




Article

# Going the Extra Mile (or Not): A Moderated Mediation Analysis of Job Resources, Abusive Leadership, Autonomous Motivation, and Extra-Role Performance

Annick Parent-Lamarche \*, Claude Fernet  and Stéphanie Austin 

Department of Human Resources Management, Université du Québec à Trois-Rivières, 3225, Albert-Tessier, Trois-Rivières, QC G8Z 4M3, Canada; [claud.fernet@uqtr.ca](mailto:claud.fernet@uqtr.ca) (C.F.); [stephanie.austin@uqtr.ca](mailto:stephanie.austin@uqtr.ca) (S.A.)

\* Correspondence: [annick.parent-lamarche@uqtr.ca](mailto:annick.parent-lamarche@uqtr.ca)

**Abstract:** Abusive leadership is particularly prevalent in nursing and it can have multiple adverse effects on performance at work. However, little research has examined whether and under what conditions abusive leadership may be detrimental to nurses' extra-role performance. This cross-sectional study explores whether abusive leadership intensifies the effects of emotional job resources on autonomous motivation, a psychological mechanism that could be responsible for extra-role performance. Data were collected from dyads of registered French-Canadian nurses and their immediate supervisors ( $n = 99$  dyads). The models were tested with path analysis using Mplus. Our results show that extra-role performance is positively associated with nurses' job emotional resources and autonomous motivation, but negatively associated with abusive leadership. Nurses' cynicism is also negatively associated with autonomous motivation. Importantly, the indirect relation between emotional resources and extra-role performance through autonomous motivation is moderated by abusive leadership, providing support for a moderated mediation effect. These results add to those supporting a similar moderated mediation mechanism to explain employee attitudes and demonstrate the relevance of self-determination theory in a work context. These findings reinforce the need to focus on the quality of leadership practices as well as interventions aimed at promoting the performance of nurses at work.

**Keywords:** abusive leadership; autonomous motivation; extra-role performance; emotional resources; job demands–resources model; self-determination theory; path analysis; moderated mediation



**Citation:** Parent-Lamarche, Annick, Claude Fernet, and Stéphanie Austin. 2022. Going the Extra Mile (or Not): A Moderated Mediation Analysis of Job Resources, Abusive Leadership, Autonomous Motivation, and Extra-Role Performance.

*Administrative Sciences* 12: 54.

<https://doi.org/10.3390/admsci12020054>

Received: 18 March 2022

Accepted: 25 April 2022

Published: 28 April 2022

**Publisher's Note:** MDPI stays neutral with regard to jurisdictional claims in published maps and institutional affiliations.



**Copyright:** © 2022 by the authors. Licensee MDPI, Basel, Switzerland. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (<https://creativecommons.org/licenses/by/4.0/>).

## 1. Introduction

Abusive leadership, also defined as abusive supervision, relies on repeated negative behavior, such as anger, intimidation, yelling, and ridiculing (Tepper 2000). Data suggest that an estimated 13.5% of U.S. workers (Schat et al. 2006) are exposed to abusive leadership. In fact, in this country, it is estimated that corporations lose USD 23.8 billion annually in productivity as a result of abusive leadership. A study conducted among a random sample of 6500 registered nurses (Estes 2013) showed that the prevalence of abusive supervision is particularly high in a nursing context. Specifically, 46.6% of participants reported perceiving abusive supervision, among which 36.6% believed it to undermine their performance.

Research has shown that abusive leadership has a negative impact on employees' performance and an array of organizational elements (Tao et al. 2017). Employees' perceptions of working under a supervisor's duress is related to adverse personal (e.g., work stress, burnout, and psychological distress (Huang et al. 2020)) and organizational outcomes (e.g., turnover intention and workplace deviance; (Lyu et al. 2019)). For instance, Lavoie-Tremblay et al. (2016) found that it predicts a poorer quality of care in nurses towards patients beyond that explained by transformational leadership. This finding corroborates those of studies suggesting that the effects of negative supervisor–employee relationships are greater and last longer than those of more positive relationships (Baumeister et al. 2001).

However, few studies have examined whether and under what conditions abusive leadership may be detrimental to extra-role performance. In contrast to job duties and task performance, extra-role performance, emphasizing discretionary behaviors. This type of behavior is usually not directly or explicitly recognized by an organization's formal reward system (e.g., volunteering for non-mandatory roles and tasks, collaborating with other nurses to improve the quality of services). Nonetheless, discretionary behaviors are linked to efficiency and organizational effectiveness (Organ 1988). As such, discretionary behaviors appear to be particularly important in the current nursing context given the strict resources (shortages and the caring and empathetic nature of helping professions).

### 1.1. Purpose of the Study

To address this gap, our cross-sectional study draws on recent developments in theory and research on abusive leadership (Jha 2019; Tepper et al. 2017), which suggest that employees may respond differently to the work environment as a function of the degree to which they perceive abusive behaviors from their supervisor. We explore whether abusive leadership intensifies the effects of job emotional resources (such as emotional support from patients, colleagues, and supervisors) on autonomous motivation (acting with volition and choice), a psychological mechanism that could be responsible for extra-role performance. As such, abusive leadership would moderate the effect of emotional resources on autonomous motivation, which entails conditions that direct and energize nurses' discretionary behaviors.

### 1.2. Background

Self-determination theory (Deci and Ryan 2000) provides a useful perspective for understanding the underlying reasons that motivate behaviors and the associated job and individual outcomes. To this end, SDT offers two main classifications of motivation that correspond to the quality of the efforts expended at task: autonomous and controlled motivation. For the first, it brings together the reasons linked to the inherent pleasure and satisfaction of carrying out a task (intrinsic motivation), as well as those that allow the achievement of goals considered important since they are in harmony with one's personal values (identified regulation). For the second, controlled motivation reflects the efforts that are invested to either obey and conform to internal pressures (introjected regulation), such as avoiding feelings of guilt, or to respond to external pressures (external regulation), such as dodging punishment or obtaining rewards of a material or social nature. However, and despite various job constraints (e.g., regulatory actions and operations), nurses are liable to perform extra-role behaviors if they are autonomously motivated at work. This is likely to occur when they receive proper support and feedback, feel ownership of their work, and understand the meaning of their tasks (Deci et al. 2017).

SDT-based research points to the importance of employee autonomous motivation in relation with attitudinal, affective, and behavioral outcomes (Gagné and Deci 2005; for a recent meta-analysis, see Van den Broeck et al. 2021). In the nursing context, autonomous motivation has been positively related to organizational and occupational commitment (Fernet et al. 2017, 2021) and in-role performance (Fernet et al. 2015), but negatively to emotional exhaustion (Fernet et al. 2020b), turnover intentions, and sickness absence (Austin et al. 2020). Despite their interest, these studies were based on self-report measures of job performance (increasing the possibility of self-evaluation bias) and did not directly address extra-role performance and its potential predictors.

#### 1.2.1. The Mediating Role of Autonomous Motivation

According to SDT, employee motivation largely depends on various "aspects of the social environment, including both aspects of the job and the work climate" (Gagné and Deci 2005; Sandrin et al. 2021). Aside from autonomy support, as proposed by SDT, studies have investigated different job resources (e.g., decision latitude, recognition, and social support) that may facilitate or hinder employee motivation (Olafsen and Deci 2020). This

is in line with the motivational process assumption of the job demands–resources model (JD-R model), which proposes that adequate job resources foster employee motivation and desirable outcomes, including in-role and extra-role performance (Bakker et al. 2004). In this framework, job resources are defined as the psychosocial, physical, and organizational aspects that support employees in their actions and health. For example, social support, as an emotional resource, helps employees accomplish their tasks while contributing to their well-being (Bakker and Demerouti 2017).

Recent studies (Fernet et al. 2015, 2020b) have indicated that job resources (e.g., emotional, cognitive, and physical) are positively associated with nurses' autonomous motivation. Of particular interest, a study by Fernet et al. (2015) found that job resources predict in-role performance through autonomous motivation. However, some studies have also showed that job demands and burnout (an affective strain reaction mainly characterized by exhaustion and cynicism (Schaufeli and Bakker 2004)) are involved in the motivational process (e.g., Bakker et al. 2004). Similar to a lack of job resources, too many job demands or a state of burnout can be unfavorable to employee performance because it would prevent them from the necessary mental and physical energy to engage in discretionary actions. The depletion of emotional resources—which is relevant for nurses because of the high emotional demands associated with their job—would be especially important for discretionary, self-initiated actions. On the basis of these theoretical and empirical considerations, we propose the following hypothesis:

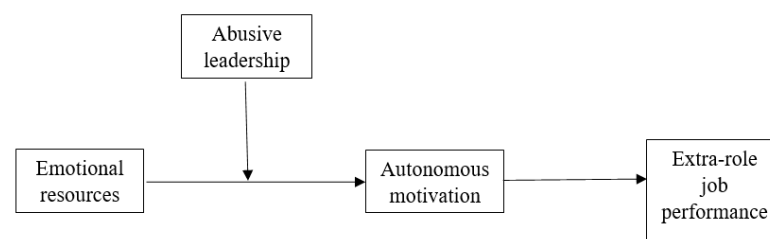
**Hypothesis 1 (H1).** *Controlling for job emotional demands and burnout, emotional resources will be positively related to extra-role performance through autonomous motivation.*

#### 1.2.2. The Moderating Role of Abusive Leadership

Tepper (2000) defines abusive leadership as sustained forms of hostility perpetrated against subordinates (e.g., nasty or demeaning comments, loud outbursts). Krasikova et al. (2013) describe that such behavior can take various forms that go against the values of the organization. Examples are the use of negative communication to intimidate, criticize, or to get the subordinate to comply or adhere to a specific course of action. In the workplace, perceptions of abusive leadership have been negatively associated with in-role performance, including formal and supervisory ratings (Moin et al. 2020), organizational citizenship behaviors (Kim et al. 2020), as well as a quality of patient care (Lavoie-Tremblay et al. 2016). In answer to abusive leadership, individuals tend to voluntarily engage in inappropriate or even deviant behaviors, including sabotage, lateness, theft, shirking, and working slower than usual (Tepper et al. 2017). Accordingly, they should be less keen to perform extra-role behaviors.

From a motivational standpoint, abusive behaviors would inhibit employees' extra-role behaviors insofar as they conflict with a sense of self-determination. In other words, employees are less inclined to invest their cognitive, emotional, and physical energy into their performance in the face of organizational hurdles, such as a mismatch between organizational expectations and personal values (Kahn 1990). This rationale suggests that the mediating role of autonomous motivation in the relation between emotional resources and extra-role performance may depend on the supervisor's leadership behavior. To our knowledge, only one empirical study has examined the potentially moderating role of abusive leadership on extra-role performance. Jha (2019) found that telecom employees' psychological empowerment (which is prototypically autonomous motivation) mediated the relation between psychological safety and intentions to stay with the organization, such that the indirect relation was stronger when abusive leadership was low. Expanding on this proposal and based on the aforementioned theoretical background, the following hypothesis is proposed:

**Hypothesis 2 (H2).** *Controlling for job emotional demands and burnout, abusive leadership will moderate the indirect relation of emotional resources and extra-role performance through autonomous motivation, such that the mediated relation will be stronger when abusive leadership is low. See Figure 1. Hypothetical model.*



**Figure 1.** Hypothetical model. Note. See Table 3 for the indirect effects of emotional resources on extra-role job performance via autonomous motivation (Hypothesis 1). See Figure 2 and Table 3 for the moderated mediation effect of abusive leadership on the relationship between emotional resources and extra-role job performance.

## 2. Methods

### 2.1. Procedure and Participants

Data were collected from dyads of registered French-Canadian nurses and their immediate supervisor after ethics approval from the University of Quebec in Trois-Rivières ethical committee (CER-10-159-06.20) and participants' informed consent was obtained. All participants were members of the Professional Association of Nurses of Quebec. After having read an invitation letter describing the objective of the study, they completed an informed consent form and an electronic questionnaire which asked them to provide the contact details of their immediate supervisor. Supervisors were then invited to complete an electronic questionnaire within a two-week period. Of the 541 nurse participants, 116 supervisors completed the questionnaire, for a response rate of 21%. We used listwise deletion to obtain a full dataset of nurses and supervisors of the same dyad who had both fully answered to the questionnaire ( $n = 99$  dyads; the nurse and her/his supervisor). Most of the nurses were women ( $n = 92, 92.93\%$ ) with an average age of 27.19 years ( $SD = 7.01$ ), as for the immediate supervisor ( $n = 77, 77.78\%$ ), but with an average age of 44.09 years ( $SD = 9.53$ ). Most nurses worked in a non-ICU unit (81.97%) and held a permanent position (81.03%).

### 2.2. Measures

All of the instruments used in the present study are already available in the public domain, and no authorization was required for the utilization of any of these measures for research purposes. All measures were administrated in French and selected based on previous studies supporting their validity and reliability (Bocéréan et al. 2019; Fan et al. 2020; Fernet et al. 2020a; Nasr et al. 2009). The means, standard deviations, and correlation coefficients of these measures are presented in Table 1.

**Table 1.** Descriptive and correlational statistics.

	M	SD	1.	2.	3.	4.	5.	6.	7.	8.	9.
1. Extra-role performance	5.66	0.77	–								
2. Abusive leadership	1.35	0.45	−0.34 **	–							
3. Emotional demands	4.37	1.29	−0.06	0.34 **	–						
4. Emotional resources	5.28	1.13	0.25 *	−0.44 **	−0.35 **	–					
5. Supervisor Emotional exh	1.91	1.23	−0.07	−0.05	0.03	0.07	–				
6. Supervisor cynicism	0.91	0.96	−0.10	−0.04	−0.05	0.07	0.79 **	–			
7. Aut motivation	5.57	0.97	0.37 **	−0.25 *	−0.27 **	0.33 **	−0.05	0.09	–		
8. Employee Emotional exh	2.61	1.44	−0.17	0.32 **	0.58 **	−0.34 **	−0.02	−0.09	−0.38 **	–	
9. Employee cynicism	1.39	1.35	−0.18	0.45 **	0.46 **	−0.50 **	0.02	−0.09	−0.62 **	0.65 **	–

Note A: \*  $p \leq 0.05$  and \*\*  $p \leq 0.01$ ; exh = exhaustion; aut = autonomous.

#### 2.2.1. Abusive Leadership

Abusive leadership was measured with the 15-item scale developed by Tepper (2000). A sample item is: “My immediate supervisor blames me to save himself/herself embarrassment” ( $\alpha = 0.86$ ). Each item was rated on a five-point scale from 1 (never) to 5 (almost always).

### 2.2.2. Extra-Role Performance

Supervisor-rated nurses' extra-role performance was measured with an eight-item scale adapted from [Williams and Anderson \(1991\)](#) (French by [Nasr et al. 2009](#)) (e.g., "This nurse goes out of way to help new employees";  $\alpha = 0.72$ ). Each item was rated on a seven-point scale from 1 (do not agree at all) to 7 (very strongly agree).

### 2.2.3. Job Emotional Resources

A four-item scale adapted from the DISC 2.0 questionnaire ([Van de Ven et al. 2008](#)) was used to assess nurses' emotional resources. A sample item is: "I get emotional support from others (e.g., patients, colleagues, supervisors) when a tough situation occurs at work";  $\alpha = 0.84$ . Each item was rated on a five-point scale from 0 (never) to 6 (almost always).

### 2.2.4. Job Emotional Demands

A four-item scale adapted from the DISC 2.0 questionnaire ([Van de Ven et al. 2008](#)) was used to assess nurses' emotional demands. A sample item is: "I have to do a lot of emotionally draining work";  $\alpha = 0.79$ . Each item was rated on a five-point scale from 0 (never) to 6 (almost always).

### 2.2.5. Burnout

Nurses' and supervisors' emotional exhaustion and cynicism were assessed with the Maslach burnout inventory-general survey (MBI-GS) ([Schaufeli et al. 1996](#)). Each dimension contains five items, such as "I feel emotionally drained from my work" (emotional exhaustion;  $\alpha = 0.94$  for nurses and  $\alpha = 0.93$  for supervisors) and "I doubt the significance of my work" (cynicism;  $\alpha = 0.92$  for nurses and  $\alpha = 0.86$  for supervisors). Each item was rated on a seven-point scale from 0 (never) to 6 (daily).

### 2.2.6. Autonomous Motivation

Nurses' autonomous motivation was assessed using two dimensions of the multi-dimensional work motivation scale initially developed in French ([Gagné et al. 2015](#)): identified regulation (3 items, e.g., "because putting efforts in this job aligns with my personal values") and intrinsic motivation (3 items, e.g., "because I have fun doing my job"). Nurses rated their key reasons for investing in their job on a seven-point scale from 1 (not at all for this reason) to 7 (exactly for this reason). The Cronbach's alpha was calculated with the mean subscale scores ( $\alpha = 0.88$ ).

### 2.2.7. Control Variables

We took supervisors' burnout (emotional exhaustion and cynicism) as control variables because it has been suggested or showed to account for variance in job attitudes and behaviors, such as motivation and performance. In line with past studies on job performance ([Parent-Lamarche et al. 2020, 2021](#)), we also adjusted the tested models for nurses' and supervisors' sex and age as well as nurses' work schedule.

## 2.3. Data Analysis

The proposed model was tested following the approach developed by [Preacher et al. \(2007\)](#). The moderated mediation effect corresponds to conditional indirect effects, meaning that the mediation effect is conditioned by the values of at least one moderator ([Preacher et al. 2007](#)). Our model explores whether abusive leadership moderates the indirect effect of emotional resources on extra-role performance through autonomous motivation. Our analyses involved several steps. First, we tested a model including the predictors (emotional resources, abusive leadership) and the control variables (nurses' job demands and emotional exhaustion and cynicism) to estimate the main and interaction effect on nurses' autonomous motivation and extra-role performance. Second, we looked at the significant variables for autonomous motivation that were indirectly (but significantly) related to extra-role performance via autonomous motivation. In the final step, we verified whether abusive

leadership moderates the indirect relation between emotional resources and extra-role performance through autonomous motivation.

Path analysis was performed using Mplus (Muthén et al. 2017) with robust maximum likelihood estimator (MLR) to estimate all models. The goodness of fit was evaluated using the Tucker–Lewis index (TLI) and comparative fit index (CFI). Values over 0.90 and 0.95 are considered to be indicative of a satisfactory and excellent fit, respectively (Hoyle 1995). A two-tailed probability ( $p \leq 0.05$ ) for rejection of the null hypothesis was used to evaluate the significance of the combined contribution of the variables and each individual regression coefficient.

### 3. Results

#### 3.1. Descriptive Analysis

The descriptive statistics and correlations of the measured variables are presented in Table 1.

#### 3.2. Multiple Regression Analyses

The main and interaction effects on autonomous motivation and extra-role performance are presented in Table 2.

**Table 2.** Main effects on autonomous motivation and objective job performance.

Independent Variables	Autonomous Motivation	Extra-Role Performance
Constant	0.911	4.404 **
<b>AUTONOMOUS MOTIVATION</b>		
Autonomous motivation		0.358 **
<b>LEADERSHIP</b>		
Abusive leadership	−0.083	−0.626 **
<b>JOB CHARACTERISTICS</b>		
Emotional resources	0.027	0.094
<b>NURSE BURNOUT</b>		
Nurse emotional exh	−0.028	−0.011
Nurse cynicism	−0.435 **	0.088
<b>INTERACTION EFFECTS</b>		
Emotional resources–abusive leadership	−0.470 **	−0.069
<b>ADJUSTMENTS</b>		
CFI	1.00	1.00
TLI	1.00	1.00
$\chi^2$ (df)	123.743 (27) **	123.743 (27) **

Note A: \*\*  $p \leq 0.01$ ; exh = exhaustion; aut = autonomous. Note B: the following variables were controlled for in all models: nurse sex, nurse age, supervisor sex, supervisor age, supervisor emotional exhaustion, supervisor cynicism, nurse job demands, and nurse work schedule (unstandardized coefficients).

Controlling for supervisors' emotional exhaustion and cynicism and adjusting the model for nurses' age, sex, and work schedule as well as supervisor' age and sex, the results show that nurses' extra-role performance is positively related to autonomous motivation (0.358 \*\*) and negatively related to abusive leadership (−0.626 \*\*). Nurses' cynicism is also negatively related to autonomous motivation (−0.435 \*\*). As presented in Table 3, only nurses' cynicism (and not emotional resources) is indirectly related to extra-role performance through autonomous motivation (−0.158 \*\*). These results did not support Hypothesis 1.

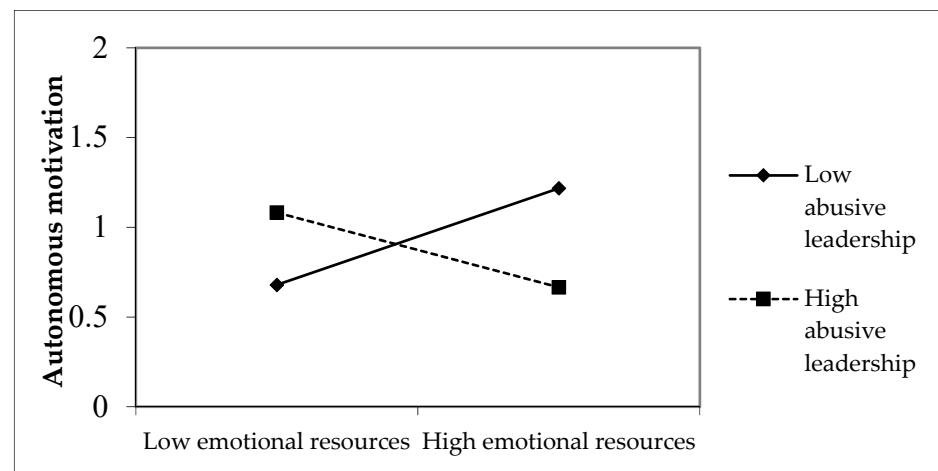
**Table 3.** Indirect effects on objective job performance.

Independent variables	Estimate	SE
<b>LEADERSHIP</b>		
Abusive leadership	−0.030	0.063
<b>JOB CHARACTERISTICS</b>		
Emotional resources	0.010	0.025
<b>NURSE BURNOUT</b>		
Nurse emotional exh	−0.010	0.025
Nurse cynicism	−0.158 **	0.049
<b>MODERATED MEDIATION</b>		
Emotional resources–abusive leadership interaction	−0.170 *	0.084

Note A: \*  $p \leq 0.05$  and \*\*  $p \leq 0.01$ ; exh = exhaustion; aut = autonomous. Note B: the following variables were controlled for in all models: nurse sex, nurse age, supervisor sex, supervisor age, supervisor emotional exhaustion, supervisor cynicism, nurse emotional demands, and nurse work schedule (unstandardized coefficients).

### 3.3. Moderated Mediation Analyses

The significant interaction between abusive leadership and emotional resources (−0.470 \*\*) (see Table 2) indicates that the indirect relation of emotional resources on extra-role performance through autonomous motivation is moderated by abusive leadership (−0.170 \*) (see Table 3). These results are consistent with Hypothesis 2. Figure 2 shows the indirect relation at low and high levels of abusive leadership. This indicates that the conditional indirect effect of autonomous motivation is stronger and significant when abusive leadership is low, but weaker and significant when abusive leadership is high.



**Figure 2.** Interaction effect of emotional resources and abusive leadership on nurse autonomous motivation.

## 4. Discussion

In the aim of enriching our understanding of when abusive leadership undermines extra-role performance in nurses, we proposed and tested a moderated mediation model. One noteworthy finding is that abusive leadership qualifies the conditions under which emotional resources facilitate autonomous motivation and contribute to extra-role performance. Although unexpected, we also found that nurses' cynicism is negatively associated with extra-role performance through autonomous motivation. These results have valuable theoretical and managerial implications.

### 4.1. Theoretical Contributions

Our results highlight the need to rethink and expand our knowledge on the motivational significance of abusive leadership behaviors. While corroborating studies showing that abusive leadership can directly influence in-role (Tariq and Ding 2018) and extra-role

(Huang et al. 2019) employee performance, our results emphasize the relevance of paying particular attention to the abusive leadership's moderating role. By exhibiting abusive behaviors, immediate supervisors are likely to interfere with the motivational process underlying nurses' discretionary behaviors, as their emotional resources have been shown to foster autonomous motivation and facilitate their extra-role performance. Focusing on work performance, these results contribute to those of Jha (2019), who showed a similar moderated mediation mechanism to explain employee attitudes (e.g., intention to stay with an organization).

Our study also contributes evidence in favor of the JD-R model. Although this model explains leadership behaviors as resources for achieving objectives, our results indicate that they should not be considered "simple" resources (Nielsen et al. 2017), but taken in tandem with other resources given their synergistic interaction with emotional resources in the present study. Interestingly, our results reveal that emotional resources are favorable for extra-role performance because they promote nurses' autonomous motivation, where they value their tasks and enjoy carrying them out. However, these same emotional resources may not be fully beneficial, or even harmful, to their autonomous motivation and discretionary behavior in contexts of high abusive supervision. Consistent with SDT (Deci et al. 2017), basic psychological needs (e.g., competence, autonomy, and relatedness) should be largely suppressed in situations of abusive leadership, which would lead nurses to alternative behaviors, often defensive or self-protective, such as the development of introjected or external regulations. These behaviors prevent them from experiencing a full sense of volition and choice in their actions (Deci et al. 2017). In this sense, emotional resources normally conducive to work (e.g., being able to express emotions, being listened to in a challenging situation) could arouse negative feelings, such as guilt, shame, or anxiety in environments of abusive supervision, thus worsening their sense of self-determination. These findings invite additional research on the characteristics of cognitive, emotional, and physical job resources, as they may differentially impact employee motivation and behavior in contexts of abusive supervision. Resources at other levels of the organization such as the psychological safety climate or HRM practices should then be considered.

Finally, the current results contribute to the importance of SDT in the workplace (Deci et al. 2017). Although this perspective highlights the relevance of the interpersonal aspect of the work environment, such as the effect of the immediate supervisor's interpersonal style and leadership practices on employee motivation (Fernet et al. 2015), our study brings new insights into the complex mechanisms that can explain this relation. To our knowledge, this is the first study assessing supervisor-rated extra-role performance. Moreover, our unexpected finding that cynicism plays a role in motivation and extra-role performance reveals the importance of considering employees' psychological state to explain job outcomes (Bakker and Demerouti 2017). A cynical job attitude of withdrawal and detachment would not offer the motivation necessary to drive their discretionary behaviors.

#### *4.2. Limitations and Future Directions*

This study contains limitations that pave the way to future research directions. First, self-report measures were used for most of the variables, except for extra-role performance. Such measures can increase the risk of social desirability and biased responses. Second, similar to prior studies (Tariq and Ding 2018), the abusive leadership of the immediate supervisor was assessed only in terms of the frequency of the perceived behaviors. It is possible that frequency and intensity do not have the same impact on employee functioning. As mentioned by Tariq and Ding (2018), some workers may react more quickly to silent treatment, while others may react to an explosive incident of verbal abuse. Thus, the effect of the intensity of abusive relationship should be considered in future studies. Third, the cross-sectional results refrain from drawing conclusions about the directionality of associations, so we cannot rule out the possibility of inverse or reciprocal relations between the study variables. For example, it is conceivable that nurses with less autonomous motivation perceive their work environment more negatively and present higher burnout scores. It is



also possible that lower performance diminishes autonomous motivation. Future research should therefore examine these relations using a longitudinal or experimental design. Fourth, although the study was based on established theories, other motivational (e.g., self-efficacy) and job characteristics (e.g., relational job design) could intervene in the proposed moderated mediation process. One research direction is to consider the full gamut of coping strategies when nurses are under supervision abuse, contrast different theoretical and conceptual approaches by concurrently modeling multiple mechanisms, and account for a wider portfolio in studies of abusive leadership (Tepper et al. 2017). In addition, studies could look at vulnerability to emotional intelligence, emotional contagion, core self-evaluation, and integrative emotion regulation. Finally, the sample was restricted to nurses and supervisors in the province of Québec. Our results should be replicated in other Canadian provinces, countries, and in employees of other occupations and industries to increase the generalization of the results. This would extend our conclusions and precede the design of interventions for a wide range of cultures.

#### 4.3. Practical Implications

In spite of these limitations, our study highlights the need for targeting leadership in implementations of policies, interventions, and programs for the promotion of occupational health (Franke et al. 2014). The promotion of effective nursing leadership practices is necessary to facilitate extra-role performance. Therefore, it is considered important for healthcare establishments to focus on leadership in conjunction with emotional resources to provide a workplace conducive to autonomous motivation and extra-role performance. Our results suggest that supervisors can influence nurses' emotional resources, which are related to their motivation and extra-role performance. In other words, abusive leadership hinders nurses from developing autonomous motivation from emotional resources. The JD-R model has great potential in this regard, particularly for identifying the job resources needed (e.g., supervisor and coworker support) for nurses' optimal motivation, functioning, and well-being (e.g., Van der Heijden et al. 2019). Several studies indicate that nurses are more likely to be satisfied with their work, committed to their occupation, and psychologically empowered when job resources (such as task autonomy) are available (Giles et al. 2017). It should be mentioned that work satisfaction was the highest factor associated with nursing quality care in a recent study (Koy et al. 2020). Organizational support, including compensation payments and recognition from supervisors, may also help to improve nurses' motivation and adaptive attitudes (Lee and Kang 2020). To this end, healthcare leaders could promote a culture of support by encouraging equity in the application of policies and relying on shared leadership (Pursio et al. 2021).

Among the possible means to facilitate such organizational efforts, leadership training programs could be developed and implemented to ensure that abusive leadership styles be gradually modified into a more adaptive style, such as that of transformational leadership (Barling et al. 1996). Leadership training may involve group discussions, role-playing, and one-on-one discussion sessions with immediate supervisors to develop goal- and action-oriented plans (Barling et al. 1996). Future intervention efforts along these lines are encouraged, as they offer promising avenues to foster nurses' autonomous motivation and performance.

## 5. Conclusions

This study demonstrates that abusive leadership qualifies the conditions under which job emotional resources facilitate autonomous motivation and contribute to extra-role performance. In the context of nursing staff shortages, it may be particularly useful to promote effective leadership practices along with sufficient emotional resources in order to support nurses who have the autonomous motivation to go the extra mile.

**Author Contributions:** A.P.-L. and C.F. designed the study. C.F. collected the data. A.P.-L. analyzed and interpreted the data. A.P.-L., C.F. and S.A. wrote the manuscript. All authors have read and agreed to the published version of the manuscript.

**Funding:** This work was supported by the financial support of the UQTR Research Chair on Motivation and Occupational Health and a grant from the Fonds de Recherche du Québec–Société et Culture (2019-SE1-252542) to the second author.

**Institutional Review Board Statement:** The study was conducted according to the guidelines of the Declaration of Helsinki and approved by the Institutional Review Board of the Université du Québec à Trois-Rivières (protocol code: CER-10-159-06.20; date of approval: 8 November 2012).

**Informed Consent Statement:** Informed consent was obtained from all subjects involved in the study.

**Data Availability Statement:** The data are not publicly available in order to respect the privacy of research participants.

**Acknowledgments:** We acknowledge the valuable assistance of Mélissa Lavoie during data collection.

**Conflicts of Interest:** The authors declare no conflict of interest.

## References

- Austin, Stéphanie, Claude Fernet, Sarah-Geneviève Trépanier, and Mélanie Lavoie-Tremblay. 2020. Fatigue in new registered nurses: A 12-month cross-lagged analysis of its association with work motivation, engagement, sickness absence and turnover intention. *Journal of Nursing Management* 28: 606–14. [CrossRef] [PubMed]
- Bakker, Arnold B., and Evangelia Demerouti. 2017. Job demands–resources theory: Taking stock and looking forward. *Journal of Occupational Health Psychology* 22: 273. [CrossRef] [PubMed]
- Bakker, Arnold B., Evangelia Demerouti, and Willem Verbeke. 2004. Using the job demands–resources model to predict burnout and performance. *Human Resource Management: Published in Cooperation with the School of Business Administration, The University of Michigan and in Alliance with the Society of Human Resources Management* 43: 83–104. [CrossRef]
- Barling, Julian, Tom Weber, and E. Kevin Kelloway. 1996. Effects of transformational leadership training on attitudinal and financial outcomes: A field experiment. *Journal of Applied Psychology* 81: 827–32. [CrossRef]
- Baumeister, Roy F., Ellen Bratslavsky, Catrin Finkenauer, and Kathleen D. Vohs. 2001. Bad is stronger than good. *Review of General Psychology* 5: 323–70. [CrossRef]
- Bocéréan, Christine, Emilie Dupret, and Martine Feltrin. 2019. Maslach Burnout Inventory-General Survey: French Validation in a Representative Sample of Employees. Available online: <https://hal.archives-ouvertes.fr/hal-02480484/> (accessed on 26 April 2021).
- Deci, Edward L., and Richard M. Ryan. 2000. The “what” and “why” of goal pursuits: Human needs and the self-determination of behavior. *Psychological Inquiry* 11: 227–68. [CrossRef]
- Deci, Edward L., Anja H. Olafsen, and Richard M. Ryan. 2017. Self-determination theory in work organizations: The state of a science. *Annual Review of Organizational Psychology and Organizational Behavior* 4: 19–43. [CrossRef]
- Estes, Brad C. 2013. Abusive Supervision and Nursing Performance. *Nursing Forum* 48: 3–16. [CrossRef]
- Fan, Xue-Ling, Qi-Qi Wang, Jun Liu, Chao Liu, and Tao Cai. 2020. Why do supervisors abuse subordinates? Effects of team performance, regulatory focus, and emotional exhaustion. *Journal of Occupational and Organizational Psychology* 93: 605–28. [CrossRef]
- Fernet, Claude, Sarah-Geneviève Trépanier, Stéphanie Austin, Marylène Gagné, and Jacques Forest. 2015. Transformational leadership and optimal functioning at work: On the mediating role of employees’ perceived job characteristics and motivation. *Work & Stress* 29: 11–31.
- Fernet, Claude, Sarah-Geneviève Trépanier, Mireille Demers, and Stéphanie Austin. 2017. Motivational pathways of occupational and organizational turnover intention among newly registered nurses in Canada. *Nursing Outlook* 65: 444–54. [CrossRef] [PubMed]
- Fernet, Claude, Alexandre J. S. Morin, Stéphanie Austin, Marylène Gagné, David Litalien, Mélanie Lavoie-Tremblay, and Jacques Forest. 2020a. Self-determination trajectories at work: A growth mixture analysis. *Journal of Vocational Behavior* 121: 103473. [CrossRef]
- Fernet, Claude, David Litalien, Alexandre J. S. Morin, Stéphanie Austin, Marylène Gagné, Mélanie Lavoie-Tremblay, and Jacques Forest. 2020b. On the temporal stability of self-determined work motivation profiles: A latent transition analysis. *European Journal of Work and Organizational Psychology* 29: 49–63. [CrossRef]
- Fernet, Claude, Nicolas Gillet, Stéphanie Austin, Sarah-Geneviève Trépanier, and Sophie Drouin-Rousseau. 2021. Predicting nurses’ occupational commitment and turnover intention: The role of autonomous motivation and supervisor and coworker behaviors. *Journal of Nursing Management* 29: 2611–19. [CrossRef]
- Franke, Franziska, Jörg Felfe, and Alexander Pundt. 2014. The impact of health-oriented leadership on follower health: Development and test of a new instrument measuring health-promoting leadership. *German Journal of Human Resource Management* 28: 139–61. [CrossRef]
- Gagné, Marylène, and Edward L. Deci. 2005. Self-determination theory and work motivation. *Journal of Organizational Behavior* 26: 331–62. [CrossRef]
- Gagné, Marylène, Jacques Forest, Maarten Vansteenkiste, Laurence Crevier-Braud, Anja Van den Broeck, Ann Kristin Aspeli, Jenny Bellerose, Charles Benabou, Emanuela Chemolli, and Stefan Tomas Güntert. 2015. The Multidimensional Work Motivation Scale: Validation evidence in seven languages and nine countries. *European Journal of Work and Organizational Psychology* 24: 178–96. [CrossRef]

- Giles, Michelle, Vicki Parker, Rebecca Mitchell, and Jane Conway. 2017. How do nurse consultant job characteristics impact on job satisfaction? An Australian quantitative study. *BMC Nursing* 16: 1–10. [\[CrossRef\]](#)
- Hoyle, Rick H. 1995. *Structural Equation Modeling: Concepts, Issues, and Applications*. Newbury Park: Sage Publications.
- Huang, Liang-Chih, Cheng-Chen Lin, and Szu-Chi Lu. 2020. The relationship between abusive supervision and employee's reaction: The job demands-resources model perspective. *Personnel Review* 49: 2035–54. [\[CrossRef\]](#)
- Huang, Liang-Chih, Chun-Hui Su, Cheng-Chen Lin, and Szu-Chi Lu. 2019. The influence of abusive supervision on employees' motivation and extra-role behaviors. *Chinese Management Studies* 13: 514–30. [\[CrossRef\]](#)
- Jha, Sumi. 2019. Determinants of employee retention: A moderated mediation model of abusive leadership and psychological empowerment. *Industrial and Commercial Training* 51: 373–86. [\[CrossRef\]](#)
- Kahn, William A. 1990. Psychological conditions of personal engagement and disengagement at work. *Academy of Management Journal* 33: 692–724.
- Kim, Hyosun, Yunlu Chen, and Hyewon Kong. 2020. Abusive supervision and organizational citizenship behavior: The mediating role of networking behavior. *Sustainability* 12: 288. [\[CrossRef\]](#)
- Koy, Virya, Jintana Yunibhand, Yupin Angsuroch, Sue Turale, and Suwimon Rojnawee. 2020. Registered nurses' perceptions of factors influencing nursing care quality: A structural equation modeling study. *Nursing & Health Sciences* 22: 91–98.
- Krasikova, Dina V., Stephen G. Green, and James M. LeBreton. 2013. Destructive leadership: A theoretical review, integration, and future research agenda. *Journal of Management* 39: 1308–38. [\[CrossRef\]](#)
- Lavoie-Tremblay, Mélanie, Claude Fernet, Geneviève L. Lavigne, and Stéphanie Austin. 2016. Transformational and abusive leadership practices: Impacts on novice nurses, quality of care and intention to leave. *Journal of Advanced Nursing* 72: 582–92. [\[CrossRef\]](#)
- Lee, Jiyeon, and Sook Jung Kang. 2020. Factors influencing nurses' intention to care for patients with emerging infectious diseases: Application of the theory of planned behavior. *Nursing & Health Sciences* 22: 82–90.
- Lyu, Dongmei, Lingling Ji, Qiulan Zheng, Bo Yu, and Yuying Fan. 2019. Abusive supervision and turnover intention: Mediating effects of psychological empowerment of nurses. *International Journal of Nursing Sciences* 6: 198–203. [\[CrossRef\]](#)
- Moin, Muhammad Farrukh, Feng Wei, and Qingxiong Weng. 2020. Abusive supervision, emotion regulation, and performance. *International Journal of Selection and Assessment* 28: 498–509. [\[CrossRef\]](#)
- Muthén, Bengt O., Linda K. Muthén, and Tihomir Asparouhov. 2017. *Regression and Mediation Analysis Using Mplus*. Los Angeles: Muthén & Muthén.
- Nasr, Mohamed Ikram, Assâad El Akremi, and Christian Vandenberghe. 2009. Justice organisationnelle, confiance et comportements de citoyenneté: Test d'un modèle multi-sources multi-cibles de l'échange social au travail. *Revue de Gestion des Ressources Humaines* 4: 3–23. [\[CrossRef\]](#)
- Nielsen, Karina, Morten B. Nielsen, Chidiebere Ogbonnaya, Marja Käsälä, Eveliina Saari, and Kerstin Isaksson. 2017. Workplace resources to improve both employee well-being and performance: A systematic review and meta-analysis. *Work & Stress* 31: 101–20.
- Olafsen, Anja H., and Edward L. Deci. 2020. Self-determination theory and its relation to organizations. In *Oxford Research Encyclopedia of Psychology*. Oxford: Oxford University Press.
- Organ, Dennis W. 1988. *Organizational Citizenship Behavior: The Good Soldier Syndrome*. Lexington: Lexington books/DC health and com.
- Parent-Lamarche, Annick, Alain Marchand, and Sabine Saade. 2020. Does Depression Mediate the Effect of Work Organization Conditions on Job Performance? *Journal of Occupational and Environmental Medicine* 62: 296–302. [\[CrossRef\]](#) [\[PubMed\]](#)
- Parent-Lamarche, Annick, Alain Marchand, and Sabine Saade. 2021. How do work organization conditions affect job performance? The mediating role of workers' well-being. *Journal of Workplace Behavioral Health* 36: 48–76. [\[CrossRef\]](#)
- Preacher, Kristopher J., Derek D. Rucker, and Andrew F. Hayes. 2007. Addressing moderated mediation hypotheses: Theory, methods, and prescriptions. *Multivariate Behavioral Research* 42: 185–227. [\[CrossRef\]](#)
- Pursio, Katja, Päivi Kankkunen, Ericka Sanner-Stiehr, and Tarja Kvist. 2021. Professional autonomy in nursing: An integrative review. *Journal of Nursing Management* 29: 1565–77. [\[CrossRef\]](#) [\[PubMed\]](#)
- Sandrin, Emilie, Alexandre J. S. Morin, Claude Fernet, Tiphaine Huyghebaert-Zouaghi, Morgane Suarez, Franck Duarte, and Nicolas Gillet. 2021. Nature, predictor, and outcomes of motivation trajectories during a professional training program. *European Journal of Work and Organizational Psychology* 31: 1–19. [\[CrossRef\]](#)
- Schat, Aaron C. H., Michael R. Frone, and E. Kevin Kelloway. 2006. Prevalence of Workplace Aggression in the US Workforce: Findings From a National Study. In *Handbook of Workplace Violence*. Thousand Oaks: Sage Publications.
- Schaufeli, Wilmar B., Michael P. Leiter, Christina Maslach, and Susan E. Jackson. 1996. *MBI-General Survey*. Palo Alto: Consulting Psychologists Press.
- Schaufeli, Wilmar B., and Arnold B. Bakker. 2004. Job demands, job resources, and their relationship with burnout and engagement: A multi-sample study. *Journal of Organizational Behavior: The International Journal of Industrial, Occupational and Organizational Psychology and Behavior* 25: 293–315. [\[CrossRef\]](#)
- Tao, Jun, Wanxing Jiang, Chang Liu, Xin Yang, Weiguo Zhang, and Haomin Zhang. 2017. New employee intention to leave and consequent work performance: Does leadership style matter? *Social Behavior and Personality: An International Journal* 45: 1707–21. [\[CrossRef\]](#)
- Tariq, Hussain, and Donghong Ding. 2018. Why am I still doing this job? The examination of family motivation on employees' work behaviors under abusive supervision. *Personnel Review* 47: 378–402. [\[CrossRef\]](#)

- Tepper, Bennett J. 2000. Consequences of abusive supervision. *Academy of Management Journal* 43: 178–90.
- Tepper, Bennett J., Lauren Simon, and Hee Man Park. 2017. Abusive supervision. *Annual Review of Organizational Psychology and Organizational Behavior* 4: 123–52. [[CrossRef](#)]
- Van de Ven, Bert, Peter Vlerick, and Jan De Jonge. 2008. *Disq 2.0. The DISC Questionnaire French Version 2.0*. Eindhoven: Eindhoven University of Technology.
- Van den Broeck, Anja, Joshua L. Howard, Yves Van Vaerenbergh, Hannes Leroy, and Marylène Gagné. 2021. Beyond intrinsic and extrinsic motivation: A meta-analysis on self-determination theory's multidimensional conceptualization of work motivation. *Organizational Psychology Review* 11: 240–73. [[CrossRef](#)]
- Van der Heijden, Beatrice, Christine Brown Mahoney, and Yingzi Xu. 2019. Impact of job demands and resources on nurses' burnout and occupational turnover intention towards an age-moderated mediation model for the nursing profession. *International Journal of Environmental Research and Public Health* 16: 2011. [[CrossRef](#)] [[PubMed](#)]
- Williams, Larry J., and Stella E. Anderson. 1991. Job satisfaction and organizational commitment as predictors of organizational citizenship and in-role behaviors. *Journal of Management* 17: 601–17. [[CrossRef](#)]