Tetlock's research, combined with the findings of the current studies, suggests that one strategy for reducing abusive supervision might be to make supervisors accountable for their attributions. Policies requiring supervisors to document instances of lower employee performance could increase the likelihood that supervisors consider external factors in their assessment. Establishing documentation policies may also provide supervisors an official outlet to provide non-abusive, civil feedback to the employee. Additionally, organizational requirements obliging supervisors to speak with employees prior to documenting lower performance may also provide supervisors an opportunity to find other determinants for lower performance, resulting in less abusive reactions. Our findings demonstrate that when supervisors attributed lower level of performance to factors external to the employee, supervisors were less likely to engage in abusive behaviors toward the employee. These results suggest that policies or actions taken by organizations to explore external attributions for lower levels of performance may result in decreased instances of abusive supervision. Future research needs to ascertain whether these strategies can reduce the prevalence of abusive supervision.

In Study 2, we found that when supervisors perceive that poor performance is due solely to external factors, they are less likely to attribute poor performance to employees' internal characteristics and, in turn, less likely to engage in abusive behaviors toward the employee. In addition, our findings suggest that supervisors over-attribute blame to the employee as compared to external factors when no other information about the cause of poor performance is provided. Organizations could implement performance management training for supervisors, in addition to enacting policies that would encourage supervisors to think actively about external factors that could contribute to poor project performance. It is also possible that training supervisors to consider external causes for poor employee performance might provide the supervisor time to "cool off," putting time between instances of lower performance and supervisor reactions, which may result in reduced abusive reactions.

5.1 | Strengths and limitations

There are several strengths of this research worth noting. Spector (2019) outlined best practices for cross-sectional design studies. Following these recommendations, we used two sources of data in Study 1 and followed up in Study 2 with an experimental approach to establish causality between performance and perceived employee conscientiousness. Two data sources are particularly appropriate in this context as they reflect both the subjective nature of employees' experiences of abusive supervision and supervisor-rated performance. Second, our Study 1 sample comes from supervisor-employee dyads

in multiple organizations across multiple industries, enhancing the generalizability of our model. Moreover, we replicated these findings with a mixed-method approach in which we combined a critical incident approach and an online vignette experiment (Study 2) and demonstrated that supervisors make over-attributions of poor performance to internal rather than external factors.

This research nevertheless has several limitations. First, Study 2 involved a hypothetical scenario. Although vignette studies are common in examining abusive supervision (e.g., Brees et al., 2016; Camps et al., 2020), a major limitation of vignette studies is their lack of realism and, as a result, limited ecological validity (e.g., Hainmueller et al., 2015). Following Aguinis and Bradley's (2014) recommendations, we sought to enhance the realism by incorporating elements of a recall approach and asking about a real employee. In addition, instead of measuring intentions to engage in abusive behaviors, we used a behavioral outcome for assessing abusive behaviors.

Second, the focus of our paper was on the attributional mechanism that explains higher levels of supervisors' abusive reactions to lower levels of employee performance. However, a number of factors could serve as boundary conditions for abusive reactions. For example, Malle (2006) highlighted the moderating role of familiarity (i.e., being good friends) in the behavior–cause relationship. Supervisors who have high-quality relationships with their employees or demonstrate higher levels of liking of the employee might be less likely to engage in the FAE. Recent research also highlighted the multidimensional nature of liking (e.g., relationship liking or task liking; Yammarino et al., 2020), and these dimensions might have different implications for attributional processes. Other factors can augment the relationship between employee performance and abusive supervision. Supervisors' dependency on employee performance has implications for how supervisors respond to lower performing employees. For example, Walter et al. (2015) found that supervisors' positive outcome dependency exacerbated the relationship between lower employee performance and higher levels of abusive supervision. It also remains unclear what personality traits turn supervisors into perpetrators. Indeed, abusive supervision is a relatively low-base phenomenon (see Tepper et al., 2017), suggesting that not all supervisors engage in destructive behaviors as a response to a negative event. For example, Paulhus et al. (2018) highlighted that individuals respond differently to "provocations" depending on their dark tetrad personality traits (i.e., narcissism, Machiavellianism, psychopathy, and sadism). Hence, further investigation of boundary conditions will provide a more comprehensive understanding of when supervisors mistreat their employees.

Our model focused on perceptions of employee conscientiousness as a focal mechanism. However, it remains unclear what supervisors are trying to achieve with their abusive behaviors. Supervisors may have different or even overlapping motives for abusing their employees. For example, some supervisors may engage in abuse in an attempt to force employees to improve their performance, while others may punish employees for thwarting performance objectives. A better understanding of motives has the potential to inform organizational interventions. If supervisors engage in abusive reactions to correct performance, then organizations can educate supervisors about constructive ways to address lower performance; whereas, if abuse is driven by punitive motives, then creating organizational policies that reprimand abusive behaviors may be a more effective way to curtail abusive supervision. Thus, we suggest future research examine underlying motives of abusive supervision.

Another limitation stems from testing a mediated model using a cross-sectional design (Study 1). A cross-sectional design does not enable causal inferences, as there is a possibility of a reverse causation, and we measured the relationship between perceived conscientiousness and abusive supervision at the same point in time. We partially addressed this limitation in Study 2 by using an experimental design and demonstrating that the attribution of poor performance leads to assessments of conscientiousness. While some researchers call for longitudinal studies to address this limitation (Zapf et al., 1996), Spector (2019) questioned this proposition stating that the ability of longitudinal designs to establish causality is overstated and offers "limited advantages over the cross-sectional design in most cases in which it is used" (p. 125).

Another methodological limitation stems from using a parceling approach when conducting SEM. As our sample size in Study 1 was relatively small, we used random parceling approach (Little et al., 2002) to achieve a more optimal indicator to sample size ratio. However, this might have implications for the construct representation (e.g., Hall et al., 1999). Finally, while the diverse nature of the Study 1 sample enhances the generalizability of the resulting model, contextual variables may have implications for enacted or experienced aggression (Barling et al., 2009; Yang et al., 2014) and attributions made for lower performance. Thus, we suggest future studies explore the role of contextual variables, such as organizational or team climates, in supervisor attributions and their subsequent responses.

6 | CONCLUSION

In this paper, we investigated the extent to which lower levels of employee performance related to higher levels of abusive supervision and theorized that supervisor attributions to employee dispositional characteristics (i.e., conscientiousness) play a key role in this relationship. We consider the notion that supervisors may engage in more abusive behaviors as a result of perceptual biases. The current paper examined whether supervisor attributions of employee performance to employee internal factors influence supervisors to engage in more abusive supervision toward the employee. We demonstrated that supervisors have a tendency to over-attribute lower performance to employees' lower conscientiousness, which in turn relates to higher levels of abusive behaviors. In addition, our results provide a direct test of FAE by showing that supervisors assign more blame to internal factors (i.e., employee) rather than external factors (i.e., software malfunction) in the absence of information about the cause of poor performance. Overall, our findings show that supervisors are prone to perceptual biases that lead them to engage in more abusive behaviors.

We suggest researchers investigate what strategies supervisors can use to reduce the strength of attributional biases.

ENDNOTE

[1] Recognizing that the constructs of interest (i.e., performance, abusive supervision, and conscientiousness) occur on a continuum, we refer to these constructs in relative terms. When we reference "higher" or "lower" levels of a specific construct, we denote directionality.

DATA AVAILABILITY STATEMENT

The data that support the findings of this study are available on request from the corresponding author. The data are not publicly available due to privacy or ethical restrictions.

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APPENDIX A.

To ensure the robustness of our findings, we conducted additional analyses with control variables in Study 1 and Study 2.

Study 1

Trait negative affect

After accounting for supervisors' trait negative affect, task performance was positively related to attributed employee conscientiousness ($B = .32$, $SD = 0.06$, 95% CI [0.21; 0.44]), and attributed employee conscientiousness was negatively related to employee perceptions of abusive supervision ($B = -.36$, $SD = 0.09$, 95% CI [−0.55; −0.19]). Attributed employee conscientiousness mediated the relationship between task performance and perceptions of abusive supervision ($B = -.11$, $SD = .04$; 95% CI [−0.18, −0.05]). OCB was not related to attributed employee conscientiousness ($B = .08$, $SD = 0.04$, 95% CI [−.005; .17]), and the indirect effect of OCB on perceptions of abusive supervision via attributed employee conscientiousness was not significant ($B = -.03$, $SD = 0.02$; 95% CI [−0.07, 0.002]). Finally, CWB was negatively related to attributed employee conscientiousness ($B = -.26$, $SD = 0.07$, 95% CI [−0.42; −0.13]). Attributed

employee conscientiousness mediated the relationship between CWB and perceptions of abusive supervision ($B = .09$, $SD = 0.04$; 95% CI [0.03, 0.17]).

Study 2

Trait negative affect

In addition to the baseline measure of employee conscientiousness, we included supervisors' trait negative affect as a covariate. The pattern or significance of our findings remained. Attributed conscientiousness significantly related to abusive behaviors ($B = -.45$, $SE = 0.07$, 95% CI [−0.58, −0.31]). The covariate—trait negative affect—was not significantly related to abusive behaviors ($B = -.06$, $SE = 0.12$, 95% CI [−0.29, 0.18]). The relative indirect effects of condition on abusive behaviors via attributed conscientiousness were positive and significant for both the combined ($B = .32$, $SE = 0.08$, 95% CI [0.18, 0.49]) and internal ($B = .39$, $SE = 0.10$, 95% CI [0.22, 0.59]) conditions relative to the control group. The relative indirect effect of the external condition on abusive behaviors was not significant ($B = -.01$, $SE = 0.05$, 95% CI [−0.11, 0.10]).

Hostile attributions

We controlled for supervisors' hostile attributions in addition to the baseline measure of employee conscientiousness. The pattern or significance of our findings remained. Attributed conscientiousness significantly related to abusive behaviors ($B = -.44$, $SE = 0.07$, 95% CI [−0.58, −0.30]). The covariate—hostile attributions—was not significantly related to abusive behaviors ($B = .07$, $SE = 0.06$, 95% CI [−0.06, 0.19]). The relative indirect effects of condition on abusive behaviors via attributed conscientiousness were positive and significant for both the combined ($B = .31$, $SE = 0.08$, 95% CI [0.18, 0.48]) and internal ($B = .38$, $SE = 0.10$, 95% CI [0.21, 0.58]) conditions relative to the control group. The relative indirect effect of the external condition on abusive behaviors was not significant ($B = -.01$, $SE = 0.05$, 95% CI [−0.11, 0.09]).

Liking

In addition to the baseline measure of employee conscientiousness, we included supervisors' liking for the employee as a covariate. The pattern or significance of our findings remained. Attributed conscientiousness significantly related to abusive behaviors ($B = -.42$, $SE = 0.07$, 95% CI [−0.56, −0.29]). The covariate—liking—was negatively related to abusive behaviors ($B = -.30$, $SE = 0.09$, 95% CI [−0.48, −0.12]). The relative indirect effects of condition on abusive behaviors via attributed conscientiousness were positive and significant for both the combined ($B = .31$, $SE = 0.08$, 95% CI [0.17, 0.48]) and internal ($B = .36$, $SE = 0.09$, 95% CI [0.20, 0.56]) conditions

relative to the control group. The relative indirect effect of the external condition on abusive behaviors was not significant ($B = -.01$, $SE = 0.05$, 95% CI [−0.11, 0.09]).

Employee competence

We controlled for supervisors' assessment of employee competence in addition to the baseline measure of employee conscientiousness. The pattern or significance of our findings remained. Attributed conscientiousness significantly related to abusive behaviors ($B = -.45$, $SE = 0.07$, 95% CI [−0.58, −0.31]). The covariate—employee competence—was not significantly related to abusive behaviors ($B = -.08$, $SE = 0.10$, 95% CI [−0.28, 0.12]). The relative indirect effects of condition on abusive behaviors via attributed conscientiousness were positive and significant for both the combined ($B = .33$, $SE = 0.08$, 95% CI [0.18, 0.49]) and internal ($B = .39$, $SE = 0.10$, 95% CI [0.22, 0.59]) conditions relative to the control group. The relative indirect effect of the external condition on abusive behaviors was not significant ($B = -.01$, $SE = 0.05$, 95% CI [−0.11, 0.10]).

All control variables

Lastly, we entered all covariates at once (i.e., baseline level of employee conscientiousness, supervisor trait negative affect, supervisor hostile attributions, liking for the employee, and employee competence). The pattern or significance of our findings remained. Attributed conscientiousness significantly related to abusive behaviors ($B = -.42$, $SE = 0.07$, 95% CI [−0.55, −0.28]). Among the covariate, only liking was significantly related to abusive behaviors ($B = -.28$, $SE = 0.09$, 95% CI [−0.48, −0.11]). The relative indirect effects of condition on abusive behaviors via attributed conscientiousness were positive and significant for both the combined ($B = .30$, $SE = 0.08$, 95% CI [0.16, 0.46]) and internal ($B = .36$, $SE = 0.09$, 95% CI [0.20, 0.54]) conditions relative to the control group. The relative indirect effect of the external condition on abusive behaviors was not significant ($B = -.01$, $SE = 0.05$, 95% CI [−0.11, 0.09]).

APPENDIX B.

We ensure consistency of findings across different analytical approaches in Study 1, we ran the analysis with supervisors' conscientiousness ratings as the mediator while controlling for the employee level of conscientiousness (instead of using the residual score

approach). Task performance was positively related to supervisor-rated employee conscientiousness ($B = .32$, $SD = 0.06$, 95% CI [0.20; 0.43]), and supervisor-rated employee conscientiousness was negatively related to employee perceptions of abusive supervision ($B = -.34$, $SD = 0.09$, 95% CI [−0.52; −0.16]). Supervisor-rated employee conscientiousness mediated the relationship between task performance and perceptions of abusive supervision ($B = -.11$, $SD = 0.03$; 95% CI [−0.17, −0.04]). OCB was positively related to supervisor-rated employee conscientiousness ($B = .08$, $SD = 0.04$, 95% CI [0.002; 0.17]); the indirect effect of OCB on perceptions of abusive supervision via supervisor-rated employee conscientiousness was not significant ($B = -.03$, $SD = 0.02$; 95% CI [−0.06, 0.002]). CWB was negatively related to supervisor-rated employee conscientiousness ($B = -.26$, $SD = 0.07$, 95% CI [−0.41; −0.13]). Supervisor-rated employee conscientiousness mediated the relationship between CWB and perceptions of abusive supervision ($B = .09$, $SD = 0.03$; 95% CI [0.03, 0.16]). Overall, the results are consistent and stables across both approaches.

APPENDIX C.

Study 2 Vignette: The Structure of the Vignette's Experimental Manipulation

At your work, you are currently supervising a project. For this project, your team members must work closely with software to complete the project successfully. One of your employees, [employee name], has been working with the software on the project. [employee name] is responsible for entering accurate and complete information into the software. The software then analyzes and processes information for presentation in the final stage of the project.

After [employee name] inputted the data and then the software finished information processing, you had a chance to look at the project performance. You could immediately see that the project performance fell far below requirements. The poor project performance will result in missing the project deadline by at least 2 months and coming in overbudget.

[Experimental manipulation].

[Internal attribution condition]: Your investigation showed that the cause of the poor project performance was [employee name]'s lack of effort.

[External attribution condition]: Your investigation showed that the cause of the poor project performance was a software malfunction at the final stage.

[Combined attribution condition]: Your investigation showed that the cause of the poor project performance was equally a software malfunction at the final stage and [employee name]'s lack of effort.

[Control condition]: [No information was provided].

APPENDIX D.

TABLE: FREQUENCIES OF ABUSIVE BEHAVIORS IN STUDY 2

	Behavior	Control condition	External condition	Combined condition	Internal condition	Total
Ridicules	Absent	97.41%	99.08%	100.00%	100.00%	99.09%
	Present	2.59%	0.92%	0.00%	0.00%	0.91%
Blames	Absent	79.30%	88.10%	56.20%	62.40%	71.50%
	Present	20.70%	11.90%	43.80%	37.60%	28.50%
Expresses anger at	Absent	92.20%	95.40%	91.70%	90.30%	92.50%
	Present	7.80%	4.60%	8.30%	9.70%	7.50%
Rude to	Absent	92.20%	88.90%	87.60%	86.00%	88.80%
	Present	7.80%	11.10%	12.40%	14.00%	11.20%
Tells they are incompetent	Absent	50.90%	71.60%	29.80%	26.90%	45.10%
	Present	49.10%	28.40%	70.20%	73.10%	54.90%
Threatens with consequences	Absent	94.00%	94.50%	96.70%	87.10%	93.40%
	Present	6.00%	5.50%	3.30%	12.90%	6.60%
Annoyed at	Absent	56.90%	67.90%	45.50%	48.40%	54.70%
	Present	43.10%	32.10%	54.50%	51.60%	45.30%
Expresses disappointment	Absent	83.60%	79.80%	80.00%	86.00%	82.20%
	Present	16.40%	20.20%	20.00%	14.00%	17.80%