

Meaningful work, pleasure in working, and the moderating effects of deep acting and COVID-19 on nurses' work

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Abstract

Aims: This study aims to verify the association between nurses' perception of the meaningfulness of their work and their pleasure in working, and whether this relationship may change based on the level of deep acting performed to cope with emotional regulation demands and the influence of the COVID-19 pandemic on the health-care work.

Methods: Nurses from both private and public Italian institutions ($N = 239$) completed an online questionnaire between June 2021 and January 2022. A moderated moderation model was tested through SPSS Process macro. The design is cross-sectional.

Results: The results show that the perception of meaningfulness of work is positively associated with pleasure in working, especially in conditions of high deep acting. This relationship is further moderated by the COVID-19 influence so that the association between meaningful work and pleasure in working is stronger in conditions of high COVID-19 influence and at higher levels of deep acting performed.

Conclusion: Perceiving one's work as meaningful can be a job resource that protects nurses from the negative effects of emotional regulation demands and even from the stress of dealing with COVID-19.

Impact: The study addresses the problem of nurses' emotional regulation demands at work and evaluates the protective role of meaningful work. The findings could be useful for planning prevention interventions (through training in adaptive emotional regulation strategies) or protection interventions (through the promotion of effective coping strategies and the stimulation of one's work engagement).

KEYWORDS

COVID-19, deep acting, emotional labor, meaningful work, nurses, pleasure in working

1 | INTRODUCTION

According to a generally shared, and progressively data-supported¹⁻⁵ social representation of the COVID-19 pandemic, healthcare workers have been exposed to a doubling burden of occupational stressors

since its outbreak. Well-known work-related stressors, such as workload and emotional load, have intensified,^{1,6} and other pandemic-related stressors have accumulated, such as the responsibility of dealing with a new disease, the fear of exposing their families to the risk of being infected, and so on.² From the literature, those

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who worked most intensely in contact with COVID-19 had to face severe mental health challenges, reporting higher levels of burnout, emotional exhaustion,⁴ anxiety, depression,^{3,5} and lower levels of self-efficacy, resilience, and frontline work willingness.² However, medium-high levels of job satisfaction and work engagement were also found.^{1,7,8} These controversial findings could be explained by the fact that during the pandemic, and perhaps because of it, the most important characteristics of the nursing profession, such as a sense of duty and sacrifice, dedication to patient care, and a sense of belonging to the nursing profession, have been accentuated.⁹ In addition, work-related emotions have also intensified (fear, vulnerability, compassion for patients).² On the one hand, this has made the risk of burnout and emotional exhaustion more likely,^{10,11} along with the consequent need to cope with emotional labor.¹² On the other hand, it may have acted in a positive sense, increasing the perception of the meaningfulness of one's job role and profession, and acting on engagement and commitment. Therefore, to support the workers who have most suffered the consequences of the pandemic, it is necessary to investigate both the criticalities and the strengths of the work, to increase the reaction and adaptation strategies to the former, and the empowerment strategies of the latter.

So far, the literature has focused on verifying pandemic-related negative effects on work. This study, however, starts from a positive assumption, *id est*, that the sense of meaningfulness of one's work leads to the pleasure of working, and that this relationship may be moderated by having to deal with emotional labor and by the influence of pandemic on healthcare work.

2 | BACKGROUND

2.1 | Meaningful work and positive work-related outcomes

Work characteristics that could act as resources for workers have been studied for some time.¹³ Among these, the perception of meaningful work has shown to have strong links with workers' satisfaction, retention, engagement, commitment, and quality job performance.¹⁴ Meaningfulness of work is the perception that work corresponds to one's values, and that it is relevant and influential, both for oneself and for others¹⁵; in other words, it is the perception that one's work has a strong intrinsic and extrinsic significance. This perception may arise from specific job characteristics (e.g., job duties or relationships) or from a sense of belonging to the profession. The latter case is very common in the health professions, as generally, individuals who choose to pursue this career feel a connection with the typical values of the care professions, and in many cases a real vocation. A qualitative study on meaningful work for nurses highlighted three key components, namely the sense of being acknowledged, the possibility of connecting to others, and the perception of making a difference.¹⁴ These characteristics, when present, are more likely to result in higher productivity, engagement, pride, and enjoyment in working. Finding meaning in work may also

help to cope with the stressful situations that characterize nursing work.¹⁵ In fact, employees with a stronger perception of work meaningfulness continue to engage in their work even during a crisis, while the same situation constitutes a detrimental distraction for employees with lower work meaningfulness perceptions.¹⁶ According to a recent study,¹⁶ individuals with lower levels of work meaningfulness were significantly less engaged than those who ascribed a higher meaning to their work, especially in conditions of higher perceived COVID-19 crisis strength. Lower work meaningfulness was also associated with lower levels of propensity to take charge at work.¹⁶ In particularly complicated times (e.g., during a pandemic), maintaining a motivated workforce is essential. For healthcare workers during the pandemic, with increased workloads and consequently increased work-related stress, fatigue, and emotional exhaustion, it was crucial that they possessed resources that would lighten the burden. Furthermore, given that individual and job resources are associated with better performance, the motivation of healthcare professionals was also crucial for patients.

2.2 | Emotional labor in the health sector

The work of nurses, by its very nature, is one of the most emotionally loaded jobs. Nurses are constantly required to control their emotions to align them with the emotions that the organization requires them to show. The suppression of negative emotions, such as fear and irritation, and the expression of empathy, understanding, kindness, and positivity,¹⁷ are associated with high-quality care services. These emotions, however, may not match the ones that are actually felt. Specifically, maintaining neutral or positive expressions in the face of pain is perhaps the most stressful factor in the health professions, and is closely linked to burnout, stress, job dissatisfaction, fatigue, and health problems.^{10,11}

The discrepancy between the emotions actually felt and the emotions that must be displayed because required by the job role or work organization is called emotional dissonance.¹² There are two strategies for coping with emotional dissonance.¹² Surface acting involves suppression of real emotions in favor of those required; the subject, therefore, acts on himself and wears a mask, trying to fake emotions that are not actually felt. Deep acting involves an actual attempt to feel the emotions that should be felt; to perform this strategy, a greater cognitive effort is required, but it seems to be more functional. In fact, if surface acting has been widely linked to higher levels of stress, burnout, and negative consequences on psychophysical health,^{11,18} the findings that associate deep acting with these outcomes are controversial.¹⁹ In some studies, no differences emerged between the two strategies, both were found to be detrimental.¹⁰ Other studies have found a positive relationship between deep acting and positive outcomes such as personal accomplishment and job satisfaction,^{17,20,21} or negative relationships with negative outcomes, such as stress and burnout.¹⁷

The different paths between surface and deep acting could go back to the processes underlying the two strategies. In fact, deep

acting involves the reappraisal of emotions, while surface acting involves the suppression of emotions, which requires more cognitive resources and thus efforts.²² The reappraisal, however, has proven to be effective particularly toward negative emotions, reducing their intensity and thus avoiding physiological responding.²³ It may even generate an increased sense of meaning.¹⁷ What makes surface acting particularly stressful and does not characterize deep acting may be the sense of inauthenticity.¹² Workers who are more used to frequent interactions with the public, owed to the nature of the work itself, positively evaluate being authentic in their relationship with others. Therefore, being forced to feign emotions, that is, to be inauthentic, is a source of distress. Research suggests that the importance of expressing one's real emotions varies from person to person.²⁴ To someone, feigning emotions while remaining emotionally detached could be beneficial. To someone else, such forcing is comparable to forcing one's true self. This could explain the individual choice of what strategy to use to overcome the emotional demand. Therefore, emotional dissonance could be stressful based on how important it is for individuals to truly express themselves in interactions with others.²⁴ In other words, the existence or not of a conflict between emotions felt and emotions shown could moderate the effects of other variables on work-related well-being. In a study,²⁴ subjects who considered the expression of authentic emotions more important felt higher levels of emotional exhaustion and lower levels of job satisfaction when forced to fake emotions they did not really feel.

Emotional regulation behaviors could occur independently of explicit requests from the organization.²⁵ In a study,²⁵ pleasure motive was positively linked to deep acting. In fact, some types of workers may choose to perform deep acting for personal reasons, especially if the emotional display rules require culturally accepted behaviors (e.g., showing sympathy toward people who are suffering). In this case, deep acting could be a response to the satisfaction of personal needs, and therefore could be used differently based on the different cognitions and motivations that individuals have about their work.²¹

Another theory that could explain why deep acting is sometimes associated with positive outcomes is the one that highlights the difference between challenge and hindrance stressors.^{26,27} According to this theory, hindrance stressors are perceived as burdens that make work even more difficult and are therefore associated with high levels of stress and fatigue. Challenge stressors, however, while retaining all the characteristics and dangers of any other stressor, could be perceived by workers as worthy of their efforts, and therefore could be linked to job satisfaction and work engagement.²⁷ For example, challenge stressors could be related to the possibility of obtaining promotions, recognition, and career advancement, or they could be perceived as legitimate parts of a job. In the case of nurses, emotional stressors could be included in this second category. The request to regulate one's emotions may be perceived as a challenge stressor because it satisfies one's affiliation needs, is linked to appreciation by colleagues and superiors, is culturally associated with the demonstration of competence, and is also closely related to the objectives of the profession.²¹ For example, COVID-19's grip on

hospitals may have made the need to regulate emotions in interaction with patients frightened by the new disease and the inability to find comfort in their family even more important. Furthermore, it may have amplified the awareness of both the importance of the health professions and the need to increase the quality of the care work to respond effectively to the needs of patients. In other words, emotional stressors may be perceived as challenges as they are identified as an essential part of the job, especially in conditions of high influence from the COVID-19 pandemic.

3 | THE STUDY

3.1 | Aims

The study aims to (1) determine the relationship between the perception of work meaningfulness and pleasure in working, and (2) the conditional effects of deep acting and COVID-19 perceived influence on one's work. Specifically, we hypothesize that the COVID-19 pandemic may have acted on the perception of the meaningfulness of the work of nurses and on the performance of adaptive strategies to respond to the emotional labor resulting from the new needs imposed by the pandemic. Hence, we hypothesize that the association between the perception of meaningful work and pleasure in working may change based on the level of deep acting that individuals perceive to perform while working and the more or less influence of COVID-19 on nurses' work. The hypothesized model is represented in Figure 1.

3.2 | Participants

The research population for the study is made up of professional nurses, employed in both public and private health facilities throughout Italy. The managers and supervisors of the structures were contacted using the contact details publicly available online and invited to forward the e-mail containing the instructions to participate in the research to all their employees, and these in turn to other colleagues through a snowball sampling procedure. In the email, the research objectives were explained, the data processing and informed consent documents were attached, and the link to the online questionnaire was provided. The inclusion criterion was to fill the role of nurses, therefore subjects covering other roles (e.g., technical personnel, rehabilitation personnel, medical personnel, and so on) were excluded from the data analysis. This was made possible through the inclusion of questions regarding the sociodemographic characteristics of the participants, including their job roles within the organization. Data were collected between June 2021 and January 2022, when the COVID-19 emergency in Italy had reached a higher number of daily infections than the previous year. Therefore, the workload of health facilities was very high, also due to the simultaneous expansion of the vaccination campaign to the entire Italian population.

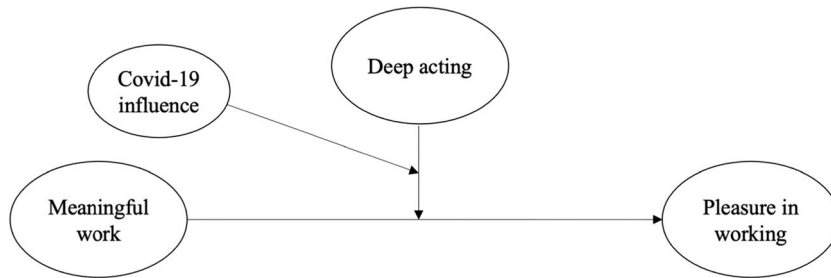


FIGURE 1 The hypothesized moderated moderation model

3.3 | Measures

Deep acting was measured using the 3-item Deep Acting scale of the Emotional Labor Scale.²⁸ It was rated on a 4-point Likert scale ranging from 1 = never to 4 = always. Higher scores indicate a higher presence of the construct. An example of an item is "I try to actually experience the emotions that I must show." Cronbach's α in this study was 0.72.

Meaningful work perception was assessed using the 10-item Meaningful Work scale of the Questionnaire on the Experience and Evaluation of Work 2.0 (QEEW 2.0²⁹), an instrument extensively validated on large samples from the healthcare sector. It was rated on a 4-point Likert scale ranging from 1 = strongly disagree to 4 = strongly agree. Higher scores indicate a higher presence of the construct. An example of an item is "In my work, I can be meaningful to others." Cronbach's α in this study was 0.89.

Pleasure in working was assessed using the 5-item Pleasure in your Work scale of the Questionnaire on the Experience and Evaluation of Work 2.0 (QEEW 2.0²⁹). It was rated on a 4-point Likert scale ranging from 1 = strongly disagree to 4 = strongly agree. Higher scores indicate a higher presence of the construct. An example of an item is "I still find my work stimulating, each and every day." Cronbach's α in this study was 0.70.

COVID-19 influence was assessed through the item "How much do you think COVID-19 has affected the quality of your work?" Nurses were asked to rate their perception of the influence on a scale ranging from 1 to 10, where high scores correspond to a very high perceived influence of the pandemic on their work.

3.4 | Ethical considerations

The project has been approved by the Bioethics Committee of the University of Palermo (protocol n. 72/2022). Each participant has given their consent. The data were analyzed in aggregate form, and complete anonymity was guaranteed.

3.5 | Data analysis

Descriptive statistics, correlations, means, standard deviations, and reliability indices for all the study variables were measured using SPSS 27. To verify the distribution of the data the values of skewness

and kurtosis were also assessed. Both indices were within the acceptable range, thus the distribution can be considered normal. To test the research hypotheses, a moderated moderation model was carried out through the PROCESS Macro³⁰ for SPSS (version 3.5), using Model 3. This is a method widely used in the social sciences and allows to verify in a simple and effective way whether the presence of second moderator moderates a first moderating effect on a relationship between variables.³⁰ To evaluate the real presence of the interaction effects, the statistical significance of each conditional effect must be verified.³⁰ A hierarchical regression analysis was also conducted to control for sociodemographic variables such as gender, age, and seniority, and to assess the contribution of the set of variables to variance.

4 | RESULTS

4.1 | Sample characteristics

The sample is made up of 239 nurses working in hospitals, local health facilities, nursing homes, and private clinics throughout the Italian territory. Overall, 70.7% are female and 29.3% are male. The mean age is 41.4 years old ($SD = 12$). 87.4% of the sample work in public health facilities, while 12.6% work in private structures. This unbalance may have been due to the difficulty in contacting private clinics or nursing homes, and the unwillingness of the managers of these facilities to forward the request to participate in this study to their employees. Furthermore, 11.3% of the sample have worked as a nurse for less than 1 year, 33.9% have worked from 1 to 8 years, 8.4% have worked from 8 to 14 years, and 46.4% have worked for more than 14 years. As for the work contract, 81.6% of the sample has a permanent contract, 12.1% have a fixed-term contract with good chances of renewal, while the remaining 6.3% have a fixed-term contract with little or no clear possibility of renewal.

4.2 | Hypotheses testing

Means, standard deviations, and correlations between the study variables are presented in Table 1. From a first analysis of the correlation matrix, the relationships between the perceived influence of COVID-19 and the other variables have a positive direction. The correlation between pleasure in working and meaningful work is

TABLE 1 Means, standard deviations, and correlations ($N = 239$)

Variable	Mean (SD)	1	2	3	4
1. Deep acting	2.24 (0.89)	1			
2. Meaningful work	3.20 (0.71)	0.139*	1		
3. Pleasure in working	2.66 (0.83)	-0.062	0.434**	1	
4. Covid-19 influence	8.26 (1.96)	0.169**	0.130*	0.016	1

*Correlation is significant at the 0.05 level (two-tailed).

**Correlation is significant at the 0.01 level (two-tailed).

the strongest, consistent with previous research. Also in line with the literature, a moderate correlation was found between COVID-19 influence and deep acting. On the other hand, no statistically significant correlation was found between COVID-19 influence and pleasure in working, which is not associated with deep acting either. Finally, a weak correlation was found between meaningful work and deep acting.

Table 2 shows the hierarchical regression analysis using pleasure in working as the outcome. In the first step, we introduced gender, age, and seniority (years spent in the role) as control variables. In the second step, we added the study variables. Finally, the interaction terms were added in the third step. The final model explains 26% of the variance. Before calculating the interactions, variables have been standardized (mean = 0 and SD = 1). Two interactions, the one between meaningful work perception and deep acting, and the triple interaction between these two variables and the perceived COVID-19 influence, resulted statistically significant. COVID-19 influence has no significant effect on pleasure in working. However, as hypothesized, meaningful work perceptions and pleasure in working are positively and strongly associated.

To test the moderate moderation model we hypothesized, we used model number 3 of the Macro Process for SPSS. We computed pleasure in working as the outcome, meaningful work perception as the independent variable, deep acting as the first moderator, and COVID-19 influence as the second moderator. Gender, age, and seniority were entered as covariables. The results confirmed the significant effects of the two interactions that emerged from the hierarchical regression in Table 2. To be specific, a significant effect of meaningful work ($\beta = 0.256$, $SE = 0.03$, $p = 0.000$) and deep acting ($\beta = -0.186$, $SE = 0.08$, $p = 0.024$) emerged from the multiple regression analysis, as well as the interaction effect between meaningful work and deep acting ($\beta = 0.042$, $SE = 0.02$, $p = 0.005$) and the triple interaction between meaningful work, deep acting, and COVID-19 influence ($\beta = 0.014$, $SE = 0.01$, $p = 0.037$). The other two combinations of interactions did not reach statistical significance. The interaction effects between meaningful work and deep acting at different COVID-19 influence levels are all significant, as shown in Table 3. The effect of meaningful work perceptions on pleasure in working significantly increases at high levels of deep acting, especially at high levels of perceived COVID-19 influence. See Figure 2 for a graphical representation of the results.

TABLE 2 Coefficients table of hierarchical regression analysis ($N = 239$)

Predictors	Pleasure in working			
	R ²	ΔR^2	β	SE
Step 1—Control variables	0.02			
Gender			-0.105	0.42
Age			-0.147	0.02
Seniority			0.094	0.25
Step 2—Variables	0.21	0.19		
Meaningful work			0.449**	0.03
Deep acting			-0.119*	0.08
Covid-19 influence			-0.031	0.09
Step 3—Interactions	0.26	0.05		
Meaningful work \times Deep acting			0.173**	0.15
Meaningful work \times Covid-19 influence			0.040	0.16
Deep acting \times Covid-19 influence			-0.044	0.17
Meaningful work \times Deep acting \times Covid-19 influence			0.144*	0.13

Note: β , standardized beta-coefficient from the final step.

* $p < 0.05$; ** $p < 0.01$.

TABLE 3 Conditional effects of the focal predictor (meaningful work) at values of the moderators ($N = 239$)

Moderator 1	Moderator 2	Effect	SE	p
Low deep acting	Low Covid-19 influence	0.203**	0.04	0.000
Low deep acting	Medium Covid-19 influence	0.188**	0.04	0.000
Low deep acting	High Covid-19 influence	0.159**	0.05	0.001
High deep acting	Low Covid-19 influence	0.301**	0.06	0.000
High deep acting	Medium Covid-19 influence	0.341**	0.05	0.000
High deep acting	High Covid-19 influence	0.421**	0.07	0.000

* $p < 0.05$; ** $p < 0.01$.

The results show that the perception of meaningful work is positively associated with pleasure in working, especially in conditions of high deep acting, which seems to be used by nurses in our study as an adaptive strategy since it allows them to align their emotions with those required by their work. This alignment may be beneficial to their experienced pleasure in working. The moderation of deep acting on the relationship between meaningful work and pleasure in working is further moderated by the COVID-19 influence. The higher the perceived influence of COVID-19 on nurses' work, the greater the effect of meaningful work perception on pleasure in working, especially in conditions of high deep acting. In conditions of low and medium COVID-19

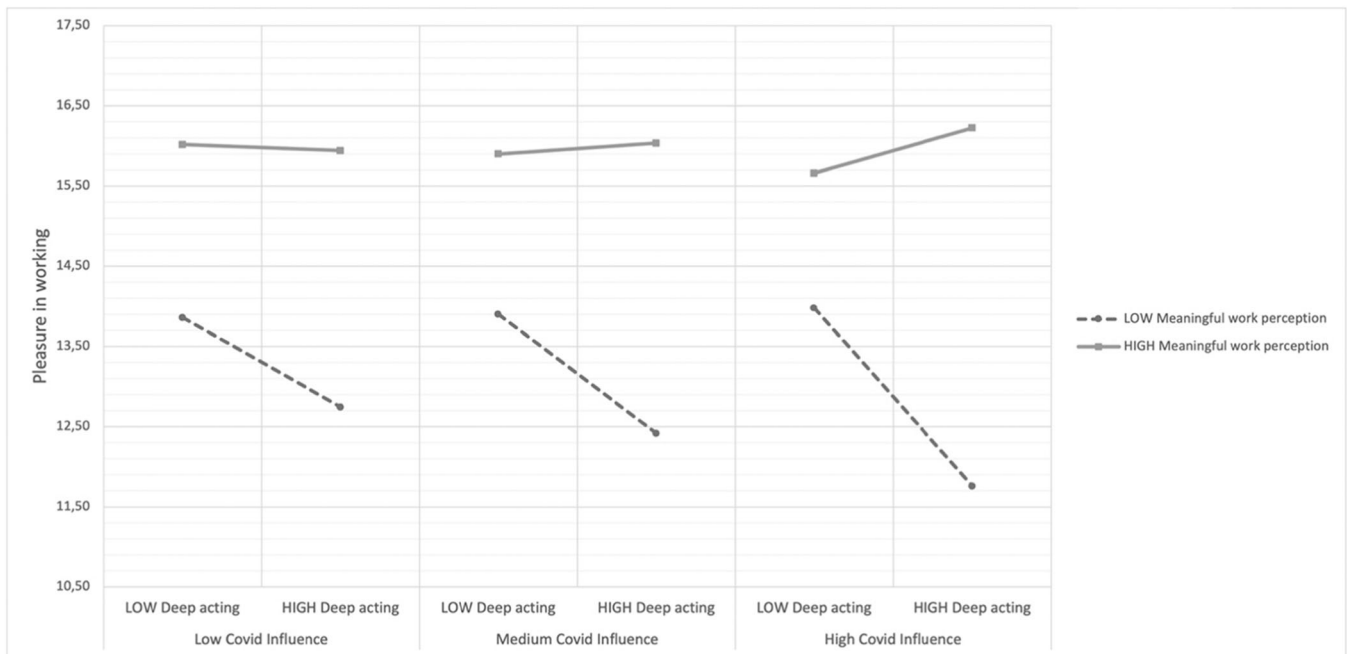


FIGURE 2 Interaction effects between meaningful work perceptions, deep acting, and Covid-19 influence on pleasure in working.

influence, deep acting does not seem to make a large difference in pleasure in working for the nurses who perceive their work as meaningful. However, for nurses with the lowest levels of meaningful work perception, deep acting seems to be particularly detrimental to their experienced pleasure in working. In fact, in our study, they experience a higher level of pleasure in working only in conditions of low deep acting. On nurses whose work has been most influenced by the pandemic but who, at the same time, have a low perception of meaningful work, in conditions of high deep acting the pleasure in working is at the lowest levels.

5 | DISCUSSION

The study's aim was to verify the moderating effects of deep acting and COVID-19 pandemic influence on the relationship between nurses' perception of meaningful work and pleasure in working. The results show a consistent difference between those who give high meaning to their work and those who perceive lack of meaningfulness. The former show significantly higher levels of pleasure in working, both in conditions of low and high deep acting, and in conditions of low and high influence of COVID-19. For those who perceive little meaningful work, the pleasure in working remains constant in conditions of low deep acting, regardless of the effect of COVID-19. In conditions of high deep acting, on the other hand, those who give low meaning to their work also perceive little pleasure in working, especially in conditions of a high incidence of COVID-19. For those who perceive a lack of meaningfulness, therefore, both deep acting and COVID-19 further worsen the pleasure in working.

In line with the job demands-resources (JD-R) model,¹³ according to which the need to face emotional work (job demand) can lead to negative outcomes, while ascribing value to one's work (job resource) can be associated with positive outcomes, in the same way in our model the perception of meaningful work is positively associated with pleasure in working and deep acting is negatively linked to it. Furthermore, still in line with the JD-R model,¹³ when the resource is low, as the incidence of stressful factors increases, the positive outcome, that is, the pleasure in working, also significantly decreases.

In line with the theorized distinction between hindrance stressors and challenge stressors,²⁶ according to which the former generates fatigue while the latter may generate motivation and engagement, in our study deep acting does not seem to be experienced in the same way by the whole sample. For those who perceive their work as meaningful, deep acting is linked to higher levels of pleasure in working than for those who perceive little meaningfulness, for whom conditions of high deep acting are connected to a heavy decrease in the levels of pleasure in working. In this case, deep acting is therefore identified as a hindrance stressor. For those with a high perception of the significance of work, however, the same stressor previously defined as hindrance seems to be perceived as a challenge stressor,²⁶ since as it increases the pleasure in working also increases.

The results suggest that the perception of the meaningfulness of work makes the biggest difference. Perceiving one's work as meaningful generates a positive effect on the pleasure of working. Confirming what was found in the literature,¹⁴ a strong sense of work meaningfulness is linked to positive outcomes such as pride, engagement, and pleasure in working. The same positive association emerged in our sample, especially in the condition of highest

difficulty due to the pandemic influence. This result is also in line with the reference literature,¹⁶ according to which the workers who ascribed more significance to their work continued to give their best, especially in conditions of higher perceived COVID-19 crisis strength.

The specificity of the sample profession can help interpret these results. The health professions have a widely recognized intrinsic and extrinsic importance. In times of pandemics, the essentiality of nurses has stood out more than ever, globally. The population has conferred immeasurable value on healthcare workers who have faced COVID-19 from the front lines. And the health workers themselves have had a great demonstration of their worth. In other words, the pandemic crisis has made their value more salient. And this is probably why our data showed that the sample with the highest perception of meaningful work and the greatest use of deep acting as an emotional regulation strategy had the highest levels of pleasure in working. For nurses, the issue of the amplification of positive emotions has a wider value than for service companies.¹⁷ The goal of the health profession is indeed the well-being and care of the patient. Therefore, having to interface with suffering is taken into account, as is the attempt to show kindness and reassuring emotions. This represents one of the core values of the profession and is among the factors that make it so valuable. From the literature, we know that worker motivation impacts the use of different emotional regulation strategies.¹⁷ Thus, similarly, nurses with higher perceptions of meaningful work may choose emotional regulation strategies that are more adaptive and functional for them. In this case, deep acting, that is, the attempt to align their emotions with those required by the work situation by modifying real emotions, could allow workers to express authentic emotions, which is linked to positive outcomes.^{17,20,21} Instead, nurses with a lower perception of meaningful work experience the need to regulate emotions as a source of stress. These workers may be at greater risk of emotional exhaustion and burnout, since the need to regulate emotions may even amplify the negative emotions that they experience at work.^{10,19} In fact, it is also possible that the fraction of the sample that perceives little meaning in their work may have been influenced by negative experiences, not uncommon during the pandemic, especially among frontline staff. This may have generated feelings of frustration and helplessness, which are more difficult to regulate.

5.1 | Limitations

The study's main limitations stem from the cross-sectional design, which does not allow causal interpretations of the relationship between the study variables, and from the use of self-report measures only. Furthermore, the convenience sample constitutes a limit to the generalization of results, since it is inextricably linked to the pandemic situation experienced in Italy. Also, more specific measures should be used in future research to determine the influence of COVID-19. Finally, the absence of any indication of the

hospital ward to which the nurses belong (due to the need to guarantee anonymity in some institutions) prevented a more specific interpretation of the results based on that data.

6 | CONCLUSION

During the pandemic, and perhaps because of it, work-related emotions such as fear, vulnerability, and compassion for patients, intensified. However, some important characteristics of the nursing profession, such as a sense of duty and sacrifice, and a sense of belonging and dedication to patient care,⁹ may have also been accentuated. This has made nurses more exposed to the risk of emotional stress on the one hand, but on the other, it has made them more aware of the meaning of their work. The results of this study revealed both connotations. Working closely with the effects of COVID-19 has confronted nurses with strong emotions, such as suffering, fear, loneliness, and helplessness. Emotions that, however, had to be managed and regulated, so that they were not shown. As hypothesized, this great effort at emotional regulation has moderated the relationship between the perception of meaningful work and pleasure in working, especially in conditions of high pandemic influence. For those who were not protected by their perception of meaningful work, deep acting turned out to be a very powerful stressor, capable of greatly lowering the levels of pleasure in work. As if for that part of the sample, not being motivated by the value of the nursing mission, having to make an effort to act on one's emotions so that they correspond to those required by the job was a hardly bearable work characteristic. On the other hand, the devastating effects of COVID-19 could have awakened and accentuated the values of the nursing profession, so that, in conditions of high pandemic influence, deep acting could have been used as a resource. In other words, cognitively altering their emotions to align them with what they need to display may have helped some nurses do their jobs even better. Successfully meeting emotion work requirements can be linked to well-being because it is associated with feelings of authenticity, which are essential to nursing.

The main implication of this study's findings is that working on deep acting strategy training can foster the well-being of nurses, because it can help them cope with the emotional labor to fulfill their professional role and at the same time can provide a sense of accomplishment and confirmation of their identity.²¹ According to the literature,²¹ to promote deep acting, which is an automatic process that the individual chooses to implement on the basis of individual instances, it is possible to act on the contextual conditions that predispose to the implementation of this automatism. The results of the present study may suggest that any form of intervention aimed at increasing the strategy of deep acting could pass through reasoning about the profound purposes of one's work, that is, the perception of meaningfulness. The sense of meaning given to one's work could be modulated on the basis of sharing organizational values. The more workers' expectations of what makes their work meaningful for themselves and others are in tune

with the style through which work is actually conducted within the organization, the more the positive feelings associated with their work are expected to increase and, consequently, the probability that deep acting is chosen as the preferred strategy also increases.¹⁹ Given that not all stressful events can be predicted or avoided, and the experience of COVID-19 has proved it, it is necessary to train broader emotion regulation skills.²¹ Some practical activities that can be carried out are, for example, regular supervision interventions with a facilitator who enhances the workers' previous experiences of emotional regulation and suggests other adaptive ones, combined with coping strategies, up to specific actions aimed at emotional well-being (e.g., mindfulness techniques).

The literature cited and this study shows how extremely important it is that people who intend to pursue emotionally stressful jobs are aware of the physical and emotional pressure they will be subjected to. This suggests enhancing career guidance strategies before career entry and assessing individuals' motivation in the pre-entry phase of nursing schools. This does not exclude, as previously mentioned, an action also on those who are already advanced in the profession, as the emotional regulation strategies can be trained and improved at any stage of the career. In conclusion, each result highlights the importance of providing support strategies to reduce the psychological impact of the pandemic on the workers who have suffered the most from it, acting both on the critical issues of the work and on the reinforcement of strengths.

AUTHOR CONTRIBUTIONS

Conceptualization: Francesco Pace, Giulia Sciotto, and Lorenzo Russo. Methodology, writing, original draft preparation, reviewing and editing: Giulia Sciotto and Francesco Pace. Data collection: Lorenzo Russo. Data analysis: Giulia Sciotto. All authors read and approved the final manuscript.

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CONFLICT OF INTEREST

The authors declare no conflict of interest.

DATA AVAILABILITY STATEMENT

The data that support the findings of this study are openly available in the OSF repository at https://osf.io/2fyms/?view_only=267028686daf480caf79229804a48df6.

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REFERENCES

- Giménez-Espert M, Prado-Gascó V, Soto-Rubio A. Psychosocial risks, work engagement, and job satisfaction on nurses during COVID-19 pandemic. *Front Public Health*. 2020;8:566896. doi:10.3389/fpubh.2020.566896
- Hu D, Kong Y, Li W, et al. Frontline nurses' burnout, anxiety, depression, and fear statuses and their associated factors during the COVID-19 outbreak in Wuhan, China: a large-scale cross-sectional study. *EClinicalMedicine*. 2020;24:100424. doi:10.1016/j.eclinm.2020.100424
- Al Maqbali M, Al Sinani M, Al-Lenjawi B. Prevalence of stress, depression, anxiety and sleep disturbance among nurses during the COVID-19 pandemic: a systematic review and meta-analysis. *J Psychosom Res*. 2021;141:110343. doi:10.1016/j.jpsychores.2020.110343
- Chen R, Sun C, Chen JJ, et al. A large-scale survey on trauma, burnout, and posttraumatic growth among nurses during the COVID-19 pandemic. *Int J Ment Health Nurs*. 2021;30:102-116. doi:10.1111/inm.12796
- Havaei F, Ma A, Staempfli S, MacPhee M. Nurses' workplace conditions impacting their mental health during COVID-19: a cross-sectional survey study. *Healthcare*. 2021;9:84. doi:10.3390/healthcare9010084
- Bernburg M, Hetzmann MS, Mojtahedzadeh N, et al. Sleep perception, sleep quality and work engagement of German outpatient nurses during the COVID-19 pandemic. *Int J Environ Res Public Health*. 2022;19:313. doi:10.3390/ijerph19010313
- Allande-Cussó R, García-Iglesias JJ, Ruiz-Frutos C, Domínguez-Salas S, Rodríguez-Domínguez C, Gómez-Salgado J. Work engagement in nurses during the COVID-19 pandemic: a cross-sectional study. *Healthcare*. 2021;9:253. doi:10.3390/healthcare9030253
- Zhang M, Zhang P, Liu Y, Wang H, Hu K, Du M. Influence of perceived stress and workload on work engagement in front-line nurses during COVID-19 pandemic. *J Clin Nurs*. 2021;30:1584-1595. doi:10.1111/jocn.15707
- Fernandez R, Lord H, Halcomb E, et al. Implications for COVID-19: a systematic review of nurses' experiences of working in acute care hospital settings during a respiratory pandemic. *Int J Nurs Stud*. 2020;111:103637. doi:10.1016/j.ijnurstu.2020.103637
- Diefendorff JM, Erickson RJ, Grandey AA, Dahling JJ. Emotional display rules as work unit norms: a multilevel analysis of emotional labor among nurses. *J Occup Health Psychol*. 2011;16(2):170-186. doi:10.1037/a0021725
- Karimi L, Leggat SG, Donohue L, Farrell G, Couper GE. Emotional rescue: the role of emotional intelligence and emotional labour on well-being and job-stress among community nurses. *J Adv Nurs*. 2014;70(1):176-186. doi:10.1111/jan.12185
- Hochschild AR. *The Managed Heart: The Commercialization of Human Feeling*. University of California Press; 1983. doi:10.1002/pam.4050030365
- Bakker AB, Demerouti E. Job demands-resources theory: taking stock and looking forward. *J Occup Health Psychol*. 2017;22(3):273-285. doi:10.1037/ocp0000056
- Pavlish C, Hunt R. An exploratory study about meaningful work in acute care nursing. *Nurs Forum*. 2012;47(2):113-122. doi:10.1111/j.1744-6198.2012.00261.x
- Gómez-Salgado J, Navarro-Abal Y, López-López MJ, Romero-Martín M, Climent-Rodríguez JA. Engagement, passion and meaning of work as modulating variables in nursing: a theoretical analysis. *Int J Environ Res Public Health*. 2019;16:108. doi:10.3390/ijerph16010108
- Liu D, Chen Y, Li N. Tackling the negative impact of COVID-19 on work engagement and taking charge: a multi-study investigation of frontline health workers. *J Appl Psychol*. 2021;106(2):185-198. doi:10.1037/apl0000866
- Andela M, Truchot D, Borteyrou X. Emotional labour and burnout: some methodological considerations and refinements. *Can J Behav Sci*. 2015;47(4):321-332. doi:10.1037/cbs0000024
- Schmidt KH, Diestel S. Are emotional labour strategies by nurses associated with psychological costs? A cross-sectional survey. *Int J Nurs Stud*. 2014;51(11):1450-1461. doi:10.1016/j.ijnurstu.2014.03.003

19. Hülshager UR, Schewe AF. On the costs and benefits of emotional labor: a meta-analysis of three decades of research. *J Occup Health Psychol.* 2011;16(3):361-389. doi:10.1037/a0022876
20. Brotheridge CM, Grandey AA. Emotional labor and burnout: comparing two perspectives of "people work". *J Vocat Behav.* 2002;60:17-39. doi:10.1006/jvbe.2001.1815
21. Zapf D, Kern M, Tschan F, Holman D, Semmer NK. Emotion work: a work psychology perspective. *Annu Rev Organ Psychol Organ Behav.* 2021;8:139-172. doi:10.1146/annurev-orgpsych-012420-062451
22. Lee M, Pekrun R, Taxer JL, Schutz PA, Vogl E, Xie X. Teachers' emotions and emotion management: integrating emotion regulation theory with emotional labor research. *Soc Psychol Educ.* 2016;19(4): 843-863. doi:10.1007/s11218-016-9359-5
23. Ochsner KN, Ray RD, Cooper JC, et al. For better or for worse: neural systems supporting the cognitive down- and up-regulation of negative emotion. *Neuroimage.* 2004;23:483-499. doi:10.1016/j.neuroimage.2004.06.030
24. Pugh D, Groth M, Henning-Thurau T. Willing and able to fake emotions: a closer examination of the link between emotional dissonance and employee well-being. *J Appl Psychol.* 2011;96(2): 377-390. doi:10.1037/a0021395
25. Von Gilsa L, Zapf D, Ohly S, Trumpold K, Machowski S. There is more than obeying display rules: service employees' motives for emotion regulation in customer interactions. *Eur J Work Organ Psychol.* 2014;23(6):884-896. doi:10.1080/1359432X.2013.839548
26. Cavanaugh MA, Boswell WR, Roehling MV, Boudreau JW. An empirical examination of self-reported work stress among U.S. managers. *J Appl Psychol.* 2000;85(1):65-74. doi:10.1037/0021-9010.85.1.65
27. Crawford ER, LePine JA, Rich BL. Linking job demands and resources to employee engagement and burnout: a theoretical extension and meta-analytic test. *J Appl Psychol.* 2010;95(5):834-848. doi:10.1037/a0019364
28. Brotheridge CM, Lee RT. Development and validation of the Emotional Labour Scale. *J Occup Organ Psychol.* 2003;76(3): 365-379. doi:10.1348/096317903769647229
29. Van Veldhoven M, Prins J, van der Laken P, Dijkstra L. QEEW 2.0: 42 Short Scales for Survey Research on Work, Well-being and Performance. SKB; 2015.
30. Hayes AF. *Introduction to Mediation, Moderation, and Conditional Process Analysis: A Regression-Based Approach.* 2nd ed. The Guilford Press; 2018.

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