

## RESEARCH ARTICLE

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# Meaningful Work and Counterproductive Work Behaviors: A Serial Mediation

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### Abstract

Counterproductive work behaviors (CWB) are a set of volitional actions that stem from an intention to harm organizations and their stakeholders (e.g., employees, clients, investors). While, increasingly, more research has been conducted with the aim to explain, predict and prevent CWB from occurring, very little research has investigated the role of motivational constructs such as meaningful work in mitigating the emergence of CWB. The present study draws on The Theory of Purposeful Work Behavior to argue that meaningful work can play a significant role in preventing CWB, and that job satisfaction and organizational commitment serve as mediating factors in the link between meaningful work and CWB. A total of 237 participants participated in a serial mediation, cross-sectional study. The results support the indirect effect of meaningful work on CWB, via job satisfaction and organizational commitment. We conclude that meaningful work is an important factor that is capable of deterring CWB by triggering relevant job attitudes.

### Keywords

meaningful work, counter-productive work behaviors, serial mediation

Counterproductive work behaviors (CWB) consist of volitional acts that harm or intend to harm organizations and their stakeholders (Spector & Fox, 2002). CWB is rather prevalent in the workplace, and a plethora of studies have found that employees' CWB negatively impacts companies, colleagues and clients alike (e.g., Tepper et al., 2017; Howard et al., 2020). Counterproductive work behaviors serve as an umbrella term encompassing a cluster of ever-expanding

harmful behaviors at work, such as aggression, transgression, or retaliation (Spector and Fox, 2010). Any behavior that can or might cause harm to others or the organization is deemed as a counterproductive behavior (Sackett, 2002; Spector and Fox, 2002). More insidious examples include employees chatting on social media during work hours, complaining about leaders and the company, job hopping, and corruption (Wang et al., 2020).

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More extreme examples of CWBs include huge scandals such as the Facebook–Cambridge Analytica data scandal (Wong, 2019) or the Siemens scandal (Venard, 2018), culminating in extensive fines and other repercussions (Davies & Rushe, 2019). Despite its prevalence and impact, a growing number of studies point out that CWBs are not exclusively perpetrated by ill intended, unprincipled individuals (Bandura, 2016; Moore & Gino, 2013; Newman et al., 2020), instead, evidence reveals how under certain conditions, employees with no precedent whatsoever in this regard can also engage in CWBs (Bandura, 2016; Moore & Gino, 2013; Newman et al., 2020; Welsh et al., 2020; Xi et al., 2021).

Although CWB are one of the three major sub-domains of job performance (e.g., Sackett & Lievens, 2008) and while the cumulative evidence with regard to key social and psychological processes that explain the adoption and manifestation of counterproductive work behavior continues to grow (Belschak et al., 2018; Chugh & Kern, 2016; Welsh et al., 2015), much less is known about the individual or contextual factors that might prevent engagement in CWBs.

One promising concept which can act as a deterrent for counterproductive work behavior is meaningful work, a concept defined by Pratt and Ashforth (2003) as work that is personally significant and worthwhile. Steger and colleagues (2012) proposed a three-dimensional model of meaningful work that comprises (1) positive meaning in work, (2) meaning making, and (3) greater good. Positive meaning is the subjective experience that what one is doing has personal significance. Meaning making is the experience that work attributes to meaning in life as a whole. Greater good is the desire to make a positive impact on others. The concept is treated from a subjective experience perspective.

A slew of research published recently has shown that employees who consider their work to be meaningful are more productive, more satisfied and they're less likely to leave the organization (Allan et al., 2019; Bailey, Yeoman, et al., 2018) and they are also healthier, happier, more resistant to stressful situations, and have a purpose in life (Robertson et al., 2019).

While a number of studies that investigate the link between meaningful work and job performance have been published (e.g., Lam et al., 2016; Shockley et al., 2016), the focus of the studies has been split between three main types of performance, namely self-rated job performance (Allan et al., 2016; Harris et al., 2007), organizational citizenship behaviors (Lam et al., 2016; Steger et al., 2012), and withdrawal intentions (Arnoux-Nicolas et al., 2016).

In a meta-analysis conducted by Allan and colleagues (2019) that utilized meta-analytic structural equation modelling (MASEM), meaningful work has been shown to predict, via a mediated model, a variety of proximal and distal outcomes. The best MASEM fitting model identified in the study was the one in which meaningful work predicted work engagement, organizational commitment, and job satisfaction and these variables, subsequently predicted self-rated performance, organizational citizenship behaviors, and withdrawal intentions (Allan et al., 2019).

Of particular interest for the present study is the fact that the above-mentioned study's findings highlight the indirect effects that stem from meaningful and impact withdrawal intentions, a subtype of counterproductive work behaviors (Carpenter & Berry, 2017). The MASEM pathways from meaningful work to withdrawal intentions were significant via work engagement (95% CI [0.5, 0.10]), job satisfaction (95% CI [-0.46, -0.41]), and organizational commitment (95% CI [-0.10, -0.05]).

The conceptual model which can best integrate and explain these findings is currently The Theory of Purposeful Work Behavior (Barrick, Mount, & Li, 2013) that outlines a framework which encompasses both antecedents and outcomes of meaningful work. The theory postulates that the experience of meaningful work is generated by the interaction between purposeful goal strivings (which themselves stem from the individual level of personality traits) and task and social job characteristics, and that this experienced meaningfulness is able, in turn, to influence a myriad of work outcomes, among which counterproductive work behaviors is explicitly mentioned. Unfortunately, the

theory does not advance specific testable hypotheses on the potential mechanism that link meaningful work to counterproductive work behaviors and simply specifies task-specific motivation processes (namely, self-efficacy, action goals, expectations) as mediating factors between meaningful work and job satisfaction and performance. This proposed mechanism currently lacks the empirical support needed to validate this part of the theory and the conceptual and measurement ambiguity of the explicitly proposed factors hinders research efforts.

Thus, in order to better integrate the available theory with the available empirical findings, we propose an alternative mechanism through which meaningful work impacts counterproductive work behaviors based on Allan and colleagues' (2019) meta-analytical findings and, in order to broaden the scope of these results we also test this link while taking into account a broader conceptualization of counterproductive work behaviors which includes withdrawal as well as employer-oriented sabotage, verbal abuse towards colleagues, and theft (Spector et al., 2010).

Building on the rationale above, this study analyses the relationship between meaningful work and counterproductive work behaviors, using job satisfaction and organizational commitment as mediators for this association due to these constructs having been found to act as proximal outcomes of meaningful work that in turn predict different types of work performance, including withdrawal, a subtype of counterproductive work behavior (Allan et al., 2019).

Job satisfaction is defined as the extent to which people like (or dislike) their jobs (Spector, 1997) while organizational commitment is defined as the employee's acceptance of organizational goals and values, willingness to exert effort on behalf of the organization, and desire to maintain membership in the organization (Meyer et al., 2002). We propose that job satisfaction and organizational commitment could mediate the relationship between meaningful work and counterproductive work behaviors (see Figure 1) because these two variables have

been shown to act as mediators between meaningful work and other performance related constructs and as they are known to be negatively related to counterproductive work behaviors (Allan et al., 2019; Meyer et al., 2002; Scott & Lewis, 2017).

With regards to the directionality of the mediating relationships, we propose that, in our model, job satisfaction predicts organizational commitment and not the other way around. This is due to the conceptualization of meaningful work that emphasizes the subjective value of and importance to oneself of one's work which seems more closely linked, from a conceptual standpoint, to job satisfaction since this attitude is formed based on characteristics that have a more direct, unmitigated impact on one's perception of one's work. In comparison acceptance of organizational goals and values and willingness to exert effort on behalf of one's employer seem to us to be more distal effects of meaningful work as meaningful work has been shown to lead to job satisfaction even in the absence of organizational commitment (Steger et al., 2012).

That being said, while research on the causal relationship between job satisfaction and organizational commitment does not seem to have reached consensus, with studies pointing to job satisfaction predicting organizational commitment, to organizational commitment predicting job satisfaction and, to the two constructs reciprocally influencing each other (e.g., Vandenberg and Lance, 1992; Curry et al., 1986; Currivan, 1999; Huang & Hsiao, 2007), the cumulative evidence does point towards the conclusion that the two constructs are highly correlated with each other, yet conceptually distinct (Woznyj et al., 2022). This leads us to believe that in order to establish which of these two constructs predicts the other, it is more important to consider the theoretical nature of the relationships included in the study, which in our case point toward job satisfaction being the predictor of organizational commitment and not vice versa.

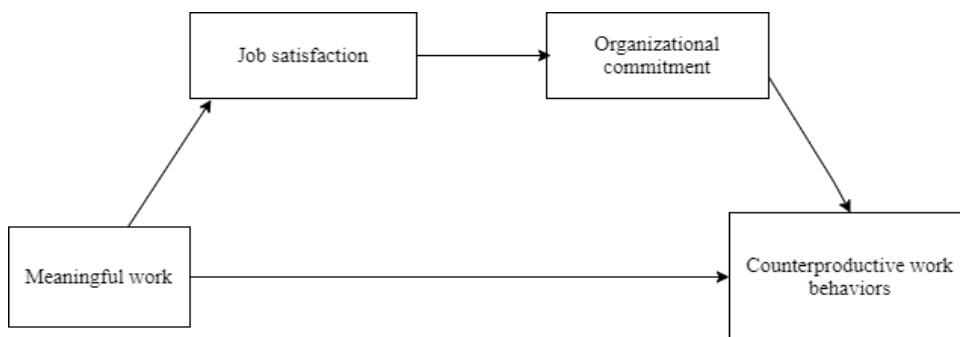


Figure 1. Hypothesized theoretical model

Therefore, we expect that employees who experience higher levels of meaningful work are more likely to also experience job satisfaction and organizational commitment which, in turn, will negatively impact counterproductive work behaviors:

*Hypothesis 1:* Meaningful work is negatively related to counterproductive work behaviors.

*Hypothesis 2:* The relationship between meaningful work and counterproductive work behaviors is serial mediated by job satisfaction and organizational commitment.

## Method

### Procedure and participants

A convenience sampling method was used for this study. The instruments were shared on Facebook and LinkedIn groups through an online questionnaire. The questionnaire also contained a GDPR statement which informed the respondents of their data protection. Those who completed the questionnaire didn't receive any financial compensation but they had the possibility to learn more about the research. The sample comprised 237 respondents from Romania, of whom 187 were females (78.9%), with a mean age of 38.9, ranging from 21 to 62 years. The majority of the participants reported having obtained an academic degree (64.5%), with 28.6% reporting to have graduated high school, and 6.9% reporting to have graduated technical or vocational colleges. 72.9% of the respondents indicated that they work for a privately owned organization, while 21.5% indicated that they work for a governmental institution, and 5.48% indicated working for

both. A large variety of industries are represented in our sample, such as IT, Health services, Public administration, Marketing, Construction, Energy production and distribution, Banking, Mass Media, NGOs, Education and eCommerce.

### Measures

Meaningful work was assessed using *The Work and Meaning Inventory (WAMI;* Steger et al., 2012). The inventory is composed of three subscales measuring Positive Meaning (e.g., "I have found a meaningful career"), Meaning-Making through Work (e.g., "My work helps me better understand myself"), and Greater Good Motivations (e.g., "The work I do serves a greater purpose"), totaling 10 items which are rated on a 5-point Likert scale ranging from 1 (Strongly disagree) to 5 (Strongly agree).

Job satisfaction was assessed using the three-item *Job satisfaction- Subscale from the Michigan Organizational Assessment Questionnaire* (Tepper, 2000). A sample item was "All in all, I am satisfied with my job". The items are rated on a 7-point Likert scale ranging from 1 (Strongly disagree) to 7 (Strongly agree).

Organizational commitment was assessed using the 9-item scale of *Organizational Commitment* (Cook & Wall, 1980). The scale contains items such as: "I feel myself to be part of the organization" and "The offer of a bit more money with another employer would not seriously make me think of changing my job". The items are rated on a 5-point Likert scale ranging from 1 (Strongly disagree) to 5 (Strongly agree).

Counterproductive work behaviors were assessed using the *Counterproductive Work Behavior Checklist (CWB-C; Spector et al., 2010)*. The scale consists of 10 items (e.g., “Told people outside the job what a lousy place you work for”, “Insulted or made fun of someone at work”). The items are rated on a 5-point Likert scale ranging from 1 (Never) to 5 (Everyday).

**Data analysis**

SPSS, version 23, was used for the data analysis, and the serial mediation model was tested with the PROCESS add-on, model 6 (Hayes, 2017). The PROCESS add-on is a statistical instrument based on OLS (*Ordinary Least Squares*) regression. It is used to estimate the direct and indirect effects in mediation models, single or multiple way interactions in moderation models, and for indirect conditional estimate effects in mediated moderations with one or more mediators or moderators (*PROCESS Macro for SPSS and SAS, 2021*). The indirect effect was tested through the bootstrap method, with a 95% confidence interval.

**Results**

**Preliminary data analysis**

We calculated the Mahalanobis, Cooks, and Leverage distance values to check for outliers in our data (Field, 2018) and we excluded 14 cases, thus resulting a final sample of 223 participants. After that, we ran a correlation analysis between the variables and then we

analyzed the tolerance level and the VIF (Variance Inflation Factor) because there were certain correlations bigger than  $r > .30$ . The tolerance level declared values smaller than the threshold value of .70 but a value of  $VIF < 10$  signaled that there wasn’t any significant collinearity between the variables included in the study (Field, 2018). We attribute the low tolerance level obtained on the fact that job satisfaction and organizational commitment have been shown to correlate strongly which each other (Woznyj et al., 2022).

**Descriptive statistics and correlations**

Table 1 presents the mean, standard deviation, and correlations between the 4 variables. Meaningful work significantly correlated with both job satisfaction ( $r = .57$ ) and organizational commitment ( $r = .61$ ). The correlation between meaningful work and counterproductive work behaviors ( $r = -.17$ ) provides support for our first hypothesis, which proposed that meaningful work is negatively associated with counterproductive work behaviors. The biggest positive correlation is between job satisfaction and organizational commitment ( $r = .71$ ), followed by the correlation between meaningful work and organizational commitment ( $r = .61$ ). Both job satisfaction and organizational commitment were negatively correlated with counterproductive work behaviors at highly similar coefficients ( $r = -.35$ ). All the correlations are significant at  $p < .01$ , namely  $p < .001$ .

Table 1. *Descriptive statistics and correlations*

Variables	M	SD	1	2	3	4	5	6
1. Age	38.9	12.48	-	-	-	-	-	-
2. Gender	1.79	0.41	.12	-	-	-	-	-
3. Meaningful work	38.26	9.02	-.04	.01	(.93)	-	-	-
4. Job satisfaction	12.11	2.488	.01	-.01	.572**	(.74)	-	-
5. Organizational commitment	32.96	6.667	.03	.03	.617**	.715**	(.80)	-
6. Counterproductive work behaviors	17.36	4.490	-.09	-.01	-.172*	-.354**	-.359**	(.79)

Notes: Gender was encoded 1 for male, 2 for female; scale reliabilities on the diagonal. \* $p < .01$ ; \*\* $p < .001$ , N = 223

The serial mediation results show that the total indirect effect of MW on CWB is supported by the data. Subsequently, both job satisfaction ( $b_1 = -.43, t = -2.55, p < .05$ ) and organizational commitment are negatively related to CWB ( $b_2 = -.18, t = -2.87, p < .001$ ).

We have used the PROCESS add-on (version 3.4) to test the serial mediation

(Hayes, 2013) and model 6 for serial mediation. Figure 2 presents the mediation model in which meaningful work influences counterproductive work behaviors through 4 paths ( $a_1b_1, a_2b_2, a_1d_2b_2, c'$ ). The arrows indicate the model's path and  $a_1, a_2, b_1, b_2, d_21, c,$  and  $c'$  are the path's coefficients.

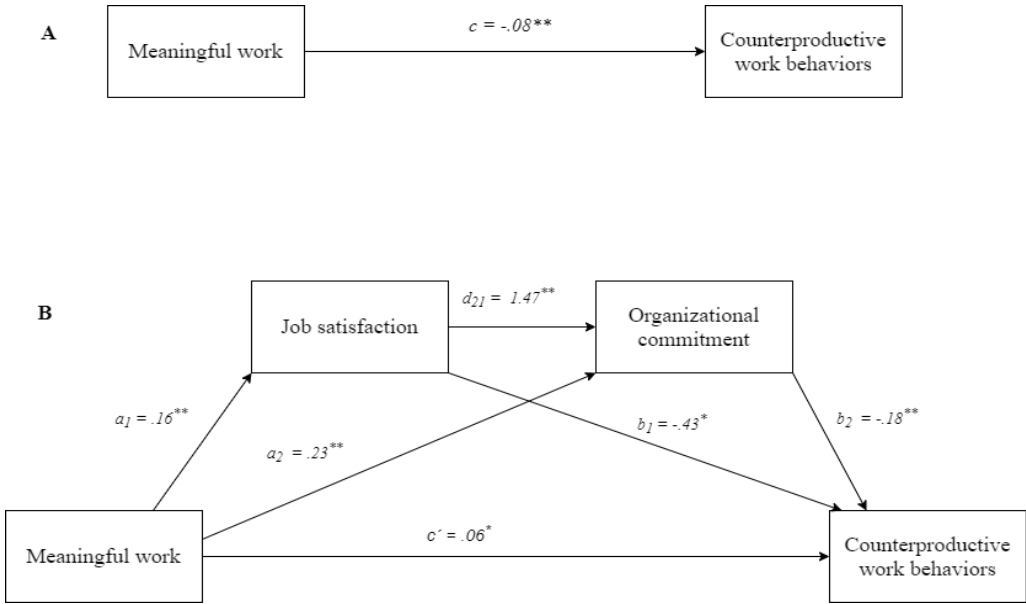


Figure 2. The statistical diagram of the serial mediation model,  $^{**}p < .001, ^*p < .05$

Figure 2A presents the total effect of meaningful work on counterproductive work behaviors (path  $c$ ), without the mediators, meaningful work having a significant effect on the dependent variable ( $c = -.08, p < .001$ ). In Figure 2B, the direct effect (path  $c'$ ) is  $.06$  ( $p < .05$ ) when the mediators are added. This means the total indirect effect of MW on counterproductive work behaviors, through job satisfaction and organizational commitment, is significant, resulting in a partial mediation. As displayed in Table 2, the 95% bias-corrected confidence interval produced by the PROCESS Macro, based on 5000 bootstraps; confirms that the total indirect effect is negative and significant ( $-.14$ ). The first indirect effect, MW on counterproductive work behaviors, through

job satisfaction ( $X \rightarrow M1 \rightarrow Y$ ),  $a_1b_1 = -.07$  is negative and significant (CI 95% between  $-.12$  and  $-.02$ ), and the second indirect effect, meaningful work on counterproductive work behaviors, through organizational commitment ( $X \rightarrow M2 \rightarrow Y$ ),  $a_2b_2 = -.04$  is negative and significant (CI 95% between  $-.07$  and  $-.01$ ). The third indirect effect ( $X \rightarrow M1 \rightarrow M2 \rightarrow Y$ ), estimated as  $a_1d_21b_2 = -.01$  is also negative and significant.

Thus, the data analysis results support an indirect effect of meaningful work on counterproductive work behaviors, with job satisfaction and organizational commitment as serial mediators. Table 2 presents the values of the total, direct and indirect effects.

Table 2. Total effect, direct and indirect effect of meaningful work on the dependent variable through the mediators

<i>Effect</i>	<i>Point estimate</i>	<i>SE</i>	<i>t</i>	<i>p</i>	<i>Lower</i>	<i>Upper</i>
<i>Total effect</i>	-.085	.033	-2.589	.010**	-.150	-.020
<i>Direct effect</i>	.064	.040	1.601	.110*	-.014	.114
<i>Total indirect effect</i>	-.149	.029			-.209	-.096
<i>Indirect effect</i> (X → M1 → Y)	-.066	.026			-.119	-.016
<i>Indirect effect</i> (X → M2 → Y)	-.041	.015			-.075	-.015
<i>Indirect effect</i> (X → M1 → M2 → Y)	-.041	.014			-.074	-.015

Note: \**p* < .05, \*\**p* < .01

## Discussion

The aim of this study is twofold. First, we were interested in advancing the literature on meaningful work and expanding the Theory of Purposeful Work Behavior (Barrick et al., 2013) by testing a potential mechanism through which meaningful work can predict valuable outcomes for organizations, namely counterproductive work behaviors. Second, we answer a call for more research on preventing counterproductive work behavior (Fida et al., 2021), a set of behaviors which are widespread and which lead to serious consequences for organizations across the globe.

We investigated a potential relationship between meaningful work and counterproductive work behaviors, two constructs that have not, to our knowledge, been linked in the literature to date, and we proposed a mechanism through which meaningful work can have an indirect effect on counterproductive work behaviors, by suggesting that job satisfaction and organizational commitment could act as serial mediators and proximal attitudes that have a deterring effect on counterproductive work behaviors (Judge et al., 2006).

Overall, our findings show support for the negative association between meaningful work and counterproductive work behaviors, and also supported the serial mediation proposed. Meaningful work was strongly

related to both job satisfaction and organizational commitment, which is consistent with what we know from the literature (see Allan et al., 2019; Fairlie, 2011; Jiang & Johnson, 2017) and it was also negatively related, both directly and indirectly, with counterproductive work behaviors.

A potential explanation for the relationship between meaningful work and counterproductive work behaviors might be traced to the scientific literature on illegitimate tasks (Zhao et al., 2022). Illegitimate tasks are perceived as unnecessary or unreasonable work assignments that violate what can reasonably be expected of a given employee (Zhou et al., 2018; Semmer et al., 2007; Semmer et al., 2015). This type of task has been consistently shown to robustly predict counterproductive work behaviors (Zhao et al., 2022; Zhou et al., 2018) and they have also been identified in previous research as contributing to the experience of meaningless work, which can be defined as the subjective experience of perceiving one’s work as being pointless, unfulfilling and worthless (Bailey & Madden, 2016).

Since illegitimate tasks are of unreasonable and unnecessary tasks which one might perceive as meaningless work, and since this type of task can be perceived by an employee as threatening to one’s professional identity and perception of respect at work (Semmer et al., 2010) it is of no surprise that

they have also been classified by researchers as a particular case of injustice (Meier & Semmer, 2018; Semmer et al., 2010, 2015). Thus, an employee might blame their employer for being unfairly assigned tasks that are unreasonable, beyond the scope of their work and unnecessary leading to perceptions of unfairness and ultimately, to counterproductive work behaviors (Zhou et al., 2018).

Therefore, it would be reasonable to expect that having the perception of one's work as being meaningful might deter counterproductive work behaviors as, the latter is a facilitator of attitudes such as job satisfaction and organizational commitment which are responsible for desirable outcomes such as organizational citizenship behaviors (Allan et al., 2019) and as meaningful work has been consistently liked with task significance, which is defined as the degree to which employees perceive their work as significantly impacting other people and which is a desirable characteristic of one's work (Allan et al., 2017).

### **Theoretical and practical implications**

Based on the Theory of Purposeful Work Behavior (Barrick, Mount, & Li, 2013), this study makes a relevant theoretical contribution by providing empirical inquiry and support for a part of the theory which is considerably less defined, namely the processes through which meaningful work impacts work outcomes and by proposing a path through which meaningful work can reduce the occurrence of counterproductive work behaviors, thereby also contributing to the sparse literature on factors that help prevent counterproductive work behaviors. While there are a number of previous studies that have focused on the relationship between meaningful work and withdrawal behaviors (see Allen et al., 2019), and while withdrawal has been identified as being a subset of counterproductive work behaviors (Carpenter & Berry, 2017), no other study to date has expanded the investigation to other concepts that are also part of the counterproductive work behaviors construct. Notably, our study has adopted a broader definition of

counterproductive work behaviors which encompasses abuse toward others, production deviance, sabotage and theft (Spector et al., 2006).

From a practical standpoint, our study highlights multiple beneficial effects that meaningful work has in the workplace, namely its impact in preventing counterproductive work behaviors to its positive effect on job satisfaction and organizational commitment. As counterproductive work behaviors have been shown to be highly damaging for both organizations and employees alike, the importance of identifying and implementing measures aimed at deterring employees from exhibiting such behaviors is paramount.

Fortunately, research on factors that promote meaningful work provides many recommendations that organizations can draw from and apply in the workplace (Lysova et al., 2019) and successful interventions aimed at promoting meaningful work have also been researched (Fletcher & Schofield, 2021). Some of the science-backed recommended solutions that employers and practitioners in the field of work and organizational psychology can successfully implement to bolster meaningful work are: (a) developing HR practices that are focused on the engagement and development of the employee (upskilling and reskilling programs, career mentorship, effective, extensive and enjoyable socialization programs, etc.), (b) communicating the organizational mission, (c) promoting ethical leadership, (d) implementing job crafting opportunities and job co-design processes (processes in which both the employee and their manager have the opportunity to define the scope of the given role), (e) working in safe and fair conditions and many others (Lysova et al., 2019).

### **Limitations and future research directions**

Several limitations of the current study could be addressed in future research. The first limitation is that we used a cross-sectional design, which does not allow us to infer causality between the variables measured. This means that future studies should use a longitudinal, experimental, or quasi-experimental design to establish a better

casualty between these variables. Secondly, the use of self-reported questionnaires implies that our data may include the risk of common variance bias (Podsakoff et al., 2003) and other response biases such as socially desirable responding. In our defense, Conway and Lance (2010) consider that self-report measurements are the only way to measure subjective feelings and emotions, such as the meaningfulness of one's work. Additionally, we collected no identification data from our respondents and we explicitly communicated that we are in no way associated with any employer for which our participants might be working and we hope that this decreased a potential inclination to respond favorably to the questionnaire.

Another limitation of the study is that we used a convenience sample via online social media platforms. Future studies should use a randomized sample, as well as a much bigger sample, that is more representative of the general population.

Finally, future studies may want to further expand the number of concepts that fall under the conceptual umbrella of counterproductive work behaviors and include, for instance, cyberloafing and cyberslacking (Tandon et al., 2022) which, although are subtypes of counterproductive work behavior, they were not taken into consideration in this study or focus more on highlighting the impact of meaningful work on individual subtypes of counterproductive work behaviors (such as abuse, theft or production deviance) rather than a general unidimensional approach of the construct.

### Conclusions

Our study contributes to the understanding of meaningful work by outlining and providing support for a mechanism through which it can negatively impact counterproductive work behaviors, namely by highlighting the role of job satisfaction and organizational commitment as serial mediators, adding to the slew of beneficial outcomes which can be significantly influenced by employees' perception of their work as being meaningful. The implications of our results are both theoretical and practical: first, because they

provide empirical support for the part of the Theory of Purposeful Work Behavior that details meaningful work's impact on work outcomes and second by drawing attention to yet another benefit that fostering meaningful work can bring to an organization.

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