



ORIGINAL ARTICLE

Exploring Paradox: Moderating and Mediating Mechanisms in the Effect of Abusive Supervision on Employees' Helping Behavior (Case Study: Public Hospitals in Yazd City)

Roghaye Hekmat Nasab¹, Nahid Amrollahi Biuki^{1*}, Mohammad Sadegh Sharifirad¹

¹Department of Public Administration, Faculty of Humanity and Social Sciences, Ardakan University, Ardakan, Iran

ABSTRACT

Background: Typically, researchers believe that abusive supervision decreases employees' helping behavior. However, according to the emotional process theory of abusive supervision, subordinates show more helping behavior under certain conditions. The purpose of this study was to examine the impact of abusive supervision on employees' helping behavior, with a focus on the mediating role of self-blame and guilt as well as the moderating effects of core self-evaluation (CSE) and power distance.

Methods: The present study is applied in purpose and descriptive in method, classified as a semi-experimental study regarding its design. The statistical population comprised all administrative and medical staff working in public hospitals of Yazd. Sampling was conducted using a convenience sampling method, with the sample size determined through G-Power software. After removing outliers, 381 participants remained for analysis. Data were collected via a questionnaire, and after confirming its reliability and validity, hypotheses were tested using SPSS₂₁ software and the PROCESS module.

Results: The direct association between abusive supervision and employees' helping behavior was significantly negative (-0/235). The mediation by self-blame and guilt was negative too. The relationship between abusive supervision and self-blame was positively correlated to CSE (0/224), while the association between self-blame and guilt was negatively correlated to power distance.

Conclusion: In the context of abusive supervision and its aftermath, this study introduced self-blame and guilt as two mediators that can affect subordinates' reactions to abusive supervision. Also, for the first time, CSE was tested as a moderator between abusive supervision and self-blame. Finally, in response to previous calls for research, the moderating role of subordinates' power distance orientation in the relationship between self-blame and guilt was investigated.

Keywords: Abusive Supervision, Employees' Helping Behavior, Self-Blame, Guilt, Core Self-Evaluation, Power Distance

Introduction

Abusive supervision in the workplace is a phenomenon referring to the "subordinates' perception of the extent to which supervisors engage in the sustained display of hostile verbal and nonverbal behaviors, excluding physical contact (1). Nowadays, more and more workplaces

are beset with this supervision (2,3,4). Yao (5) examined abusive supervision in relation to suicide ideation. From the perspective of justice theories and reciprocity, this supervisory abuse can induce retaliating behaviors such as cooperation reduction (6), knowledge hiding (7), deviant behavior (8) and

Corresponding Author: Nahid Amrollahi Biuki
Email: amrolahi.n@ardakan.ac.ir
Tel: +98 913 3519967

Department of Public Administration, Faculty of Humanity and Social Sciences, Ardakan University, Ardakan, Iran

Copyright: ©2024 The Author(s); Published by Shahid Sadoughi University of Medical Sciences. This is an open-access article distributed under the terms of the Creative Commons Attribution License (<https://creativecommons.org/licenses/by/4.0/>), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

poor subordinate task performance (9). More recent research has revealed that subordinates may show helping behaviors after experiencing supervision abuse (10). Based on the emotional process theory of abusive supervision (11), when subordinates point the finger at themselves after experiencing abuse, they may blame themselves and feel guilty; hence, they try to compensate by showing more helping behavior (10, 12).

Moreover, considering that emotions are influenced by personality traits (13), this study seeks to investigate the moderating impacts of core self-evaluation (CSE), as a factor that increases one's vulnerability when facing challenging and stressful situations (14), and power distance orientation, which increases or decreases sensitivity to abusive supervision (15).

The research contributes to the literature on abusive supervision and subordinates' corresponding reactions. First, it considers self-blame and guilt as two mediators that can affect the reaction of subordinates to abusive supervision, thereby helping the perpetuation of abuse. Second, considering CSE as a dispositional variable, this research shows that diverse levels of CSE can affect the relationship between abusive supervision and self-blame and prevent self-blame after abuse. Third, the study responds to the call for research on how individual-level cultural values affect the perception, evaluation, and outcomes of abusive supervision (2,16). To this end, subordinates' power distance orientation is investigated for its moderating role in the relationship between self-blame and guilt. This study contributed to the body of knowledge about supervisor mistreatment and helping behaviors in several ways. First, by considering the mediating role of self-blame and guilt in the relationship between supervisor mistreatment and supervisor helping behaviors, it focuses on the emotional and affective processes of subordinates when confronted with supervisor mistreatment and shows how supervisor mistreatment may increase subordinates' helping behaviors. Then, by considering the moderating role of central self-evaluation and power distance,

it shows that individual and cultural differences as boundary conditions can affect the relationships between research variables according to the conceptual model. This study enriched the literature of abusive supervision and its aftermath by introducing self-blame and guilt as two mediators which can affect the reaction of subordinates towards abusive supervision. Second, unprecedentedly, CSE was tested as a moderator between abusive supervision and self-blame. Third, responding to the previous call for research (2,16), the moderation of subordinates' power distance orientation on the relationship between self-blame and guilt was investigated.

Literature review

Abusive supervision and employees' helping behavior

Previous research has explicitly shown the detrimental effects of abusive supervision (17) on job satisfaction and commitment (18), organizational citizenship behavior (19), knowledge sharing behavior (20), and voice behavior (21), all of which can be justified through the social exchange theory. Therefore, the following hypothesis is derived:

H1: Abusive supervision has a negative direct effect on employees' helping behavior.

The mediating roles of self-blame and guilt

Self-blame is a maladaptive cognitive coping strategy by which individuals attribute the reason for an unfavorable event to themselves (22). Research has shown that self-blaming is the first prevalent reaction to serious scold from others (23). Troester and Van Quaquebeke (9) extended the emotional process theory of abusive supervision and considered self-blaming as a cognitive appraisal that can lead to feeling of guilt. Accordingly, after perceiving abusive supervision, employees may blame themselves, and, if they deem themselves accountable, they feel guilty. Guilt is a conscious emotion that is generated in social interactions, and those who feel guilt prefer to compensate for their wrongdoings (12). In other

words, the feeling of guilt causes motivation and inclination through apologizing and making up for the loss (24). This brings one to the following hypothesis:

H2: Self-blame and guilt mediate the indirect effect of abusive supervision on employees' helping behavior in a way that the indirect association of abusive supervision and helping behavior is significantly positive.

The moderating role of CSE

CSE, a stable personality construct, represents the fundamental judgment that individuals make about their self-worth and capabilities. It includes individual subconscious appraisal of one's abilities and self-control (25). This concept was initially employed (26) to evaluate job satisfaction and then utilized in other realms.

Those who often practice CSE are more resilient when encountering challenges (27). In contrast, those who are lower in CSE are weaker and more vulnerable, since they have less self-confidence and are cynical about their competency and capabilities (14). Tepper et al. (9) contend that abusive supervision is a more serious threat for those who are psychologically weaker and more vulnerable because they have more negative perceptions about their self-worth and performance. Looking through the lens of self-control, those who are higher in CSE are more certain about their capabilities and self-control (28,29). Therefore, self-blame, which is done due to lack of self-control (30), can be employed to compensate for loss. This yields the following hypothesis:

H3: CSE moderates the relationship between abusive supervision and self-blame in a way that those who have higher CSE blame themselves less.

The moderating role of power distance

Power distance is a cultural value that represents

the extent to which an individual expects and accepts an unequal distribution of power (31,32). Those who have a better orientation of power distance accept hierarchy, respect powerful individuals and obey them (34) and tend to accept the supervisor's decisions (35). In contrast, individuals with a low power distance orientation deem themselves the peers of their supervisors and develop relationships with them, since they believe in the availability of their supervisors (32).

Those subordinates who are good at power distance orientation accept unequal power distance more willfully and are, therefore, more likely to defer to supervisors (35). Due to their awareness of status differences during interactions, they are submissive and receptive to their supervisors' decisions, and their reactions toward their supervisors' wrongdoing are less negative (15). Such subordinates accept power imbalance (36). In contrast, low power orientation leads to perceiving more rule violations and feeling less justice, thereby feeling more guilt (37). Based on the theory of resource conservation (38), subordinates with higher power distance orientation are more likely to judge their supervisor as less abusive than those with low power distance (16,39). Subordinates with a higher power distance orientation do not have to spend their resources as much to deal with abuse as subordinates with a lower power distance orientation. According to the power dependence theory (40), they feel less abuse due to their dependence on power sources. Thus, in high power distance contexts, subordinates find abusive supervisors more tolerable (16,39). This issue can be hypothesized as follows:

H4: Power distance moderates the relationship between self-blame and guilt in a way that subordinates with higher power distance orientation feel less guilt after blaming themselves.

The corresponding conceptual model is illustrated in Figure 1.

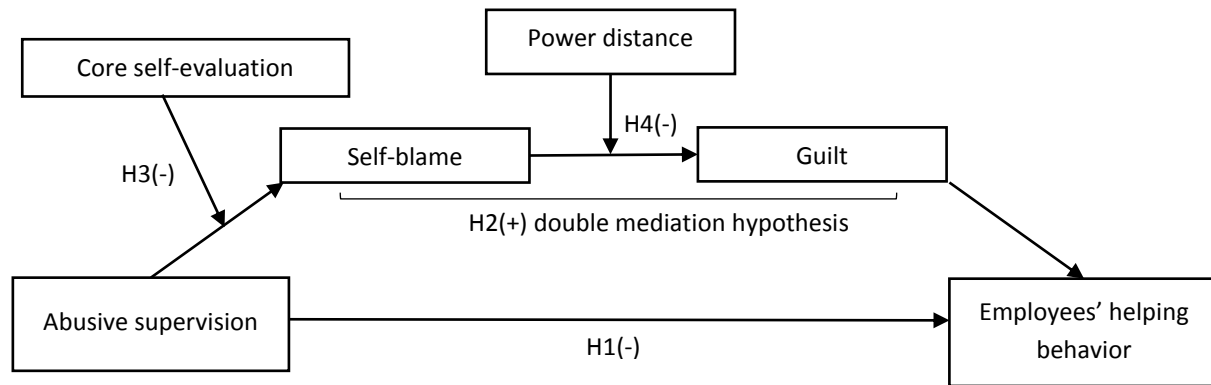


Figure 1. Conceptual model

Materials and Methods

Participants and data collection

The participants were all administrative and medical staff working in public hospitals in Yazd. They were selected by a nonprobability convenience sampling technique. The G*power software version 3.1.9.6 (41), is a software program widely used to calculate and evaluate sample size adequacy. A power of 0.9 and an α level of 0.05 were taken into consideration. Initially, 50 data points were collected, an effect size of 0.0448 was acquired, and a sample size of 373 was determined. Prior to the data collection, informed consent was received from the individual participants. After a decision on a 90% response rate (42), 410 questionnaires were distributed. Finally, 392 completed questionnaires were collected with the response rate of 95.6%. As suggested by Goldammer et al. (43), the Mahalanobis distance was calculated, and 11 outliers were omitted. Therefore, the final sample size comprising fully completed surveys was 381 with a response rate of 93%.

Research tools, procedures, and data analysis

The abusive supervision scale

Abusive supervision was assessed by asking some follow-up questions after asking the participants to read one of the written scenarios randomly. The scenarios were adopted from Troester (10), and the follow-up questions were from the five-item scale of abusive supervision (44). An example item was "My supervisor ridicules me". The corresponding Cronbach's alpha was 0.94.

In this study, the content validity of the measurement tool was confirmed by the supervisor and advisor.

The self-blame scale

To measure self-blame, the 3-item scale (10) was adopted. An example item of this scale was "I think that I am responsible for damaging my relationship with my supervisor". The Cronbach alpha was 0.83.

The guilt scale

Guilt was evaluated with the 5-item scale of guilt from the State Shame and Guilt Scale (SSDS). An example item was "I feel like apologizing and confessing". The Cronbach alpha was 0.89.

The employees' helping behavior scale

The employees' helping behavior was rated based on the scale developed by Dalal (45). This measure includes six questions. For example, "I would go out of my way to be nice to my supervisor". The Cronbach alpha was 0.78.

The CSE scale

The participants were asked to answer the questions in the 12-item CSE Scale (28). The validity of the scale was already confirmed by previous research (46). An example item was "When I try, I generally succeed". Cronbach's alpha was 0.76.

The power distance scale

The six-item scale from (47) was used to measure the power distance orientation. An example item

was “I believe managers should seldom ask for the opinion of employees”. The Cronbach alpha was 0.76.

The data collection in this research was done over a five-month period in 2023. Through Bootstrapping, the proposed moderated mediation model was investigated completely. The bootstrapping technique was employed (48) via the PROCESS macro and added to SPSS₂₁ (49). There was a common method variance (CMV) due the use of a single method to collect the data (i.e., self-report survey in this study). In this regard, a Harman one-factor test, comprising all the variables, demonstrated that a single This factor can represent only 22.47% of the variants,

which is considerably less than 50% (50). This result shows no significant common variance (51,52). Therefore, common method variance is not a major threat in this study.

Results

This section presents a concise overview of the data analysis. Prior to the testing of the proposed hypotheses, the data fitness of the measurement model and the distinctiveness of the measures, were tested with AMOS (53). Based on Table 1, the measurement model showed a good fit to the data ($\lambda^2 = 954.109$, $df = 444$, $p < 0.001$, CFI = 0.915, TLI = 0.906, RMSEA = 0.055).

Table 1. Results of confirmatory factor analysis

Models	χ^2	Df	χ^2/df	CFI	TLI	RMSEA	$\Delta\chi^2$
Six-factor model (Abusive supervision, CSE, PD, Self-blame, Guilt, Employees' helping behavior)	954.109	444	2.149	0.915	0.906	0.055	
Five-factor model (Abusive supervision, CSE, PD, Self-blame, Guilt and Employees' helping behavior combined)	1572.78	449	3.503	0.814	0.794	0.081	618.673***
Four-factor model (Abusive supervision, CSE, PD, Self-blame and Guilt and Employees' helping behavior combined)	1737.98	453	3.868	0.787	0.767	0.086	738.871***
Three-factor model (Abusive supervision and CSE combined, PD, Self-Blame and Guilt and Employees' helping behavior combined)	2172.88	456	4.765	0.716	0.691	0.100	1218.771***
Two-factor model (Abusive supervision and CSE and PD combined, Self-Blame and Guilt and Employees' helping behavior combined)	2635.98	458	5.755	0.639	0.609	0.112	1681.871***
One-factor	3287.14	459	7.162	0.531	0.494	0.127	2333.031***
One-factor	3287.14	459	7.162	0.531	0.494	0.127	2333.031***

Note: $N = 381$. All the alternative models were compared to the six-factor model.

Abbreviations: CFI (comparative fit index); RMSEA (root mean square error of approximation); SRMR (standardized root mean square residual).

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

Table 2 shows the descriptive statistics, correlations, and Cronbach's alpha of the variables. The hypotheses were tested with the PROCESS macro for SPSS [49]. The bootstrapping method

with 5,000 interactions was used to calculate the indirect effects (54). Using the confidence interval, this method shows statistical significance if the interval excludes zero.

Table 2. Descriptive statistics and zero-order correlations of the study variables

Variable	M	SD	1	2	3	4	5	6
1. Abusive supervision	2.70	1.18	(0.94)					
2. CSE	3.71	0.49	-.149**	(0.76)				
3. Self-blame	2.33	0.86	.414**	-.130*	(0.83)			
4. PD	2.03	0.68	.110*	-.057	.209**	(0.76)		
5. Guilt	2.78	0.90	.458**	-.161**	.695**	.136**	(0.89)	
6. Employees' helping behavior	2.98	0.69	-.227**	.103*	.155**	.128*	.164**	(0.78)

Note: N = 381. Cronbach's alphas are shown in the diagonal.
 * $p < .01$ ** $p < .001$

Hypothesis 1 outlined the significant negative direct association between abusive supervision and employees' helping behavior. The results in Table 3 show that the direct effect of abusive

supervision on employees' helping behavior is negative ($b = 0.235, p < 0.001$). Therefore, Hypothesis 1 is supported.

Table 3. Summary of analyses for Hypothesis 1

Variable	B	SE	T	P	LLCI	ULCI
Abusive supervision	-0.235	0.32	-7.447	0.000	-0.298	-0.173

Note: N = 381. The unstandardized beta coefficients are reported. The independent variables were mean centered.
 SE (Standard error); LLCI (Lower Limit Confidence Interval); ULCI (Upper Limit Confidence Interval)
 The dependent variable is employees' helping behavior
 * $p < .01$; ** $p < .001$.

Hypothesis 2 asserts that the mediation of self-blame and guilt is significant. Based on Table 4, the indirect association between abusive supervisor and supervisor-directed helping via self-blame was 0.04 (boot SE = 0.02). It is statistically significant, since zero was not in the bias-corrected 95% confidence interval (CI = [0.002, 0.07]). Moreover, the indirect relationship between abusive supervision and employees' helping behavior was 0.03 (boot SE=0.01). It was statistically significant because

the confidence interval did not contain zero (0.95% CI = [0.008 and 0.054]). The indirect effect of abusive supervision and employees' helping behavior via both variables of self-blame and guilt was 0.04 (boot SE = 0.01, CI = [0.013 and 0.062]), which was significant. These results generally reveal that both self-blame and guilt significantly mediate the association between abusive supervision and employees' helping behavior, supporting Hypothesis 2.

Table 4. Summary of analyses for Hypothesis 2

	Self-blame			Guilt			Employees' helping behavior		
	<i>B</i>	<i>SE</i>	<i>T</i>	<i>B</i>	<i>SE</i>	<i>t</i>	<i>b</i>	<i>SE</i>	<i>T</i>
Abusive supervision	0.3	0.03	8.85**						
Guilt				0.15	0.03	5.17**	-0.24	0.032	-7.45**
Self-blame				0.64	0.04	15.33**	0.12	0.053	2.31*
							0.18	0.052	3.52**
Model <i>R</i> ²	0.17**			0.52**			0.15**		
Indirect effects of abusive supervision on employees' helping behavior through self-blame and guilt									
	<i>Indirect effect</i>	<i>Boot SE</i>	<i>Lower 95% bootstrap confidence interval</i>			<i>Higher 95% bootstrap confidence interval</i>			
Self-blame	0.04	0.02	0.002			0.07			
Guilt	0.03	0.01	0.008			0.054			
	0.04	0.013	0.013			0.062			

Note: N = 381. The unstandardized beta coefficients are reported. The independent variables were mean centered. SE (standard error); LLCI (lower limit confidence interval); ULCI (upper limit confidence interval)
 ** $p < 0.001$ * $p < 0.01$

Hypothesis 3 posits that CSE moderates the relationship between abusive supervision and self-blame in a way that more CSE makes this relationship less positive. Table 5 suggests that after controlling the main impact of abusive supervision and CSE, the abusive supervision by CSE interaction accounted for a significant incremental variance (2.32% because of interaction) in self-blame

($b = 0.22, p < 0.001$). Additionally, there were simple slopes at one standard deviation above and below the mean score of the CSE to show the interaction effect directions (Figure 2). The slope of the association between abusive supervision and self-blame was steeper for higher levels of CSE (simple slope = 0.40, $p < 0.001$). In contrast, when the levels of CSE were lower, the association was significantly weaker (simple slope = 0.18, $p < 0.001$).

Table 5. Summary of analyses for Hypothesis 3

	Self-blame		Guilt		Employees' helping behavior	
	<i>B</i>	<i>SE</i>	<i>B</i>	<i>SE</i>	<i>b</i>	<i>SE</i>
Abusive supervision	0.291**	0.034	0.157	0.030	-.235**	0.032
CSE	-0.118	0.0812				
Abusive supervision × CSE	0.224*	0.07				
Self-blame			0.639	0.041	0.123**	0.053
Guilt					0.184**	0.052
<i>R</i> ²	0.199		0.518		0.155	
<i>F</i>	31.297**		202.829**		22.960**	
<i>Conditional effects of abusive supervision on self-blame for different levels of CSE</i>						
	<i>Effect</i>	<i>Boot SE</i>	<i>Lower 95% bootstrap confidence interval</i>		<i>Higher 95% bootstrap confidence interval</i>	
Low	0.02	0.09	0.006		0.04	
Mean	0.03	0.01	0.01		0.06	
High	0.05	0.02	0.02		0.08	
Index of the moderated mediation						
	<i>Index</i>	<i>Boot SE</i>	<i>Boot LLCI</i>		<i>Boot ULCI</i>	
CSE	0.026	0.013	0.006		0.06	

Note: N = 381. The unstandardized beta coefficients are reported. The independent variables were mean centered. CSE (core self-evaluation); SE (standard error); LLCI (lower limit confidence interval); ULCI (upper limit confidence interval)
 ** $p < 0.001$ * $p < 0.01$

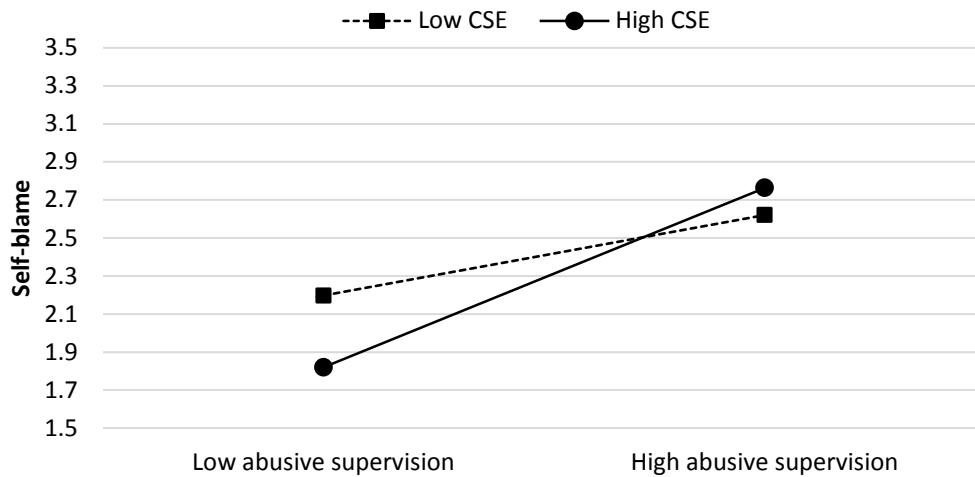


Figure 2. Interaction of abusive supervision and CSE on self-blame

To continue the analysis, the PROCESS macro for SPSS (55) was employed to test whether the conditional indirect effect of abusive supervision on employees' helping behavior via the two mediators of self-blame and guilt was moderated by CSE (i.e., Hypothesis 3; Table 5). The index of the moderated mediation was significant (moderated mediation index = 0.03, boot SE = 0.01, 95% CI = [0.006 to 0.06]). Generally, a moderated mediation index indicates whether the indirect effects are affected by low and high levels

of the moderator (49). Also, excluding zero, a 95% bootstrapped confidence interval indicates that the indirect effect varies across diverse levels of CSE. Moreover, post hoc analyses utilizing Johnson-Neyman technique suggest that the relationship between abusive supervision and self-blame is positive and significant for values above -0.85 standard deviation of the CSE mean (Figure 3). The findings contradict the proposed hypothesis. Therefore, Hypothesis 3 is not supported and is discussed later.

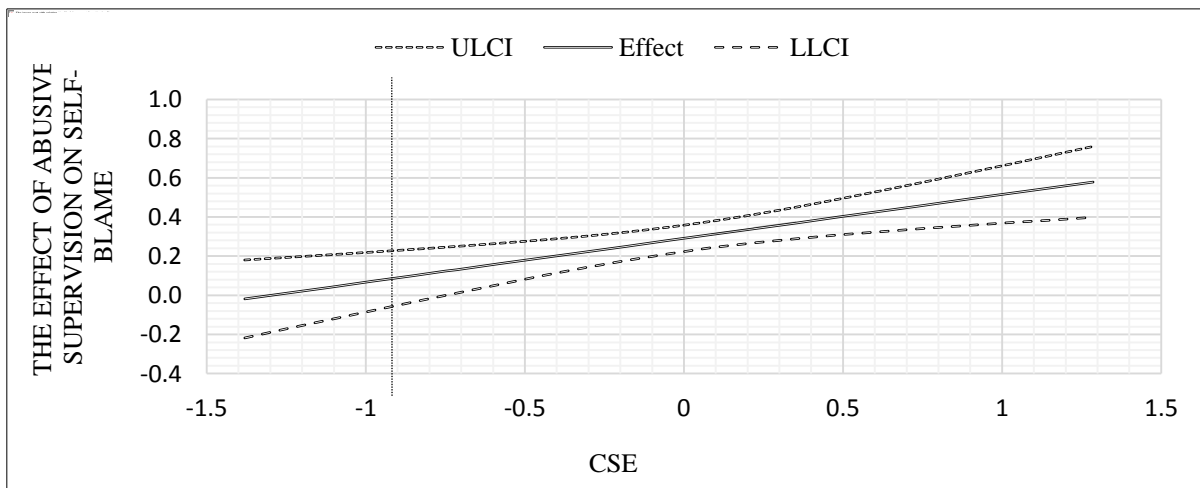


Figure 3. Johnson-Neyman regions representing the threshold for the significance of the effect of abusive supervision on self-blame for different levels of CSE

Hypothesis 4 proposes that the association between self-blame and guilt is significantly moderated by power distance (Table 6). To probe it, simple slope testing (56) and Johnson-Neyman technique (57, 58) were used to identify significant regions. The simple slope testing showed that more self-blame leads to more feelings of guilt when power distance is lower ($b = 0.22$, $SE = 0.053$, $p < 0.001$). The confidence interval did not include zero for any of high and low levels of power distance (Figure 4). Further

analysis of the moderation showed that the moderation mediation index was also significant (moderated mediation index = -0.008 , boot $SE = 0.004$, 95% $CI = [-0.017$ to $-0.001]$). This demonstrates that the indirect effect of abusive supervision on employees' helping behavior is affected by power distance as the moderator. Based on Figure 5, the relationship between self-blame and guilt was negative for all the moderator values, ranging from -1.033 to 1.97 standard deviation of the power distance mean.

Table 6. Summary of analyses for Hypothesis 4

	Self-blame		Guilt		Employees' helping behavior	
	<i>B</i>	<i>SE</i>	<i>b</i>	<i>SE</i>	<i>b</i>	<i>SE</i>
Abusive supervision	0.304**	0.034	0.155**	0.030	-	0.032
Self-blame			0.637**	0.042	0.235**	0.053
PD			-0.010	0.049	0.123*	
Self-blame × PD			-0.140**	0.053	0.184**	0.052
Guilt						
R^2	0.171		0.527			
F	78.382**		104.531**		0.155	
			22.960**			
<i>Conditional effects of self-blame on guilt for different levels of PD</i>						
	<i>Effect</i>	<i>Boot SE</i>	<i>Lower 95% bootstrap confidence interval</i>		<i>Higher 95% bootstrap confidence interval</i>	
Low	0.02	0.09	0.006		0.04	
Mean	0.03	0.01	0.01		0.06	
High	0.05	0.02	0.02		0.08	
Index of the moderated mediation						
	<i>Index</i>	<i>Boot SE</i>	<i>Boot LLCI</i>		<i>Boot ULCI</i>	
CSE	0.026	0.013	0.006		0.06	

Note: N = 381. The unstandardized beta coefficients are reported. The independent variables were mean centered. CSE (core self-evaluation); SE (standard error); LLCI (lower limit confidence interval); ULCI (upper limit confidence interval)
 ** $p < 0.001$ * $p < 0.01$

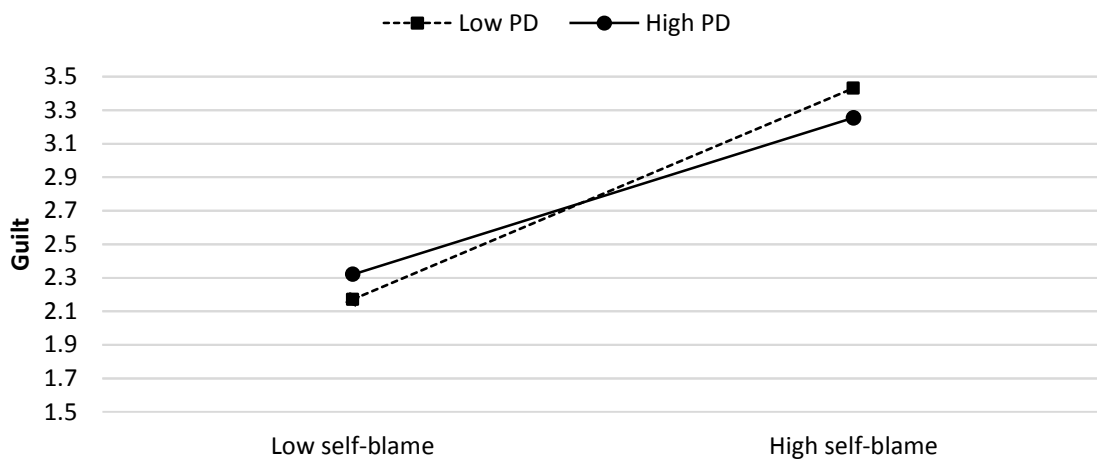


Figure 4. Interaction of self-blame and power distance on guilt

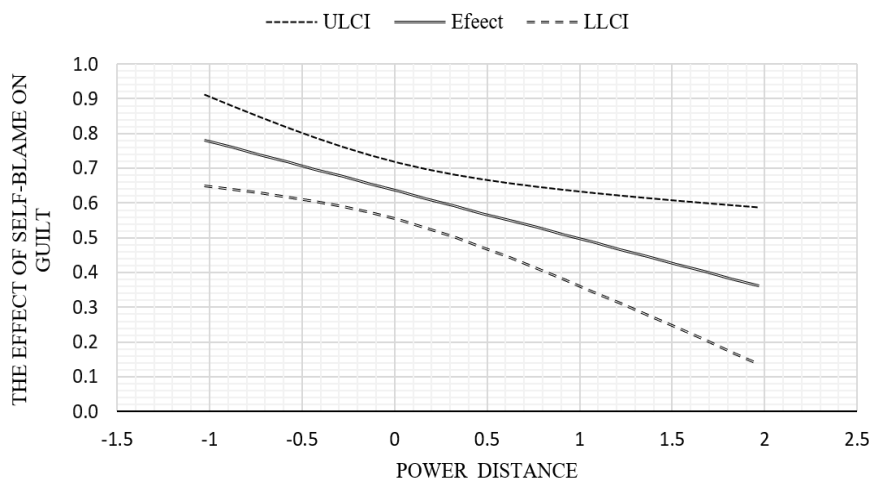


Figure 5. Johnson-Neyman regions representing the threshold for the significance of the effect of self-blame on guilt for different levels of power distance

Discussion

This study aimed at the association between abusive supervision and employees' helping behavior as well as the mediating and moderating mechanisms involved in the relationship between these two variables. In this regard, two sequential variables were examined, including a) self-blame as an internal attribution, or the cognitive process of accusing oneself of a negative event, and b) guilt as an adaptive emotion (26) that facilitates and enhances cooperation (59). Also, personality and culture, CSE, and power distance were considered as the moderators of the two relationships.

The findings of this study provide evidence for the relationship between supervisor mistreatment and helping behaviors in service sector employees in Yazd city. The findings show that in the relationship between supervisor mistreatment and helping behaviors, self-blame and guilt are serial mediator variables that suppress the negative effect of supervisor mistreatment on helping behaviors. Therefore, it seems that in order to more fully understand employee behaviors in dealing with abusive supervisors, distinctive aspects of emotional processes, personality traits, and environmental factors that have not been discussed before should be considered. We believe that the

model proposed in this study can be a starting point for further exploration and attention to emotional processes in employees' behaviors.

Direct effect

First, according to the findings of this research, employees' helping behavior is significantly and negatively correlated to abusive supervision. Most of the literature on abusive supervision is concerned with processing injustice such that followers try to make a balance; thus, refraining from helping supervisors amends the unjust supervisor-subordinate relationship (6, 8, 23, 60,61). Drawing on the resource conservation theory (62), abuse is in contrast to self-esteem and social support (63), maintaining the remaining resources. Therefore, plausibly, subordinates do not invest their time and energy in extra role behaviors, including supervisor-directed helping (64). This happens when consequent self-blame and guilt are not triggered.

Second, there is a plethora of research indicating that subordinates blame supervisors' abuse for decreasing their helping behavior and increasing their deviant behavior to establish a balance (6).

Indirect effect

The findings showed that subordinates' self-blaming after experiencing abuse can engender guilt, which ultimately functions as a motive to help the supervisor. It is in line with the emotional process theory of abusive supervision, stating that self-blame is contingent on time and situation and causes diverse feelings such as anger, fear and guilt, and may lead to different behaviors (16). Therefore, during the initial appraisal, when subordinates determine that the abuse is due to their faults, self-blame is initiated and becomes more profound after the second appraisal, and manifests itself as guilt (3). As a self-conscious feeling that is closely related to pity, retaliation and helping behavior (65), guilt can lead to more helping behavior toward supervisors.

Third, CSE was introduced as a moderator to further help the literature on abusive supervision

and the related self-blaming. It was hypothesized that those with lower CSE are more likely to blame themselves after encountering abusive supervision. Nevertheless, the findings showed the opposite. The possible reason is that, based on the self-verification theory (66), individuals prefer to be seen as they perceive themselves. Accordingly, when subordinates with higher CSE perceive abuse from their supervisors, they feel more of a threat to their self-schemas and feel more devastation (67). Individuals with higher CSE have more self-esteem and self-efficacy with an external locus of control and less neuroticism (19). Therefore, supervisor abuse is deemed as a threat to their characteristics, which makes them react to abuse more intensely. Looking through the lens of the resource conservation theory (62), abusive supervision threatens important resources such as self-esteem (63); hence, those with higher CSE make more effort to maintain their depleting resources, since they perceive the threat more severely. Once they judge themselves faulty, self-blame may occur. Research has shown that those with higher self-esteem blame themselves more, indicating their effort to control and prevent abuse (68).

Fourth, the role of power distance as a moderating factor in the relationship between self-blame and guilt was verified. Based on previous findings (43, 69), when power distance orientation is lower, more self-blame leads to more guilt. Subordinates with a higher power distance orientation tend to be more passive. They are more likely to tolerate abuse and its negative consequences so as to maintain work relationships (43,69). In the same context, the stress caused by abusive supervision affects cognitive-emotional resources, reducing emotional regulation capacity due to decreased emotional awareness. This is suggested by stress theories (62), which posit that the accumulation of stressors may deplete the necessary resources to cope with the subsequent stressors. Abusive supervision is associated with a range of acute and chronic stressors (7), and guilt levels may be elevated for those with conflictual intimate

relationships (i.e., lower power distance orientation). Both supervisor abuse and the experience of guilt can uniquely tax cognitive emotional resources (70). Those with a higher power distance orientation are likely to be more inclined to employ the avoidance coping strategy in response to uncomfortable moral emotions, which can decrease guilt awareness and reduce distress over time (71).

Limitations of future research

This research has several inherent limitations. First, the data were collected through self-reporting questionnaires, which can raise concerns of common method bias (72). Based on the recommendations of researchers e.g., Conway & Lance (73), various measures were taken to control it. The participants were selected from all administrative and medical staff working in public hospitals in Yazd. Moreover, they were reassured about the confidentiality of their responses. Valid scales were also employed to assess the variables.

A one-factor Harman test was conducted so that common method bias would not be a concern. Nevertheless, future research may use other methods, such as experimental and longitudinal research methods. Second, it was shown that abusive supervision can increase employees' helping behavior, hence burgeoning productivity if helping behavior is aligned with organizational goals. This assertion has not yet been tested and is solely deduced from previous research (15). Future research may delve into how and when helping abusive supervision can have positive organizational consequences. Third, to evaluate abuse, some assumed scenarios were designed, but the reality of workplaces was not taken into account. Thus, future studies may use a critical incident interview technique (CIT) to obtain in-depth details of the reactions to abusive supervision. This can lead to close-to-reality research. Last, the sample in this study was limited to service-offering organizations in Iran, which may limit the generalizability of the results. Further research can be conducted in other

countries with different national cultures and in different organizations.

Conclusion

Research has already demonstrated that abusive supervision hampers helping supervisors. Nevertheless, very sparse research has explored whether a specific mechanism can lead to more helping of abusive supervisors. In this regard, self-blame and guilt were studied as two sequential mediators. The findings showed that the direct impact of abusive supervision on employees' helping behavior is negative and significant, but the suppressing effects of self-blame and guilt are somehow negative and significant too. More importantly, based on a personality trait variable (i.e., CSE) and a cultural context variable (i.e., power distance), as two boundary conditions respectively involved in the relationship of abusive supervision and self-blame and that of self-blame and guilt, those who have more CSE blame themselves more when they face abuse. Additionally, those who have a better power distance orientation feel less guilt after blaming themselves.

Ethical Consideration

Ethical consent was obtained from Research Ethics Committees of Ardakan University (Approval ID: IR.ARDAKAN.REC.1403.029). The article belongs to no institute or organization, and the only stakeholder is the authors. All procedures followed in accordance with the ethical standards of the responsible committee on human experimentation (institutional and national) and with the Helsinki Declaration of 1975, as revised in 2000. All participants were informed about the study and gave their consent. Accordingly, written informed consent was received from the individual participants.

Acknowledgments

We would like to appreciate all the staff for their participation. Thanks are extended to the editors and reviewers who worked hard on this paper and reviewed our article. We also thank Amir Hussein

Mohammad Karimi Yazdi from Windsor University and Ahmad Reza Eslami from Yazd University for language edition services and Yasser Rezapour Mirsaleh from Ardakan University for critical revision of the manuscript for intellectual content.

Authors' Contributions

Writing the manuscript: R.HN, N.AB; Conceptual model design: Mahammad Sadegh Sharifirad; Acquisition of data: R.HN; Analysis and interpretation of the data: MS.Sh, N.AB; Statistical analysis: R.HN; Critical revision of the manuscript for intellectual content: N.AB, MS.Sh. All the authors have already read and approved the final draft.

Conflict of Interests

The authors declare no competing interests.

Funding

This research did not receive any specific grant from funding agencies in the public, commercial, or not-for-profit sectors.

References

1. Tepper BJ. Consequences of abusive supervision. *Academy of management journal*. 2000;43(2):178–90. <https://doi.org/10.2307/1556375>
2. Mackey JD, Frieder RE, Brees JR, Martinko MJ. Abusive supervision: A meta-analysis and empirical review. *Journal of management*. 2017;43(6):1940–65. <https://doi.org/10.1177/0149206315573997>
3. Eissa G, Lester SW. A moral disengagement investigation of how and when supervisor psychological entitlement instigates abusive supervision. *Journal of Business Ethics*. 2021;1–20. <https://doi.org/10.1007/s10551-021-04787-3>
4. Zhang Y, Liao Z. Consequences of abusive supervision: A meta-analytic review. *Asia Pacific Journal of Management*. 2015;32(4):959–87. <https://doi.org/10.1007/s10490-015-9425-0>
5. Yao Y, Dong F, Qiao Z. Perceived abusive supervision and graduate students' suicidal ideation: from the perspective of interpersonal psychological theory of suicide. *BMC psychology*. 2023;11(1):80. <https://doi.org/10.1186/s40359-023-01136-z>

6. Rafferty AE, Restubog SLD. The influence of abusive supervisors on followers' organizational citizenship behaviours: The hidden costs of abusive supervision. *British Journal of Management*. 2011;22(2):270–85. <http://dx.doi.org/10.1111/j.1467-8551.2010.00732.x>
7. Khalid M, Bashir S, Khan AK, Abbas N. When and how abusive supervision leads to knowledge hiding behaviors: An Islamic work ethics perspective. *Leadership & Organization Development Journal*. 2018;39(6):794–806. <https://doi.org/10.1108/LODJ-05-2017-0140>
8. Aryee S, Chen ZX, Sun LY, Debrah YA. Antecedents and outcomes of abusive supervision: test of a trickle-down model. *Journal of applied psychology*. 2007;92(1):191–201. <https://doi.org/10.1037/0021-9010.92.1.191>
9. Tepper BJ, Simon L, Park HM. Abusive supervision. *Annual Review of Organizational Psychology and Organizational Behavior*. 2017;4:123–52. <https://doi.org/10.1146/annurev-orgpsych-041015-062539>
10. Troester C, Van Quaquebeke N. When victims help their abusive supervisors: The role of LMX, self-blame, and guilt. *Academy of Management Journal*. 2021;64(6):1793–815. <https://doi.org/10.5465/amj.2019.0559>
11. Oh JK, Farh CI. An emotional process theory of how subordinates appraise, experience, and respond to abusive supervision over time. *Academy of Management Review*. 2017;42(2):207–32. <https://doi.org/10.5465/amr.2014.0347>
12. Tangney JP, Miller RS, Flicker L, Barlow DH. Are shame, guilt, and embarrassment distinct emotions? *Journal of personality and social psychology*. 1996;70(6):1256–69. <https://doi.org/10.1037/0022-3514.70.6.1256>
13. Weiss HM, Cropanzano R. Affective events theory. *Research in organizational behavior*. 1996;18(1):1–74.
14. Kammeyer-Mueller JD, Judge TA, Scott BA. The role of core self-evaluations in the coping process. *Journal of Applied Psychology*. 2009;94(1):177–95. <https://doi.org/10.1037/a0013214>
15. Lee C, Pillutla M, Law KS. Power-distance, gender and organizational justice. *Journal of management*. 2000;26(4):685–704. <https://doi.org/10.1177/01492063000260>
16. Tepper BJ. Abusive supervision in work organizations: <https://doi.org/10.1186/s40359-023-01136-z>

- Review, synthesis, and research agenda. *Journal of management*. 2007;33(3):261–89. <https://doi.org/10.1177/0149206307300812>
17. Zhang J, Liu J. Is abusive supervision an absolute devil? Literature review and research agenda. *Asia Pacific Journal of Management*. 2018;35(3):719–44. <https://doi.org/10.1007/s10490-017-9551-y>
18. Guan B, Hsu C. The role of abusive supervision and organizational commitment on employees' information security policy noncompliance intention. *Internet research*. 2020;30(5):1383–405. <https://doi.org/10.1108/INTR-06-2019-0260>
19. Zhang Y, Liu X, Xu S, Yang LQ, Bednall TC. Why abusive supervision impacts employee OCB and CWB: A meta-analytic review of competing mediating mechanisms. *Journal of Management*. 2019;45(6):2474–97. <http://doi.org/10.1177/0149206318823935>
20. Lee S, Kim SL, Yun S. A moderated mediation model of the relationship between abusive supervision and knowledge sharing. *The Leadership Quarterly*. 2018;29(3):403–13. <https://doi.org/10.1016/j.leaqua.2017.09.001>
21. Frieder RE, Hochwarter WA, DeOrtentiis PS. Attenuating the negative effects of abusive supervision: The role of proactive voice behavior and resource management ability. *The Leadership Quarterly*. 2015;26(5):821–37. <https://doi.org/10.1016/j.leaqua.2015.06.001>
22. Alix S, Cossette L, Cyr M, Frappier JY, Caron PO, Hébert M. Self-blame, shame, avoidance, and suicidal ideation in sexually abused adolescent girls: a longitudinal study. *Journal of child sexual abuse*. 2020;29(4):432–47. <https://doi.org/10.1080/10538712.2019.1678543>
23. Schilpzand P, Leavitt K, Lim S. Incivility hates company: Shared incivility attenuates rumination, stress, and psychological withdrawal by reducing self-blame. *Organizational Behavior and Human Decision Processes*. 2016;133:33–44. <https://doi.org/10.1016/j.obhdp.2016.02.001>
24. Tangney JP, Stuewig J, Mashek DJ. Moral emotions and moral behavior. *Annu Rev Psychol*. 2007;58:345–72. <https://doi.org/10.1146/annurev.psych.56.091103.070145>
25. Chang CH, Ferris DL, Johnson RE, Rosen CC, Tan JA. Core self-evaluations: A review and evaluation of the literature. *Journal of management*. 2012;38(1):81–128. <https://doi.org/10.1177/0149206311419661>
26. Judge TA, Erez A, Bono JE. The power of being positive: The relation between positive self-concept and job performance. *Human performance*. 1998;11(2–3):167–87. https://doi.org/10.1207/s15327043hup1102&3_4
27. Mäkikangas A, Rantanen J, Bakker AB, Kinnunen ML, Pulkkinen L, Kokko K. The circumplex model of occupational well-being: Its relation with personality. *Journal for Person-Oriented Research*. 2015;1(3):115–29. <https://doi.org/10.17505/jpor.2015.13>
28. Judge TA, Erez A, Bono JE, Thoresen CJ. The core self-evaluations scale: Development of a measure. *Personnel psychology*. 2003;56(2):303–31. <https://doi.org/10.1111/j.1744-6570.2003.tb00152.x>
29. Judge TA, Bono JE. Relationship of core self-evaluations traits—self-esteem, generalized self-efficacy, locus of control, and emotional stability—with job satisfaction and job performance: A meta-analysis. *Journal of applied Psychology*. 2001;86(1):80–91. <https://doi.org/10.1037/0021-9010.86.1.80>
30. Koi P. Born which way? ADHD, situational self-control, and responsibility. *Neuroethics*. 2021;14(2):205–18. <https://doi.org/10.1007/s12152-020-09439-3>
31. Clugston M, Howell JP, Dorfman PW. Dispositional influences on pay preferences. *Journal of Business and Psychology*. 2000;15(2):311–20.
32. Hofstede G. Dimensionalizing cultures: The Hofstede model in context. *Online readings in psychology and culture*. 2011;2(1):919–1014. <https://doi.org/10.9707/2307-0919.1014>
33. Farh JL, Hackett RD, Liang J. Individual-level cultural values as moderators of perceived organizational support—employee outcome relationships in China: Comparing the effects of power distance and traditionalism. *Academy of management journal*. 2007;50(3):715–29. <https://doi.org/10.2307/20159880>
34. Bochner S, Hesketh B. Power distance, individualism/collectivism, and job-related attitudes in a culturally diverse work group. *Journal of cross-cultural psychology*. 1994;25(2):233–57. <https://doi.org/10.1177/0022022194252005>
35. Kirkman BL, Chen G, Farh JL, Chen ZX, Lowe KB. Individual power distance orientation and follower reactions to transformational leaders: A cross-level, cross-cultural examination. *Academy of management journal*. 2009;52(4):744–64. [https://doi.org/10.5465/2009.52\(4\):744-64](https://doi.org/10.5465/2009.52(4):744-64)

- AMJ.2009.43669971
36. Tyler TR. Social justice: Outcome and procedure. *International journal of psychology*. 2000;35(2):117–25. <https://doi.org/10.1080/002075900399411>
 37. Leith KP, Baumeister RF. Empathy, shame, guilt, and narratives of interpersonal conflicts: Guilt-prone people are better at perspective taking. *Journal of personality*. 1998;66(1):1–37. <https://doi.org/10.1111/1467-6494.00001>
 38. Hobfoll SE. Conservation of resources: a new attempt at conceptualizing stress. *American psychologist*. 1989;44(3):513–24. <https://doi.org/10.1037/0003-066X.44.3.513>
 39. Lian H, Ferris DL, Brown DJ. Does power distance exacerbate or mitigate the effects of abusive supervision? It depends on the outcome. *Journal of Applied Psychology*. 2012;97(1):107. <https://doi.org/10.1037/a0024610>
 40. Emerson RM. Exchange theory, part II: Exchange relations and networks. *Sociological theories in progress*. 1972;2:58–87.
 41. Faul F, Erdfelder E, Lang AG, Buchner A. G* Power 3: A flexible statistical power analysis program for the social, behavioral, and biomedical sciences. *Behavior research methods*. 2007;39(2):175–91. <https://doi.org/10.3758/bf03193146>
 42. Hoerger M. Participant dropout as a function of survey length in Internet-mediated university studies: Implications for study design and voluntary participation in psychological research. *Cyberpsychology, behavior, and social networking*. 2010;13(6):697–700. <https://doi.org/10.1089/cyber.2009.0445>.
 43. Goldammer P, Annen H, Stöckli PL, Jonas K. Careless responding in questionnaire measures: Detection, impact, and remedies. *The Leadership Quarterly*. 2020;31(4):1–16. <https://doi.org/10.1016/j.leaqua.2020.101384>
 44. Mitchell MS, Ambrose ML. Abusive supervision and workplace deviance and the moderating effects of negative reciprocity beliefs. *Journal of applied psychology*. 2007;92(4):1159–68. <https://doi.org/10.1037/0021-9010.92.4.1159>
 45. Dalal RS, Lam H, Weiss HM, Welch ER, Hulin CL. A within-person approach to work behavior and performance: Concurrent and lagged citizenship-counterproductivity associations, and dynamic relationships with affect and overall job performance. *Academy of Management Journal*. 2009;52(5):1051–66. <https://doi.org/10.5465/AMJ.2009.44636148>
 46. Kacmar KM, Collins BJ, Harris KJ, Judge TA. Core self-evaluations and job performance: the role of the perceived work environment. *Journal of Applied Psychology*. 2009;94(6):1572–80. <https://doi.org/10.1037/a0017498>
 47. Dorfman PW, Howell JP. Dimensions of national culture and effective leadership patterns: Hofstede revisited. *Advances in international comparative management*. 1988;3(1):127–50.
 48. Edwards JR, Lambert LS. Methods for integrating moderation and mediation: a general analytical framework using moderated path analysis. *Psychological methods*. 2007;12(1):1–22. <https://doi.org/10.1037/1082-989X.12.1.1>
 49. Hayes AF. Partial, conditional, and moderated moderated mediation: Quantification, inference, and interpretation. *Communication monographs*. 2018; 85(1):4–40. <https://doi.org/10.1080/03637751.2017.1352100>
 50. Podsakoff PM, Organ DW. Self-reports in organizational research: Problems and prospects. *Journal of management*. 1986;12(4):531–44. <http://dx.doi.org/10.1177/014920638601200408>
 51. Lindell MK, Whitney DJ. Accounting for common method variance in cross-sectional research designs. *Journal of applied psychology*. 2001;86(1):114–21. <https://doi.org/10.1037/0021-9010.86.1.114>
 52. Podsakoff PM, MacKenzie SB, Lee JY, Podsakoff NP. Common method biases in behavioral research: a critical review of the literature and recommended remedies. *Journal of applied psychology*. 2003;88(5): 879–903. <https://doi.org/10.1037/0021-9010.88.5.879>
 53. Arbuckle JL. Amos. <http://www.smallwaters.com>. 2006;
 54. Singh K, Xie M. Bootstrap: a statistical method. Unpublished manuscript, Rutgers University, USA Retrieved from <http://www.stat.rutgers.edu/home/mxie/RCPapers/bootstrap.pdf>. 2008;1–14.
 55. Hayes AF. Introduction to mediation, moderation, and conditional process analysis: A regression-based approach. Guilford publications; 2017.
 56. Cohen P, West SG, Aiken LS. Applied multiple regression/correlation analysis for the behavioral

- sciences. Psychology press; 2014. <https://doi.org/10.4324/9780203774441>
57. Hayes AF, Matthes J. Computational procedures for probing interactions in OLS and logistic regression: SPSS and SAS implementations. *Behavior research methods*. 2009;41(3):924–36. <https://doi.org/10.3758/BRM.41.3.924>
 58. Johnson PO, Neyman J. Tests of certain linear hypotheses and their application to some educational problems. *Statistical research memoirs*. 1936;
 59. Deem MJ, Ramsey G. Guilt by association? *Philosophical Psychology*. 2016;29(4):570–85. <https://doi.org/10.1080/09515089.2015.1126706>
 60. Xia Y, Zhang L, Li M. Abusive leadership and helping behavior: Capability or mood, which matters? *Current Psychology*. 2019;38(1):50–8. <https://doi.org/10.1007/s12144-017-9583-y>
 61. Zellars KL, Tepper BJ, Duffy MK. Abusive supervision and subordinates' organizational citizenship behavior. *Journal of applied psychology*. 2002;87(6):1068–76. <https://doi.org/10.1037/0021-9010.87.6.1068>
 62. Hobfoll SE. The influence of culture, community, and the nested-self in the stress process: Advancing conservation of resources theory. *Applied psychology*. 2001;50(3):337–421. <https://doi.org/10.1111/1464-0597.00062>
 63. Lee C, Dickson DA, Conley CS, Holmbeck GN. A closer look at self-esteem, perceived social support, and coping strategy: A prospective study of depressive symptomatology across the transition to college. *Journal of Social and Clinical Psychology*. 2014;33(6):560–85. <https://doi.org/10.1521/jscp.2014.33.6.560>
 64. Lyu Y, Zhu H, Zhong HJ, Hu L. Abusive supervision and customer-oriented organizational citizenship behavior: The roles of hostile attribution bias and work engagement. *International Journal of Hospitality Management*. 2016;53:69–80. <https://doi.org/10.1016/j.ijhm.2015.12.001>
 65. Miranda GA, Welbourne JL, Sariol AM. Feeling shame and guilt when observing workplace incivility: Elicitors and behavioral responses. *Human Resource Development Quarterly*. 2020;31(4):371–92. <https://doi.org/10.1002/hrdq.21395>
 66. Swann Jr WB, Brooks M. Why threats trigger compensatory reactions: The need for coherence and quest for self-verification. *Social Cognition*. 2012;30(6):758–77.
 67. Duffy MK, Shaw JD, Scott KL, Tepper BJ. The moderating roles of self-esteem and neuroticism in the relationship between group and individual undermining behavior. *Journal of applied psychology*. 2006;91(5):1066–77. <https://doi.org/10.1037/0021-9010.91.5.1066>
 68. Janoff-Bulman R. Characterological versus behavioral self-blame: inquiries into depression and rape. *Journal of personality and social psychology*. 1979;37(10):1798–809. <https://doi.org/10.1037//0022-3514.37.10.1798>
 69. Vogel RM, Mitchell MS, Tepper BJ, Restubog SL, Hu C, Hua W, et al. A cross-cultural examination of subordinates' perceptions of and reactions to abusive supervision. *Journal of Organizational Behavior*. 2015;36(5):720–45. <https://doi.org/10.1002/job.1984>
 70. Taverna EC, McGuier DJ, Marshall AD. Perpetration of intimate partner violence and guilt: the role of parenting status. *Journal of Family Trauma, Child Custody & Child Development*. 2021;1–21. <https://doi.org/10.4324/9781032641225-6>
 71. Litz BT, Engel CC, Bryant RA, Papa A. A randomized, controlled proof-of-concept trial of an Internet-based, therapist-assisted self-management treatment for posttraumatic stress disorder. *American journal of psychiatry*. 2007;164(11):1676–84. <https://doi.org/10.1176/appi.ajp.2007.06122057>
 72. Podsakoff PM, MacKenzie SB, Podsakoff NP. Sources of method bias in social science research and recommendations on how to control it. *Annual review of psychology*. 2012;63(1):539–69. <https://doi.org/10.1146/annurev-psych-120710-100452>
 73. Conway JM, Lance CE. What reviewers should expect from authors regarding common method bias in organizational research. *Journal of business and psychology*. 2010;25:325–34. <https://doi.org/10.1007/s10869-010-9181-6>