

DOES “GOOD ACTING REQUIRES A GOOD CAST?” A REPLICATION STUDY OF HOW TEAM DEEP ACTING DISPERSION INFLUENCE INDIVIDUAL OUTCOMES

“¿LA BUENA ACTUACIÓN REQUIERE UN BUEN ELENCO?” UN ESTUDIO DE RÉPLICA DE CÓMO LA DISPERSIÓN DE ACCIÓN PROFUNDA DEL EQUIPO INFLUYE EN LOS RESULTADOS INDIVIDUALES

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Abstract

Previous research shows that emotional labor, or having to display certain emotions in the workplace, has significant implications for employees and their working environments. In this study, we replicate the claim from Becker and Cropanzano (2015) who suggests that the effect of individual deep acting on job performance would be moderated by team-level deep acting dispersion, such that the relationship between deep acting and performance would be positive and stronger in teams with low dispersion. Our replication included 130 participants with complete data, nested in 23 teams, in a high complexity and high demand public hospital in Santiago, Chile.



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We collected data in December-January of 2021. We focused on testing the interaction term alone but we also replicated the entire original model from Becker and Cropanzano (2015). Although the targeted interaction effect was not significant in our study (not replicated effect), it is interesting to note that other hypotheses in Becker and Cropanzano (2015) were indeed replicated. For example, team-level deep acting dispersion was indeed a significant cross-level moderator of the relationship between individual deep acting and emotional exhaustion. We discuss the main results, the replication conditions, and the managerial implications for a Chilean population.

Keywords: Direct Replication, Emotional Labor, Deep Acting, Teams

Resumen

Investigaciones anteriores muestran que el trabajo emocional, o tener que desempeñar ciertas emociones en el espacio laboral, tiene implicancias significativas para los trabajadores y sus ambientes laborales. En este estudio replicamos los hallazgos de Becker y Cropanzano (2015), los cuales sugieren que el efecto de la actuación profunda en el desempeño laboral puede ser moderada por la dispersión a nivel-equipo de la actuación profunda, de tal manera que la relación entre actuación profunda y desempeño será positiva y más fuerte en equipos con una baja dispersión. Nuestro estudio de replicación incluyó las respuestas completas de 130 participantes, agrupados en 23 equipos, provenientes de personal de enfermería de un hospital público de alta demanda en Santiago de Chile. Los datos fueron recolectados entre los meses de Diciembre-Enero del 2021. Si bien nos enfocamos en probar el efecto interacción por sí solo, también replicamos la totalidad del modelo original de Becker y Cropanzano (2015). A pesar de que el principal efecto interacción no fue significativo (no hubo efecto replicado) en nuestro estudio, sí resultó interesante dar cuenta que las otras hipótesis de Becker y Cropanzano (2015) efectivamente fueron replicadas. Por ejemplo, la dispersión a nivel-equipo de la actuación profunda resultó ser un moderador significativo en la relación entre la actuación profunda individual y el cansancio emocional. Discutimos los resultados principales, condiciones y contexto de la replicación, y las implicancias en gestión de personas para la población chilena.

Palabras claves: Replicación Directa, Trabajo Emocional, Actuación Profunda, Equipos de Trabajo.

Acknowledgements

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1. Introduction

The literature on emotional labor has consistently grown since the seminal work of Hochschild (1979), who argued that emotional display is a fundamental act of management. This idea argues that individuals either induce or inhibit emotions so as to render them “appropriate” to different types of organizational circumstances. Today, there is extensive evidence suggesting that organizations attempt to regulate the emotional expression of their employees’ through formal and informal expectations (Diefendorff & Greguras, 2009; Rafaeli, 1989). For example, there are multiple situations where workers are required to show specific types of emotions, from the line workers who interact with customers and are asked to be enthusiastic, positive, and helpful; to the CEOs who have to get approval from the board of directors to execute special projects and need to express confidence, excitement, or serenity. Emotional regulation, thus, has become a paramount area of research in organization studies.

The act of displaying emotions within organizations can have either positive or negative consequences for those performing them. The evidence suggests that having to face these organizational expectations of emotional expression frequently conflicts with felt emotions, thus requiring physical and psychological effort in order to meet such expectations (Cropanzano, Weiss, & Elias, 2003; Diefendorff & Gosserand, 2003; Grandey, 2000). Using a “dramaturgical approach,” researchers have suggested that individuals normally engage in two types of strategies when they need to show specific emotions (Cropanzano et al., 2003; Grandey, 2003), and that these strategies create different effects. On one hand, individuals may use “surface acting” or expression of emotions based on the regulation of body and language, without modifying his/her inner feelings. On the other hand, individuals may use “deep acting,” which is based on an actor’s attempt to modify the inner feelings in order to match them with the required emotional displays. Thus, deep acting has been called “faking in good faith” (Rafaeli & Sutton, 1987). Although both strategies require effort and consume cognitive resources, surface and deep acting generate completely different effects on employees (e.g. Diefendorff & Gosserand, 2003; Grandey, 2000, 2003), with more negative effects correlated to surface acting (e.g., emotional exhaustion).

During the last 10 years, researchers have tried to expand this literature by characterizing the social conditions under which the effects of deep and surface acting hold. In 2015, Becker and Cropanzano (2015) proposed that the effect of individual deep acting on job performance would be moderated by team-level deep acting dispersion, such that the relationship between deep acting and performance would be positive and stronger in teams with low dispersion. This claim is reflected in the following statement from their abstract: “Our findings suggested that team-level deep acting effects can foster benefits for team members (lower emotional exhaustion and higher satisfaction) and organizations (higher job performance).” The main argument from this paper is that when team deep acting dispersion is low there should be a team affective convergence, helping individuals deep act with relatively little effort. In contrast, in teams with a high dispersion of deep acting levels, individuals must exert additional cognitive efforts to maintain an emotional display in the face of inauthentic or inappropriate displays by their teammates. In this situation, deep acting should be much more emotionally exhaustive in contrast to teams with a low dispersion of deep acting.

Although Becker and Cropanzano (2015) found preliminary evidence to support

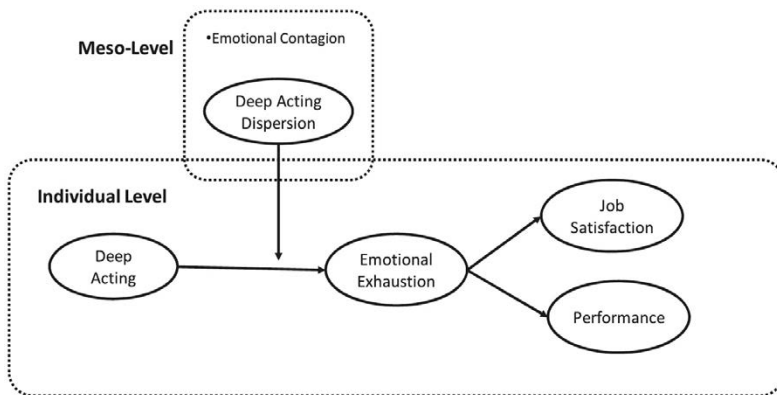
some of their hypotheses, it is still not clear whether their results are replicable in different samples or situations. Replicating this research is important for better understanding emotional regulation at work, as these results have significant theoretical and practical implications. This research suggests that deep acting is not only an individual phenomenon, but it also operates at the team-level such that the convergence of the use of deep acting strategies may be helpful for individual workers.

Replications studies are instrumental to expand credibility of original findings, to test allegedly true claims in different contexts, or to find relevant boundary conditions where results hold (Kausse, 2015; Olavarrieta & Diaz, 2021; Ryan, & Tipu, 2022; Stanley, & Spence, 2014). Although replications have been deemed as less “hot” than original papers, they are a fundamental endeavor of scientific development. Antonakis (2017) suggested that organization science is suffering from “neophilia”, or an excessive appreciation for novelty. Fortunately, recent efforts have started to change that trend, with new journals focusing on replications studies (e.g., *Journal of Management Scientific Reports*), traditional journal now accepting replication studies (e.g., *Organizational Research Methods*), or special issues in local journals, like this one in *Estudios de Administración*. In order to increase the confidence of the scientific report published by Becker and Cropanzano, we conducted a direct replication study following the highest possible research standards.

2. Description of Original Study

The original study of Becker and Cropanzano tested the model depicted in Figure 1. Although in their original publication the authors tested 6 hypotheses (Table 1), we will focus on hypotheses 4b, which suggests that there will be a negative interaction between individuals’ deep acting and their work team’s deep acting dispersion on individuals’ in-role performance. In our view, this is the hypothesis with the highest scientific and practical value, as it suggests that team-level deep acting not only has implications for individuals (effects on emotional exhaustion or job satisfaction) but also implications for organizations (effects on job performance). To fully test this hypothesis, the authors presented both the interaction and simple slopes analysis, both of which supported the hypothesis.

Figure 1. Original Becker and Cropanzano’s (2015) Theoretical Model



Source: Original paper Becker and Cropanzano (2015)

The original study of Becker and Cropanzano considered the participation of nurses’ teams at a hospital in the United States. According to the authors, their sample was a strong setting because: (1) they could classify nurses into teams, (2) teams were interdependent, and (3) nurses needed to be engaged in a job that was emotionally challenging and with clear display rules. Later on, it was analyzed to what extent work teams can mitigate or exacerbate the individual effects generated by having to “act” or display specific emotions in the workplace (e.g. showing tranquility, calmness, security, caring, empathy) in variables such as emotional exhaustion, in-role performance, and job satisfaction.

Table 1. Original Becker and Cropanzano’s (2015) Hypotheses

Hypotheses
<i>Hypothesis 1:</i> In mature teams, some teams will demonstrate greater deep acting convergence than others.
<i>Hypothesis 2:</i> Team-level deep acting dispersion will moderate the effect of individual-level deep acting, such that when dispersion is low, individual deep acting will be negatively related to emotional exhaustion.
<i>Hypothesis 3:</i> Emotional exhaustion will mediate the relationship between deep acting and job satisfaction. This indirect effect will be moderated by deep acting dispersion such that the indirect relationship between deep acting and job satisfaction through exhaustion will be positive and stronger on teams with low deep acting dispersion.
<i>Hypothesis 4a:</i> There will be a positive relationship between individual-level deep acting and job performance.
<i>Hypothesis 4b:</i> The relationship between individual-level deep acting and job performance will be moderated by team-level deep acting dispersion such that the relationship between deep acting and performance will be stronger in teams with low dispersion.
<i>Hypothesis 4c:</i> There will be an indirect effect of deep acting on performance through emotional exhaustion that will be moderated by deep acting dispersion such that the deep acting will be positively related to performance on teams with low deep acting dispersion.

The authors collected data using a cross-sectional design through paper surveys in a two-stage process. First, nurses were surveyed. Participants responded to a series of items through 5-point Likert scales. The questions captured the following variables: deep acting, surface acting, emotional exhaustion, and job satisfaction. Second, supervisors evaluated the job performance of their nurse subordinates in a different survey. Later on, data was matched and analyzed using multi-level modeling (Bryk, Raudenbush & Congdon, 1996; Hoffman, Morgeson, & Gerras, 2003), where level-2 variables (team deep acting dispersion) interacted with level-1 variables (deep acting) to predict level-1 outcomes (emotional exhaustion, job satisfaction, job performance).

3. Description of Replication Study

3.1 Replication Context

In 2019 our research team joined the efforts of the Center for Open Science under

the international SCORE (Systematizing Confidence in Open Research and Evidence) project¹. The development of methods to automate the assessment of credibility of social-behavior is the primary objective of the project. If successful, the project will present evidence of methods to quickly assess the credibility of scientific findings in various fields. This project contemplates various activities, among which is to carry out around 300 replications of scientific studies published between 2009 and 2018 in top academic journals. This project includes multiple researchers from around the world, who will carry out replication studies in a global community scientific effort.

During the first stage of the project, a series of articles were selected for the theme of human behavior research. Our team has been assigned the task of replicating hypothesis 4b in the study from Becker and Cropanzano (2015) entitled “Good acting requires a good cast: A meso-level model of deep acting in work teams” published in the *Journal of Organizational Behavior*. In this context, we had the task of replicating that research in a Chilean context.

Before conducting our replication, we obtained approval from an Institutional Review Board (IRB), or its equivalent, both in Chile and the USA. Later, we pre-registered the study to the Open Science Framework (OSF), where we detailed all our intended procedures. This pre-registration was reviewed by 2 international independent referees and an action editor (Dr. Ernest O’Boyle, Indiana University), who raised questions and made propositions to improve our replication study. The authors of the original paper (Dr. William Becker) also had the chance to respond specific to questions (e.g., what were the specific items from the original scales that were actually used in the analyses?). All these concerns were solved before our data collection process. The preregistration included details of data design, data collection procedures, sample size, use of variables, analysis plan, strategies for data inclusion/exclusion, and missing data treatment plan. Once the action editor approved the replication, we obtained permission from the COS to conduct the study².

4. Data Collection and Procedures

The data collection site was a big, high-complexity hospital serving the west side of the Santiago metropolitan area in Chile, with 600 hundred beds, 17 surgery rooms, and 50,000 square meters. The site is a public health-care provider, serving low and low/mid-class citizens, most of them relying on public health insurance. The hospital is also an educational site for student residents of a major university in Chile. Although this is one of the most respected hospitals in the country, with high-vocation, high-quality professionals, it normally struggles to get enough public resources to provide optimal health care (providing enough medical supplies, professionals, beds, surgery rooms, etc.) in comparison to private hospitals serving more wealthy populations.

This data setting is very similar to the original study in terms of the organizational mission, employee tasks, nurses’ demand for emotional display, and levels of team interdependence. However, our intended replication was conducted in a different country, and with different environmental conditions. In the following section, we describe the main deviations that we identify from the original study and the approved

1 For more information, visit <https://osf.io/preprints/socarxiv/46mnb/>

2 All the materials used in the replication study are publicly available on the following website: https://osf.io/4h6v2/?view_only=f33e86a1c44342c8b2535051fc4173f7

preregistration.

4.1 Deviations from the Original Study and Preregistration

As the replication was conducted in a public hospital in Chile (vs. a hospital in USA in original study), the instruments were applied in Spanish, using previously validated translations obtained from the “Repositorio de Escalas de Medición” website (escalas.unegocios.cl). Specifically, participants answered four questions on the “Deep Acting” scale and two on the “Surface Acting” scale made by Grandey, Dickter and Sin (2004), five questions from the “Oldenburg Burnout Inventory” adapted from Halbesleben and Demerouti (2005), and three questions from the global scale of “Job Satisfaction” (Seashore, Lawler, Mirvis, & Camman, 1982). Supervisors evaluate the “in-role Job Performance” of each of the participants using a five questions scale adapted from Williams and Anderson (1991).

More importantly, our replication was conducted during a worldwide Pandemic. This condition created three important deviations from the original study and from our approved preregistration. First, during the pandemic, the hospital was constantly at full capacity, workers were experiencing high levels of stress, sometimes accompanied with long shifts, and long periods of time separated from their families. They also experienced different types of interactions with the patients and their families/friends (in comparison to pre-pandemic times), as social contact was minimized. During data collection, the hospital was experiencing high levels of medical leaves and turnover among workers. Therefore, it is unknown whether these conditions may have affected the main claim of this replication.

Second, although the original study was conducted using paper and pencil surveys (we also initially designed our data collection based on paper surveys in our preregistration), we had to change the strategy upon request of the hospital administration and involved worker unions. Government protocols aimed at handling COVID-19 also restricted our interaction with employees to an online format.

Third, the initial power study (conducted by the COS team) provided a target of 1,011 nurses nested within 169 teams. At the time of the pre-registration (January/February 2020), the organization had approximately 1,300 nurses and healthcare technicians clustered in 135 teams, which was our initial group of potential participants. The pandemic started in Chile in March 2020, which put our study on hold. During September/October 2020 the conversations to collect data restarted. At that time, only nurses were still interested in participating in the study, but not healthcare technicians (and their unions), which reduced our potential sample to 454 nurses, nested in 44 teams. The data was collected between December 2020 and January 2021. A total of 281 nurses responded the survey, and we obtained performance evaluations for 235 nurses coming from 44 supervisors. We obtained a perfect match for 130 individuals, clustered in 23 teams. This is clearly a limitation for our replication effort as the main effects may be underpowered.

5. Results and Analysis

Description of the replication data and the original study data is summarized in Table 2 through the comparison of means, standard deviations, and correlations. The original sample was composed by older individuals (44.19 vs 33.45 years, $t = 10.90$, $p < .001$) with a lower mean team tenure (3.25 vs 5.38 years, $t = -4.14$, $p < .001$). The analyses of two independent samples t-tests show that deep acting ($t = 3.97$, $p < .001$), surface acting ($t = 6.84$, $p < .001$), and emotional exhaustion ($t = -3.05$, $p < .01$) were significantly different in the two studies. In contrast, job satisfaction ($t = -.51$, *not*

sig.) and performance ($t = -1.51$, *not sig.*) showed equivalent means. In terms of the correlations, it is interesting to note that some of the dependent variables (i.e., emotional exhaustion and job satisfaction) were significantly related to surface acting but not to deep acting in the original data. In contrast, in our replication, the same dependent variables were significantly related to deep acting but not to surface acting.

In line with the original paper, we used hierarchical linear modeling to replicate all the hypothesis testing. All the hypotheses posed multilevel relationships between team-level deep acting dispersion and individual-level variables. Therefore, hierarchical linear modeling (HLM) was an appropriate analytical approach for investigating these relationships (Bryk et al., 1996; Hoffman et al., 2003). All the analyses were conducted in R, using the “nlme” package. Although some researchers have advised to adjust the p-value to .10 when testing cross-level interaction effects (e.g. Mathieu, Aguinis, Culpepper, and Chen, 2012), we used $p = .05$ to be conservative and more stringent, as this is a replication study.

5.1 Results for Main Claim

This replication tests the claim from Becker and Cropanzano (2015) that the effect of individual deep acting on job performance would be moderated by team-level deep acting dispersion such that the relationship between deep acting and performance would be positive and stronger in teams with low dispersion. To test this claim, job performance was regressed on the cross-level interaction between individual deep acting and team-level deep acting dispersion. The model also included the separate terms for individual deep acting and team-level team acting dispersion, as well as controls at the individual level for age, team tenure, surface acting, and emotional exhaustion, and a control at the team level for deep acting level. The evidence for the claim that we used is the interaction term alone. The interaction effect was not significant ($b = 0.16$, $s.e. = 0.42$, $p = .7086$)³. Accordingly, we did not conduct a simple slopes analysis. To compare the models tested in the original study and in our replication study, see Model 6 in Table 3 (both in the original and the replication study reports).

5.2 Comparison of Other Hypotheses in Becker and Cropanzano (2005)

We also tested the rest of the hypotheses proposed by Becker and Cropanzano, which we summarized in Table 1. For hypothesis 1, we only found partial evidence that teams demonstrate greater deep acting convergence than others. Indeed, we found variability in R_{wgj} 's (Mean = .76, Min = .34, Max = .95), suggesting that some teams converge in their deep acting levels, and others don't. In contrast to Becker and Cropanzano's study, which found a negative correlation between team deep acting mean level and dispersion, we found that the correlation at the team level was positive, but not significant ($r = .14$, $CI = [-.33; .55]$). The authors suggested that their results “indicated that when teams converged, they tended to converge on higher mean levels of deep acting that was consistent with our meso-level, emotional contagion account.”. In our case, we cannot assert that convergence occurs at any specific level of team deep acting mean.

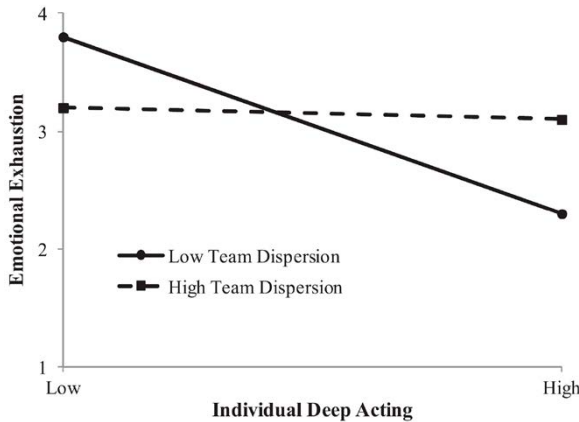
Hypothesis 2 suggested that team-level deep acting dispersion moderates the effect of individual-level deep acting, such that when dispersion is low, individual deep acting is negatively related to emotional exhaustion. Our results replicated the

³ This model represents Model 6 in Table 2 of Becker and Cropanzano (2015).

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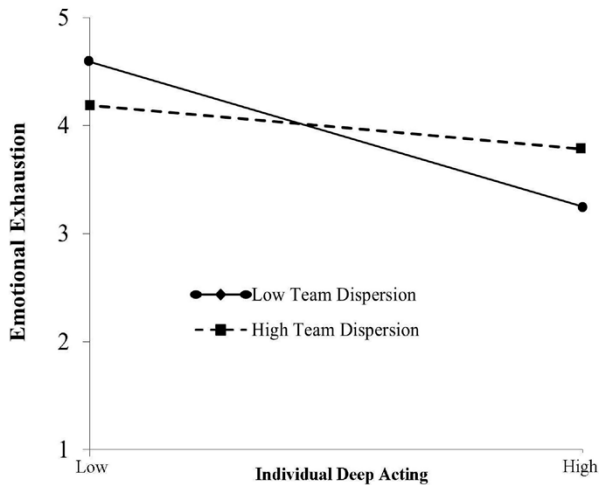
original findings. Table 3 (model 2) shows that team-level deep acting dispersion was indeed a significant cross-level moderator of the relationship between individual deep acting and emotional exhaustion ($\gamma = 0.87, p < .05$). In addition, we also plotted the moderation and found a similar theoretical behavior. Figure 2 shows the interaction plots found for the original study and our own replication study.

Figure 2. a: Original Study
A Replication and Comparison of Replicated Interaction: Moderated relationship between deep acting and emotional exhaustion



Source: Original paper Becker and Cropanzano (2015)

Figure 2.b: Replication Study
A Replication and Comparison of Replicated Interaction: Moderated relationship between deep acting and emotional exhaustion



Source: Original paper Becker and Cropanzano (2015)

Table 2. Descriptive Statistics in Original Study and Replication Study

Student	M	SD	1	2	3	4	5	6	7
1. Age	44.19	11.71							
2. Team tenure	3.25	4.35	.25**						
3. Deep acting	3.90	0.70	.23**	-.06	(.82)				
4. Surface acting	3.23	0.99	.06	-.09	.36**	(.70)			
5. Emotional exhaustion	3.13	0.76	-.18*	.05	.00	.24**	(.74)		
6. Job satisfaction	4.06	0.72	-.01	-.08	-.05	-.26**	-.32**	(.82)	
7. Performance	4.28	0.64	.12	-.08	.08	-.05	-.12	.15*	(.84)

Note: N = 208. Coefficient alpha is provided along the diagonal.
 **p<.01, *p<.05.

Table 3. A Replication and Comparison of Main Results.

Student	M	SD	1	2	3	4	5	6	7
1. Age	33.45	6.37							
2. Team tenure	5.38	4.76	.68**						
3. Deep acting	3.57	0.77	-0.05	-0.22*	(0.74)				
4. Surface acting	2.58	0.75	-0.18*	-0.11	-0.03	(0.31)			
5. Emotional exhaustion	3.35	0.56	0.1	0.09	-0.34**	0.05	(0.76)		
6. Job satisfaction	4.1	0.66	0.19*	0.06	0.31**	-0.15	-0.47**	(0.77)	
7. Performance	4.4	0.75	-0.02.	-0.04	-0.02	-0.00	-0.05	0.15	(0.92)

Note: N = 208. Coefficient alpha is provided along the diagonal.
 **p<.01, *p<.05.

Table 3a. Hierarchical linear modeling results for hypothesis test. Original Study.

Variable	Emotional Exhaustion		Job Satisfaction		In-role performance		
	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7
Intercept	3.12**	3.10**	4.08**	4.07**	-0.02	-0.02	-0.03
Level 1 variables							
Age	-0.01	-0.01	0.00	0.00	-0.00	-0.00	-0.00
Team tenure	0.02	0.02	-0.01	0.00	-0.02	0.02	0.02
Deep acting	-0.03	-0.20†	0.07	-0.02	0.08	0.17*	0.18*
Surface acting	0.25**	0.25**	-0.25**	-0.15**	-0.05	-0.05	-0.06†

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Variable	Emotional Exhaustion		Job Satisfaction		In-role performance		
	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7
Emotional exhaustion				-0.39**			0.01
Level 2 variables							
Deep acting level		-0.11	0.03	-0.01		-0.03	-0.04
Deep acting dispersion		0.20	-0.33	-0.43		-0.05	-0.01
Dispersion interaction		0.72**	-0.26	0.02		-0.40*	-0.43**
Pseudo-R ²	.22	.23	.27	.39		.27	.28

Note: NL1 = 208. NL2 = 35. Dispersion interaction is the cross-level interaction between individual deep acting and team-level deep acting dispersion. Pseudo-R² calculated based on the proportional difference in level-1 variance.

**p < .01, *p < .05, and †p < .10.

Table 3b. Hierarchical linear modeling results for hypothesis test. Replication Study.

Variable	Emotional Exhaustion		Job Satisfaction		In-role performance		
	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7
Intercept	4.12**	4.15**	3.54**	5.38**	0.64	0.70	1.16†
Level 1 variables							
Age	-0.03*	-0.03*	-0.22†	0.01	-0.01	-0.01	-0.01
Team tenure	-0.03†	-0.03†	-0.01	0.01	0.01	0.01	0.01
Deep acting	-0.18**	-0.26**	0.31*	0.19*	-0.03	-0.08	-0.11
Surface acting	-0.02	-0.02	-0.05	-0.06	-0.14†	-0.16†	-0.16†
Emotional exhaustion				-0.45**			-0.11
Level 2 variables							
Deep acting level		-0.18	0.28	0.21		-0.10	-0.12
Deep acting dispersion		0.34	-0.27	-0.13		0.03	0.06
Dispersion interaction		0.87*	-0.79†	-0.40		0.61	0.70
Pseudo-R ²	0.12	0.17	0.15	0.28	0.03	0.04	0.05

Note: NL1 = 130. NL2 = 23. Dispersion interaction is the cross-level interaction between individual deep acting and team-level deep acting dispersion. Pseudo-R² calculated based on the proportional difference in level-1 variance.

**p < .01, *p < .05, and †p < .10.

Hypothesis 3 suggested that team-level deep acting dispersion moderates the indirect effect of deep acting on job satisfaction through emotional exhaustion. First, we estimated the effect of deep acting on job satisfaction in model 3 (Table 3) ($\gamma = 0.30, p < .001$). Second, we estimated the effect of emotional exhaustion on job satisfaction controlling for deep acting in model 4 (Table 3) ($\gamma = -0.44, p < .001$). Then, we tested the moderated mediation model using an index of moderated mediation, and our results replicated the original findings. The index of moderated mediation was significantly different from zero (Index of moderated mediation = $-0.44 [-0.93; -0.10]$). Similar to

the original result, the indirect effect is stronger at low team deep acting dispersion (Indirect Effect = 0.26 [0.12; 0.46]) that at high levels of dispersion (Indirect Effect = 0.10 [0.03; 0.21]).

Hypothesis 4a predicted a positive relationship between individual-level deep acting and job performance. Becker and Cropanzano did not find a significant relationship, and neither do we ($\gamma = -0.03$, *not sig.*). Thus, we replicated the same result. Hypothesis 4b was detailed in a previous section. Finally, Hypothesis 4c proposed a moderated mediation model, where the indirect effect of deep acting on job performance through emotional exhaustion is moderated by team deep acting dispersion. Becker and Cropanzano did not find a support for this hypothesis, and neither do we (Index of moderated mediation = -0.06 [-0.32; 0.15]).

6. Discussion

Although the targeted interaction effect was not significant in our replication study (not replicated effect), it is interesting to note that other hypotheses in Becker and Cropanzano (2015) were indeed replicated. Team-level deep acting dispersion was indeed a significant cross-level moderator of the relationship between individual deep acting and emotional exhaustion. In addition, we also found that team-level deep acting dispersion moderated the indirect effect of deep acting on job satisfaction, through the effect of emotional exhaustion. These results are interesting as they suggest that very similar emotional processes may occur in team samples from different countries and cultures.

More specifically, this study contributes to the field of organizational behavior and emotions in the workplace by replicating and questioning some of the allegedly significant effects of deep acting at the team level on individuals and organizations. Similar to the original study, we found that team-level deep acting dispersion has significant cross-level moderation effects on individual outcomes such as emotional exhaustion and job satisfaction. These results strengthen our confidence on previous scientific claims asserting that managing deep acting in work teams, especially in contexts where emotional exhaustion is significant, is likely to be a productive “act of management.” Thus, training nurses to acquire deep acting strategies could have positive impacts in reducing the dispersion of emotional display, reducing the levels of emotional exhaustion, and increasing the levels of job satisfaction.

In addition, our replication provides more evidence that the dispersion of team members’ deep acting may have an effect on individuals, suggesting that processes of emotional contagion are relevant in this situation and that emotional resources are likely to be shaped by the social environment where individuals work. Our replication study found significant effects in a sample collected in a different country (Chile)—with its unique culture (more collectivistic than the USA), in a significantly different context (COVID-19 pandemic), and with less experienced teams (with significantly lower age and higher team tenure). This evidence supports the claim that team-level deep acting dispersion matters.

Nevertheless, we couldn’t find evidence for the main tested claim that proposed that team-level deep acting dispersion produces a difference in terms of job performance. Several alternative explanations could have explained our inability to reproduce this effect. First, our replication study was underpowered. In fact, due to several complications in the data collection process, we ended up having a smaller sample size in comparison to the original study. Additional efforts in the future should be conducted to replicate this study with a bigger sample size. Second, we

could not find any significant relationship between either emotional exhaustion or job satisfaction, and job performance. We believe it is plausible to think that the pandemic conditions could have blurred these relationships. During the final presentation of our research team to the hospital, the nurse coordination team emphasized that they were “fighting a war” against the pandemic, and that “nurses are really walking the extra mile” during this time despite their exhaustion, stress, or burnout symptoms. Having to work under these conditions was seen at that moment as a sign of heroism, a norm that could have decreased the relationship between emotional exhaustion and job performance. Third, the pandemic could have changed the supervisors’ perceptions of what is considered high performance. For example, small mistakes due to emotional exhaustion may have been seen as normal (or a more tolerant situation) in these extreme conditions, with supervisors putting more weight to more essential functions.

Finally, we have to acknowledge some important limitations. As we tried to provide a direct replication of the original study, we imitated the study design as much as possible, and thus, our study suffers from some of the same limitations as the original study. For instance, although the original study relies on emotional contagion processes to justify the main effects, we did not include any measure to capture this process. Second, our study also focuses on nurse teams, and thus we cannot say whether these results can be replicated in other types of jobs or industries. Third, the cross-sectional nature of the study creates ambiguity in terms of the causal ordering of the variables, and raises questions about common method variance (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003). In contrast, our replication study and its results also have some strengths. First, although cross-level moderation effects in multilevel modeling are extremely underpowered (Mathieu et al., 2012), we were able to replicate some of Becker and Cropanzano’s (2015) findings. This suggests that some of the tested effects are generally strong and with a high external validity. Second, although replication studies are rare and infrequent, and even rarer and more infrequent in a Latin American context (Olavarrieta & Diaz, 2021), we were able to contribute to science development in the region. Finally, this replication study was supported by a broader team of researchers who provided rigorous early feedback. This was particularly helpful to strengthen the design of our direct replication.

Conflict of interest

The authors of this manuscript state that there are no conflicts of interest with any entity or institution, or of a personal nature in this publication.

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