

# The Relationship Between Performance and Well-Being at Work: a Systematic Review of 20 Years and Future Perspectives in Brazil

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## Abstract

The pursuit of high levels of performance and well-being at work is a shared goal in societies nowadays. The happy-productive worker thesis (HPWT) proposes a positive relationship, where “happy” workers will perform better than “unhappy” workers. However, other relationships found in the literature have encouraged a revision of this thesis. This systematic review aims to understand better how the relationship between performance and well-being has been analyzed in Brazil during the last 20 years. Results obtained with the review of 26 studies, revealed that most of them reported a synergic or positive and unidirectional relationship consistent with the HPWT. However, we also found support for null and antagonist relationships and differences in the types of operationalizations studied. We discuss that this area of study should adopt a broader perspective to understand the complexity of the relationships between both constructs, and we propose future research directions.

**Keywords:** job performance, well-being, happy-productive worker thesis, job satisfaction.

## A Relação entre Desempenho e Bem-Estar no Trabalho: uma Revisão Sistemática de 20 anos e Perspectivas Futuras

### Resumo

A busca de altos níveis de desempenho e bem-estar no trabalho é um objetivo comum nas sociedades atuais. A tese do trabalhador feliz-productivo (HPWT) propõe uma relação positiva, onde trabalhadores “felizes” terão um desempenho melhor do que trabalhadores “infelizes”. No entanto, outras relações encontradas na literatura têm incentivado a revisão desta tese. Esta revisão sistemática visa entender melhor como a relação entre desempenho e bem-estar tem sido analisada no Brasil durante os últimos 20 anos. Os resultados obtidos com a revisão de 26 estudos, revelaram que a maioria deles relatou uma relação sinérgica, positiva e unidirecional consistente com o HPWT. Entretanto, também encontramos apoio para relações nulas e antagônicas e diferenças nos tipos de operacionalizações estudadas. Discutimos que esta área de estudo deveria adotar uma perspectiva mais ampla para entender a complexidade das relações entre os dois constructos, e propomos direções de pesquisa futuras.

**Palavras-chave:** desempenho no trabalho, bem-estar, tese do trabalhador feliz-productivo, satisfação no trabalho.

## La Relación entre Desempeño y Bienestar en el Trabajo: una Revisión Sistemática de 20 años y Perspectivas Futuras

### Resumen

La búsqueda de altos niveles de desempeño y bienestar en el trabajo es un objetivo compartido en las sociedades actuales, por lo que entender las relaciones entre esos constructos es clave en la investigación laboral. La tesis del trabajador feliz y productivo (HPWT) propone una relación positiva entre ellos, en que los trabajadores “felices” presentarán un mejor desempeño que los “infelices”. Sin embargo, otras relaciones encontradas en la literatura han estimulado la revisión de esa tesis. Esta revisión sistemática tiene como objetivo comprender mejor cómo se ha analizado la relación entre el desempeño y el bienestar en Brasil durante los últimos 20 años. Los resultados obtenidos con la revisión de 26 estudios revelaron que la mayoría reportó una relación sinérgica, positiva y unidireccional consistente con la HPWT. Además, se encontró apoyo a la existencia de relaciones nulas y antagónicas, y diferencias en los tipos de operacionalización de los constructos. Se concluye que esta área de estudio debería adoptar una perspectiva más amplia para comprender la complejidad de las relaciones entre los dos constructos y se proponen caminos para la investigación futura.

**Palabras clave:** desempeño en el trabajo, bienestar, tesis del trabajador feliz-productivo, satisfacción en el trabajo.

The promotion of well-being and performance can be considered an important goal for individuals, organizations, and societies. The formulation of the 2030 agenda for sustainable development goals reinforces this idea by emphasizing the equity between social and economic goals as one of the main foundations of sustainable development (UN, 2015). The study of this relationship is also present from its inception in the field of work and organizational psychology, in which the relevance of matching organizational goals and worker's goals and development has been often highlighted (Peeters et al., 2014; Zanelli et al., 2014). Thus, the simultaneous study of both constructs, their interrelations, and the conditions that favor them become central in work and organizational psychology.

In general terms, research assumes a positive relationship between both constructs that has been often summarized as the "happy-and-productive worker" thesis. According to this theory, happy workers perform better in comparison to unhappy ones (Staw, 1986; Warr & Nielsen, 2018). This assumption has been considered the Holy Grail in management (Cropanzano & Wright, 2001; Wright & Cropanzano, 2007) and has prevailed during years of research in the field. However, some critical viewpoints challenge the assumption of a synergic relationship between both constructs, proposing that the achievement of one (performance) may be at the expense of the other (well-being) (Furtado, 2012). Moreover, although scholars have identified that people with high levels of well-being have stronger immune systems, are more altruistic, are better decision-makers, have better interpersonal relationships, and are less likely to suffer coronary heart diseases (Cropanzano & Wright, 2001; García-Buades et al., 2020; van Veldhoven & Pececi, 2015; Warr & Nielsen, 2018), organizational researchers have obtained rather disappointing results when aiming to establish robust empirical evidence on the relationships of well-being and performance. Meta-analytical studies have shown weak (around .17), moderate (around .30), and even spurious correlations (Bowling, 2007; Iaffaldano & Muchinsky, 1985; Judge et al., 2001). More importantly, some studies even found negative relationships between well-being and performance (Ayala et al., 2017; Bledow et al., 2013; Baron et al., 2012; Tordera et al., 202).

These somewhat ambiguous and non-consistent results have motivated and challenged researchers to revisit the happy productive worker thesis (e.g., Wright & Cropanzano, 2007; Zelenski et al., 2008). Recent research highlights the need to adopt a broader perspective on the relationships between performance and well-being that emphasizes sustainability as a goal. Thus, sustainable well-being will need the support of performance and vice-versa (Peiró et al., 2014; 2015). This approach points out several challenges to advance research in the area: to consider a comprehensive approach to the operationalization of performance and well-being; to challenge the assumption of a synergic relationship between performance and well-being, and to explore a broader scope of their potential relationships (happy-productive, unhappy-unproductive, unhappy-productive, and happy-unproductive); the study of the organizational and personal factors discriminating between the types of relationships; and the reciprocal relationships between performance and well-being in the long term.

Following these recent criticisms and advancements, four contemporaneous features are especially crucial for reviewing the extant literature on this topic and promoting further advancements to understand better how the relationship between performance and well-being has been analyzed in Brazil during the last 20 years. First, to understand how research is incorporating the two most general well-being frameworks in analyzing the relationships between performance and well-being, i.e., hedonic and eudaimonic,

and their different operationalizations. Similarly, it is necessary to explore how the different operationalization of performance i.e., task, contextual, adaptive performance, or counterproductive behavior have been considered. Second, to face the complexity of those relationships by examining different combinations of those operationalizations (e.g. task performance-hedonic well-being; creative performance-eudaimonic, etc.) Third, to avoid as unique the assumption of the synergetic or positive relationships between the two constructs and explore results where the happy-productive thesis does not fit, for instance, considering negative or null relationships. Finally, reviews on the relationship between performance and well-being have been focused on the Europe-United States axis, neglecting studies carried out in other contexts such as the Brazilian one (Muthukrishna et al., 2020).

Therefore, this study aims to systematically review empirical research on the relationship between well-being and work performance in the Brazilian context attending to the different operationalizations of both constructs, how the combination of these operationalizations has been addressed, and the empirical evidence on the direction of the relationships found. In the next sections, we present the research questions that guide the review. After that, the methodology and results of the review are presented, and then discussed.

### The Operationalization of Well-Being at Work

Psychological well-being at work is a polyhedral construct that includes different dimensions and different levels of analysis. Thus, for instance, Warr (2013) differentiates between affective (e.g., positive affect) or cognitive (e.g., job satisfaction) measures, context-free (e.g., life satisfaction) or domain-specific (e.g., job satisfaction). It refers mainly to the individual's characteristics, but it has also been considered the property of a group (Chan, 2019; García-Buades, 2020).

Two main traditions, rooted in ancient Greek, have prevailed in the psychological literature: the hedonist and the eudaimonic approach (Ryan & Deci, 2001). Hedonic well-being is defined in terms of the achievement of pleasure and the avoidance of pain (Ryan & Deci, 2001) and is considered to be composed of three major components: positive affect, absence of negative affect, and satisfaction (Diener et al., 1999). Eudaimonic well-being has been defined as a person's sense of fulfillment and positive functioning (Ryff, 1989) and is considered to be composed of elements such as purpose in life, personal growth, autonomy, or positive relations with others. The hedonic approach has been the predominant paradigm in the study of well-being at work and has focused mainly on job satisfaction when examining the relationship between performance and well-being (War & Nielsen, 2018).

Thus, one limitation in previous research, mainly when developed in the happy productive worker thesis is the assumption that well-being refers to either job satisfaction, positive affect, or positive moods. One example is the early preeminent study, a classic review of the relationship between job satisfaction and job performance presented by Brayfield and Crockett in 1955. Revisits of the model pointed out the need to pay attention to the affective components of subjective well-being (Wright et al., 2007). These authors argued that the overemphasis on job satisfaction to study well-being, is a viewpoint in management sciences that is unnecessarily limiting, offering two happy-productive theses; one equating well-being to job satisfaction and another to affective well-being (as context-free). These studies reflect the perennial focus to test the happy-productive worker thesis in terms of hedonic but not as eudaimonic happiness (see Ryan & Deci, 2001).

Thus, a broader and richer perspective is needed to ascertain

the complexity of the construct and its relationships with other constructs such as performance at work (Warr, 2013). In this sense, research has recently highlighted the need to integrate the constituent elements of well-being (hedonic and eudaimonic) to achieve sustainable performance and well-being at work (Peiró et al., 2014; Peiró et al., 2019) or simultaneously approach health and happiness, as well as performance, indicators when defining sustainability (De Vos et al., 2020).

Thus, in the present review, we propose to examine the research on the relationship between performance and well-being with the following *first research question*: (1) which are the main operationalizations of well-being when studying the relationships of well-being and performance in Brazil?

### The Operationalization of Performance at Work

As it is the case of well-being, performance has also been acknowledged as a latent construct made up of multiple dimensions that encompasses several aspects (Koopmans et al., 2011). One of the more broadly studied components, task performance, is defined as the level of accomplishment of central job tasks, the fulfillment of role-duties. However, researchers have considered that performance at work is more than task accomplishment and that it should include contextual behaviors, those behaviors that support the organizational, social and psychological environment (Borman & Motowidlo, 1993). Nowadays research is paying greater attention to those behaviors related to the generation of new and useful ideas, procedures and products (creativity) and has also pointed out the need to consider those behaviors that harm the organization and thus, are signs of negative performance (counterproductive behaviors) (Koopmans et al., 2011). However, the research examining the relationship between well-being and performance has been mainly focused on task performance.

Recent research has highlighted the importance of considering different operationalizations of performance to better ascertain its relationship with well-being (Peiró et al., 2014; Peiró et al., 2019; Warr & Nielsen, 2018), arguing that the way constructs are operationalized could partially explain different relationships between them and also shed light on the sustainability of well-being and performance at work. Thus, it is important to decipher the advantages and limitations of the different operationalizations of well-being and performance when studying the relationship of these two constructs.

Thus, our review will also address the following *research question*: (2) What are the main operationalizations of performance when studying the relationships of well-being and performance in Brazil?

### Empirical Evidence on the Relationship Between Performance and Well-Being

Most of the research on the relationships of performance and well-being has assumed a positive unidirectional relationship between both constructs, that is, that people should be either happy and productive or unhappy and unproductive (see, for instance, Lyubomirsky et al., 2005). Previous meta-analysis supports those assumptions but simultaneously shows weak relationships, and some scholars have hypothesized the possibility of a null relationship between well-being in performance. This is the case of the meta-analysis presented by Judge et al. (2001). Specifically, in its model 6 Judge et al. (2001) argue that “authors might be convinced there is no relationship between job satisfaction and job performance” (p. 380). Research has also pointed out that the positive relationship between performance and well-being

is better captured in terms of affect than satisfaction (Zelenski et al., 2008) and has found negative or null relationship when attending certain operationalizations of performance and well-being such as creativity and affect (Baron et al., 2012; Bledow et al., 2013; George & Zhou, 2007). In fact, research reporting negative relations between both constructs has generally explored other facets of well-being or performance such as negative affect and creative performance (Bledow et al., 2013; George & Zhou, 2007) or psychological health (Van de Voorde et al., 2012). Thus, these complexities in the relationships require further study of the specific relationships between different facets of these constructs filling different gaps in previous studies. One important gap is to systematically research both, positive and negative, combinations of the operationalizations of well-being and performance. Given the multifaceted nature of both constructs under review, it is important to ascertain the combinations of well-being and performance that have attracted more attention in the research on their relationships in Brazil. This question, on the one side, reflects the interest of discerning if different types of well-being are expected more frequently to be related to some types of performance. On the other side, when analyzing the empirical results of these relationships, it is important to identify if the signs of the relationship (positive, negative or null -non-significant) are more likely to occur when the relations of given combinations of well-being and performance indicators are studied. Thus, it is important to identify whether or not the negative relations between well-being and performance have been hypothesized and researched in the studies on this matter in Brazil, and if there are results that support alternative relationships.

Thus, the *third research question* under study is: (3) What is the empirical evidence for synergetic, antagonist, or null relationships when different combinations of well-being and performance are studied?

### Methodological Approaches to the Study of Performance and Well-Being

Our review also aims to analyze how research has methodologically addressed the study of such relationships. Thus, we will identify what type of designs and analyses have been employed and to what extent they respond to the hypothesis being formulated. Recent critics to the HPWT have proposed several challenges related to methodological approaches in order to advance this line of research, namely the study of reciprocal relationships, the use of longitudinal designs, and the adoption of a person-centric approach (Peiró et al., 2014; Peiró et al., 2019). We will concentrate on these three aspects. First, we will examine if the research has used cross-sectional or longitudinal designs. The assumption of directionality and causality between both constructs would require longitudinal designs, while cross-sectional research and correlational analysis are to be considered when variables are expected to covariate without assuming a causal relationship between them. Longitudinal research has previously supported, to some extent, the association between performance and well-being (Ricketta, 2008). Second, we will explore if the study of reciprocal relationships has been proposed and explored. Research studying the reciprocal relationships between both constructs has challenged the unidirectionality of that relationship (Alessandri et al., 2017) offering a broader perspective. Third, we will also consider if research is developed adopting a variable-centered or person-centered approach. A person-centric approach has been suggested especially to extend this area of research to the study of individuals that rather show unhappy-productive or happy unproductive profiles or combinations (Peiró et al., 2014;

2015).

Thus, the *fourth research question* is: (4) What type of methodological approaches are employed to study the relationships between well-being and performance in Brazil?

## Method

### Databases and Terms Used

This review followed PRISMA guidelines (Moher et al., 2009) and used three databases: Scielo.br, Pepsic and Redalyc. According to CAPES (Coordenação de Aperfeiçoamento de Pessoal de Nível Superior), these are the databases most used by Brazilian researchers in the humanities and social sciences (Bastos et al., 2017). The operational definition of the constructs well-being and performance was a challenge to the review of literature on this topic (Diener & Seligman, 2004; Koopmans et al., 2011; Ryan & Deci, 2001; Ryff, 1989; Ryff & Keyes, 1995; van Veldhoven & Pececi, 2015). Many of the perceptual measures in psychology can be considered as proximal measures of well-being and performance and could be considered as dimensions or aspects of those constructs. This research focused on the indicators of well-being and performance, rather than on their determinants. The terms used in databases (searched in English and Portuguese) were as follows: “well-being”, “wellbeing”, “well-being at work”, “workplace well-being”, “satisfaction”, “job satisfaction”, “fulfillment at work”, “fulfillment in life”, “occupational health”, “mental health”, “physical health”, “financial health”, “income”, “quality of life at work”, “quality of life”, “burnout”, “negative emotions”, “hedonistic”, “eudaimonic” or “eudaimonia” and “performance”, “task performance”, “productivity”, “organizational citizenship”, “retaliation”, “presenteeism”, “absenteeism”. The term “result” was ruled out as the web search engine displayed any work containing the research result.

### Inclusion and Exclusion Criteria

The inclusion criteria to be considered in the review were as follows: articles should investigate the relationship between well-being and performance at work (considering different operationalizations); articles should be complete works in Portuguese, English, French, or Spanish, with Brazilian samples and have been published between 1998 and 2018. Only empirical studies studying human behavior at work were included. Therefore, reviews, comments, letters, or works suggesting a relationship between one or the other variable but without empirical data were excluded. Articles were not excluded for the year of publication with the range considered in the review, study design, measures employed, characteristics of participants (studies approaching students were included), or sample size.

Additionally, works should include at least one relational element in the analysis. Therefore, studies presenting correlational analyses, regressions, multilevel analyses, among others, were included, while studies presenting just descriptive data of one or both constructs were excluded.

### Research Procedure

The initial database included all works displaying the keywords included in the search. Then, the titles that met the inclusion criteria were selected. When the criterion of the title was obscure, the work was retained, and their abstracts were read. The studies selected based on titles were tracked by the abstract.

If abstracts were compliant with the inclusion criteria, the full text was read. The criterion for retaining the study was that well-being and performance should have been somehow measured, regardless of using objective measures, scale-based self-reports, or by the others' evaluation (e.g., leadership), interviews approaching this content in the script, or upon observation of behavior. Then, not including any approach to well-being or performance, and duplicated works were reasons for exclusion. When databases were poorly described, such as missing the scale reliability, scale amplitude and anchoring, central tendencies of variables to each measure, clarifications were sought from the authors.

Measures or access to well-being and performance, and the relationships presented by them were analyzed. Well-being was categorized as hedonic, eudaimonic, and physical health. The behavioral measures of performance and the organizational one (results- or productivity-oriented) have been considered. Thus, we included actions focusing on tasks, context, creative, counterproductive behaviors, and an overall appraisal when the measure was a composition of factors. The number of papers returned in the search that was not related to human behavior is noticeable. In Portuguese, the use of the word “performance” [desempenho] returned numerous papers associated with “floor performance”, “electronic device performance” or “medication performance”, for example. For the same reason, non-human papers related to well-being were also eliminated, amounting to 57% of papers rejected by the first criteria.

Finally, relationships were categorized as positive (synergic), negative (antagonist), and non-significant (null). Thus, the synergic relationships were those positive relationships between both variables (best well-being best performance); antagonists were the opposite relationships (best well-being worst performance, or vice-versa); null relationships were when relationships were not significant. It is worth mentioning that the number of relationships found was selected instead of the number of studies since many times one single study described more than one relationship between well-being and performance. We summarized the findings describing the general characteristics of the research in order to answer every research question.

## Results<sup>1</sup>

Figure 1 discloses a diagram of the survey systematization. The research of the terms resulted in 1,454 studies.

Of the studies retained, 204 abstracts were read (excluding the duplicates). From them, only 26 publications, reporting 26 studies were included in the final version of this systematic review. Most of them were from the Scielo.br ( $N=20$ ) database, and the remaining were from the Redalyc ( $N=5$ ) and Pepsic ( $N=2$ ) databases.

### Characteristics of the Studies

Studies dated from 1998 to 2018, the mode was 2015 with 5 articles. The mean number of participants was 9,889 (median=270) with huge variation, ranging from 5 to 232,308 participants. No study used retrospective/review of analysis. Civil servants prevailed ( $N=5$  studies), followed by education professionals ( $N=4$ ), students ( $N=4$ ), and nurses ( $N=3$ ). Two works approached university students (medicine and nutrition courses students). As pointed out, the 26 studies showed a wide range of relationships, distributed in different ways among the studies, ranging from 1 to 21 relationships. The research found a total of 81 relationships between well-being and performance.

<sup>1</sup> Supplemental material associated with this article is available in Portuguese with the manuscript on the rPOT website

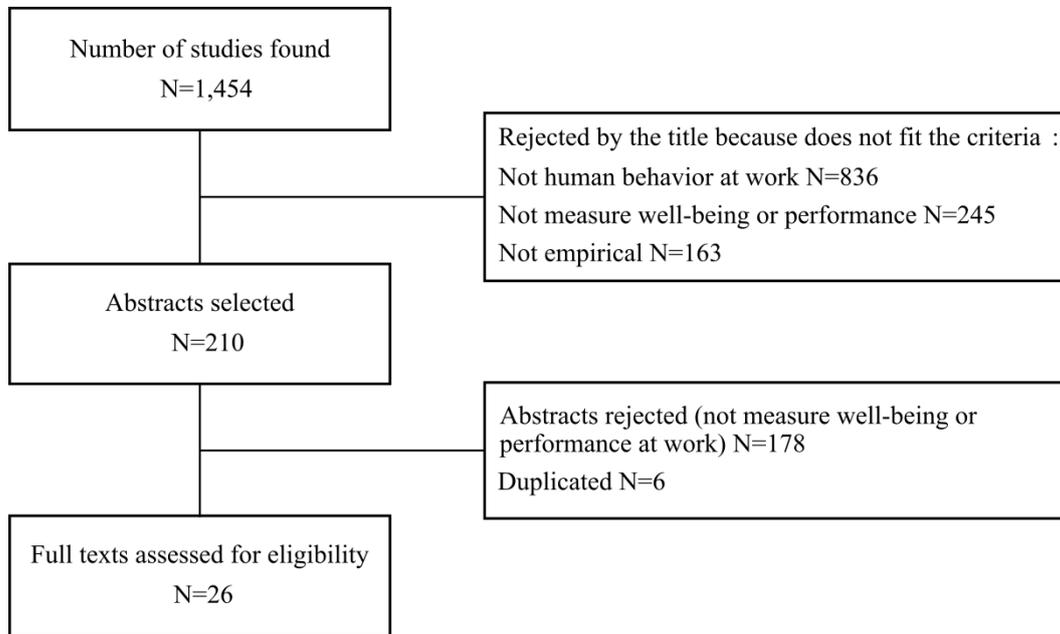


Figure 1. Diagram of the survey systematization. Note: The figure discloses the systematization and number of studies found in the search in the years 1998 and 2018. Altogether, 26 empirical studies describing the relationships between well-being and performance were found. The 20-year span is because, in 2020, journals dating from 2019 were published.

In geographic terms, studies were mainly developed in Rio Grande do Sul (N=6), the Federal District (N=5), and Sao Paulo (N=4). Data sources could not be identified in some studies, and two were of national reach. In terms of design, all the studies were cross-sectional (N=26). Most studies used single-source questionnaires (N=23), while the others were qualitative (case studies, interviews, and focal group). As regards the language, Portuguese was the prevailing language (N=22), followed by English (N=4). No study in Spanish or French was found. The journal that published most studies about the relationship between well-being and performance was the *Revista de Administração Contemporânea* (RAC, N=3), followed by the *Revista Brasileira de Enfermagem* (RBE; N=2), and the *Revista de Psicologia Organizacional e do Trabalho* (rPOT, N = 2).

**Research Question 1: What are the main operationalizations of well-being when studying the relationships of well-being and performance in Brazil?**

Regarding well-being, as is the case in the international literature, the construct was measured at the individual level of analysis. Most of the relationships used job satisfaction indicators thus, with a cognitive-attitudinal approach (N=50 relationships)

(Coelho Junior & Faiad, 2012; Martins & Santos, 2006; Siqueira, 2008), followed by using Tatiana Paschoal’s measure of well-being at work (N=9 relationships) (Paschoal & Tamayo, 2008), in its three dimensions (positive affect, negative affect, and fulfillment). The other relationships used different approaches to well-being such as quality of life, mental health, burnout, workplace safety (i.e., psychological safety). Some unusual measures were related to poor physical health, such as frequency and intensity of pain and frequency of medication use (Cassandre, 2011; Vincent et al., 1998).

As shown in Figure 2, most of the relationships consider well-being from a hedonist approach (e.g., job satisfaction dimensions, burnout N=64). It is noteworthy that a high percentage of them referred to satisfaction with income (N=18). In general terms hedonic well-being is measured in positive terms as satisfaction or positive affect (N=56). Some measured the absence of well-being in negative hedonist terms (N=7). To a lesser extent, some eudaimonic operationalizations were considered (e.g., fulfillment at work; N=13) (Ryan & Deci, 2001; Seligman, 2004, 2011), and only a few focused on physical or mental health (N=5).

The results show that before 2010 only a limited number of studies dealt with the study of the relationships between well-being

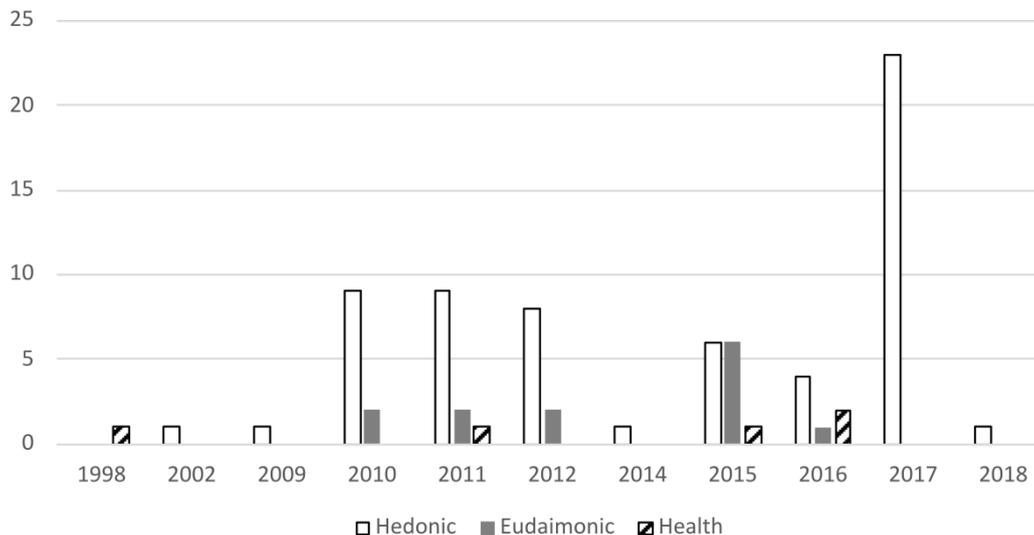


Figure 2. Descriptive by category of well-being organized by date. Note: The figure describes the number of studies per year by the typology of well-being. The time span described discloses an increasing number of works testing the topic in absolute values (N=81 relations).

and performance. A minimal number of studies are developed mainly focusing on hedonic well-being. The interest in the topic seems to increase after 2010, showing the highest peak in 2017. The main interest is still focused on the hedonic perspectives to well-being, but the study of these relationships is also approached from the eudaimonic perspective, although it does not seem a consolidated research line. There is even more limited interest in studying the relationships with health which seldomly appears during the period studied.

### Research Question 2: What are the main operationalizations of performance when studying the relationships of well-being and performance in Brazil?

Generally, research has considered performance at the individual level ( $N=78$  relationships) and has been conducted in the last decade. However, some studies consider organizational or group level productivity (organizational financial return; hospital-related incidents; the number of accidents at work; or grade in the CAPES program assessment) ( $N=3$  relationships). The most common measures were task performance ( $N=38$ ) followed by contextual ( $N=31$ ), creativity ( $N=6$ ), counterproductive behaviors ( $N=3$ ), and overall performance ( $N=3$ ). Task-related measures ranged from objective measures (sale value; academic performance; the number of inseminations of cows) – to self-reported measures of task-performance.

The contextual performance measures consisted of qualitative self-reporting of performance with coworkers, measures of the performance social climate, and organizational citizenship behavior (Porto & Tamayo, 2003). The creative performance was figured in self-reporting of creative performance, or troubleshooting. It is worth mentioning that creativity and troubleshooting of instruments are more strongly focused on adaptation to context than on excellence of work and, therefore, they were self-reporting measures.

Counterproductive behaviors comprise presenteeism and some work-related accidents. Only one study used standardized measures of the area of People Management as a measure of overall performance (Coelho Junior & Borges-Andrade, 2011). Finally, overall performance is found in the qualitative studies and includes measures not identified with any of the other categories due to lack of data in the study description.

Figure 3 presents a description of the performance categories considered and reviewed in the studies from 1998 to 2018.

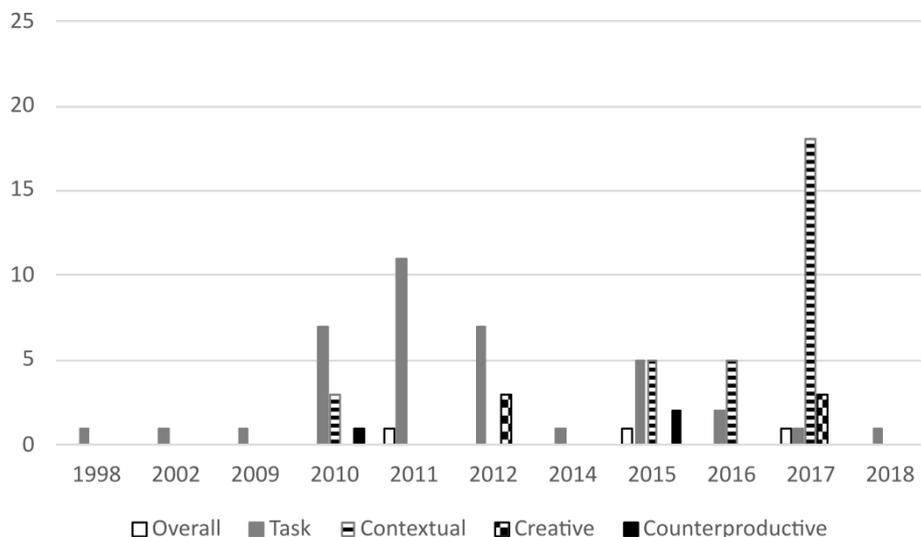


Figure 3. Descriptive by category of performance organized by date. Notes: The figure describes the number of studies per year by the typology of performance. The time span described discloses an increasing number of works testing the topic in absolute values ( $N=81$  relations). In the end, they computed different typologies.

### Research Question 3: What is the empirical evidence for synergistic, antagonist, or null relationships when different combinations of well-being and performance are studied?

Table 1 shows a 3-level distribution indicating the resulting combinations between the constructs and the types of relationships identified. The first level is by the type of relationship found (Positive; Negative; Null); the second one the type of performance; and, the third one the type of well-being. Task and contextual performance appear more often combined with hedonic approaches to well-being (job satisfaction and affect). Taken altogether, the majority of the analyses suggests a synergistic relationship between well-being and performance ( $N=50$ ) relationships; simple average correlation between all relationships when it was described, also, when the variable was negative, the sign was inverted ( $r=-.20$ ); weighted average correlation based on sample size ( $r=.38$ ), while others report a null relationship between well-being and performance ( $N=28$ ); and few analyses presented an antagonist relationship between well-being and performance ( $N=3$ ).

More diversity in the sign of the relationships is identified when hedonic well-being and health are considered. Those operationalizations presented the three types of relationships with different performance indicators: synergistic, null, and antagonist. Although only one study explicitly stated the HPWT, most of the studies combine hedonic well-being with classic task performance indicators ( $N=28$ ) following this tradition and generally find positive relationships ( $N=20$ ). However, the review also identified a few negative or antagonist relationships ( $N=3$ ). Moreover, frequently non-significant relationships were found mainly in the combination of hedonic well-being and contextual performance. In this case, most of the relationships were non-significant (out of the 26 relationships, 15 were non-significant), although an important number of positive relationships were found ( $N=11$ ). The authors suggested that third variables could be explaining those results (e.g. organizational climate, work design, justice, unfair income). The relationship between hedonic well-being and creative performance has been hardly studied ( $N=5$ ), but results generally show positive relationships ( $N=4$ ). Other relations have been studied only in one or two cases.

When unpacking the relationships from a hedonic approach, it is worth noting that the relationship with income satisfaction comprises one-third of the explored relationships between hedonic well-being and contextual and task performance. Most of

Table 1  
*Distribution among categories: relationship, performance, and well-being*

Relationship	Well-being	Performance				
		Overall	Task	Contextual	Creative	Counterproductive
Synergetic	Hedonic	2	20	11	4	1
	Eudaimonic	1	3	4	1	
Antagonistic	Health		3			
	Hedonic		2			
	Health		1			
Null	Hedonic		6	15	1	1
	Eudaimonic		3	1		
	Health					1

*Remarks.* The figure describes the number of studies by the typology of relationship between well-being and performance. The number of relationships is higher than the number of studies found, since the studies reported more than one relationship each ( $N=81$  combinations).

the null relationships were found when considering the relationship between satisfaction or positive affect and performance indicators ( $N=6$  for task performance;  $N=15$  for contextual performance,  $N=1$  for creative, and  $N=1$  for counterproductive behavior). Both measures aligned with each other, in other words, satisfaction and positive affect seem to show similar results; however, the positive affect was less measured than satisfaction. The study of the relationship between performance and negative affect is severely limited ( $N=7$ ) but always shows a positive relationship between well-being and performance indicators (task and contextual performance and counterproductive behaviors).

The eudaimonic operationalization of well-being has attracted, during the last decade, quite some attention especially in relation to task and contextual performance. Positive relationships are more clearly found when combined with contextual performance (4 out of 5 relationships studied) than when combined with task performance (3 out of 7). Thus, there is also certain diversity in the results, and null relationships were also reported. No study containing only null relationships is reported, and discussions are usually centered on the positive significant results, so no post hoc rationale is offered for those results. Thus, results are inconclusive, at least when considering eudaimonic well-being in combination with task performance. Again the authors explain the non-relation by third intervening variables (e.g. organizational climate). Moreover, the relationship between eudaimonic well-being and other performance dimensions remains almost unexplored (e.g. creative).

Finally, a variety of relationships are identified when health is considered. Although not much attention is directed toward this relationship, when health is combined with task performance ( $N=4$ ) the relationship is found to be positive ( $N=3$ ) but also a null relationship is identified ( $N=1$ ). Moreover, a negative relationship was found between health and performance when the latter was operationalized as counterproductive behavior ( $N=1$ ). This work did not initially state this hypothesis as it is, but it could be understood as a critical work. This research (Cassandre, 2011) reports a positive relationship between diseases and goal-focused productivity. This case could be understood as an exception to the prevailing line of research and it is explained as a paradoxical problem, because on the one hand the worker (in this case professors) had high status in his/her career, and on the other, suffered and used medicine to control diseases.

#### **Research question (4): What type of methodological approaches are employed for the study of the relationships between well-being and performance in Brazil?**

Only cross-sectional designs were identified. Studies and the relationships within used a range of statistical analyses that

disclosed linear relationships between well-being and performance indicators. Some of them presented relationships with graphic results with straight lines suggesting linear relationships (but giving no index), by quartiles, or segmented based on some criterion – a usual technique in the health field. Although only one study referred explicitly to the HPWT, studies generally assumed the directionality of the association between well-being and performance indicators in line with this thesis. Only one study proposed the relationship to be in the opposite direction and antagonist (the higher the level of performance the lower the well-being). This study was the one finding antagonist relationships between performance and two hedonic indicators and health. However, the designs used do not allow to test for causality as none of the studies used a longitudinal design. Results showing null relations between well-being and performance indicators are generally assumed to be derived from inconsistencies related to some methodological issues (e.g. sample characteristics or measurement errors). However, in some cases, researchers suggested possible moderators of this relationship, mainly based on context (e.g. work design, or organizational climate). Moreover, it is also interesting to note that no study proposed the analysis of a reciprocal relationship, and all the studies were designed using a variable-centered approach. These features of the research are further analyzed in the discussion section.

## **Discussion**

This study systematically reviewed empirical research on the relationship between well-being and performance in Brazil. The review aimed to explore four aspects of research that can contribute to its advancement: the operationalizations of well-being and performance, the types of combinations studied, the sign of relationships identified, and the type of methodological approach employed. We reviewed 26 empirical studies reporting on 81 relations, published in peer-reviewed journals between 1998 and 2018. Some trends were detected in the Brazilian studies dealing with well-being and performance. Most of them, although with a cross-sectional design, assume the sequence from wellbeing to performance aligning to the HPWT, although only one study explicitly mentions this thesis.

Data about well-being were mostly subjective (self-reporting) for the very own nature of this variable. As is the case in international literature, hedonic operationalizations were studied twice as much compared to other well-being dimensions when the relationship with performance is considered. Eudaimonic well-being and health received less attention.

Measures generally evaluate hedonic well-being in positive terms, while negative operationalizations such as negative affect are less explored. Special attention was given to satisfaction with

income in the reviewed studies. It is suggested that more studies are needed to examine the possible influence of satisfaction with income, particularly in countries where inequality is an issue.

In the reviewed literature, task and contextual performance received more attention among performance operationalizations; 85,37% of the relationships studied focused on these variables. However, we also found that new trends in performance focusing on creative and counterproductive aspects are also being incorporated into this area of research in Brazil. Data about performance are subject to a wide range of objective measures such as financial return, average ticket sales, the number of sales, basically focused on tasks, and to subjective measures as well, such as self-reporting and leadership appraisal that are focused on tasks and/or context.

The mean of correlations found is in line with the findings of other reviews that show a relatively weak but positive relationship (Andrade et al., 2017; Freitas et al., 2016; Paschoal et al., 2010; Paula & Queiroga, 2015; Piccolo et al., 2012; Souza & Puentepalacios, 2011; Vieira et al., 2017). Moreover, antagonist and null relationships were also found, with different operationalizations of performance and well-being. Thus, the consideration of different combinations of performance and well-being also opens a more comprehensive view of the relationship between those constructs. Although only a few studies described antagonist and null results, it is worth highlighting that the overall tendency towards neglecting results that contest the hypotheses that prevail in literature could also contribute to maintaining this research hidden. In fact, several authors have criticized the bias of just publishing those results that present significant results consistent with the hypothesis (significos) and to overlook those that are non-consistent with the hypotheses or non-significant (Antonakis, 2017). Therefore, a lesser number of this kind of result could be expected and in total 32 relationships were found that did not follow the assumption of positive synergic relationships.

The relationships found in the reviewed studies suggest that the linear hypothesis of a happy-productive worker leaves room for adjustments (Staw, 1986; Wright & Cropanzano, 2007). The null relationship has already been problematized (Peiró et al., 2015) and authors have often interpreted it methodologically (type of operationalization, sample composition, the decision for establishing profiles, selection of variables) or theoretically (offering possible mediation variables). However, there might be substantive reasons behind these results, that should be more carefully analysed and interpreted. In general terms, the few antagonist relationships found are weakly explained in the papers, and clearly demand empirical and theoretic in-depth studies (Ayala et al., 2017; Peiró et al., 2014, 2015; Warr and Nielsen, 2018).

A number of limitations have been identified in Brazilian literature that point out the need for further research to understand these relationships. The shortage of studies is noticeable, and most of them are based on self-reporting, variable-centered, cross-sectional, and, in general, single-level data.

The lack of longitudinal studies limits the possible conclusions about causality, reciprocity, or regressive network influence between variables. A positive gain or a “from bad to worse” spiral assessment requires longitudinal designs that might study the well-being and performance relationships across time and identify critical antecedents that impact those relationships (see, Tordera et al., 2020) and their evolution.

All the reviewed papers adopted a variable-centered approach. There is no study paying attention from a person-centered approach that analyse different patterns, clusters, or profiles in the relationships of well-being and performance (Peiró et al., 2014; Ayala et al. 2017). Although a considerable share of the results

showed support for the synergic relationships, correlations were not too strong and to some extent, the identified null relationships could be masking different profiles. Thus, adopting a person-centered approach could contribute to better understand the types of relationships between both constructs and their different operationalizations as previous research has shown (Ayala et al., 2017; Peiró et al., 2019; Tordera et al., 2020). Exploring different profiles and promoting research that identifies characteristics of the different profiles for the various jobs and working conditions could contribute to advances in this area of research.

Moreover, other levels of analysis could also be explored. A previous review at the group level with international data has also reported different types of relationships between performance and well-being (García-Buades et al., 2020). Thus, multilevel research could open another avenue for future research.

### Implications for Practice

The evidence found in the Brazilian context suggests that even though the relationship between well-being and performance (mainly job satisfaction and task performance) is generally positive, organizations should not take for granted that actions oriented to increase one of the considered outcomes (e.g. well-being) will automatically imply an improvement of the other (e.g. performance). Thus, human resource management policies and practices should be oriented to promote well-being and performance, attending to their multidimensional and complex nature, and reducing the possible trade-offs between them (Villajos et al., 2019). Also individuals will need to contribute to promote a synergistic relationship between well-being and performance. In this way, both constructs may become more sustainable.

### Limitations

One of the limitations of this work is the number of papers that have empirically addressed the study of the relationships studied during the last two decades in Brazil. This situation reduces our capacity to adequately understand to what extent different types of relationships could be identified. Moreover, the lack of longitudinal studies precludes the possibility to explore causal or reciprocal relationships between variables. However, it is worth noting that even with a limited number of studies, different types of relations were identified. The selection of the keywords used could be also discussed. Although the effort in this sense was comprehensive enough, some terms might have been unintentionally left aside. Nonetheless, this work is a first approach to the study of the relationship between well-being and performance in the Brazilian context, offering an opportunity to get acquainted with the state of the matter and propose further studies to fill the existing gaps in this important bundle of issues.

### Recommendations for Future Research

We recommend that future studies apply more comprehensive approaches to studying the relationships between performance and well-being, considering different operationalizations and perspectives (variable-centered and person-centered). Likewise, longitudinal, multilevel, cross-cultural approaches and interventions with pre-test and post-test designs are also recommended. Above all, understanding the process and triggers of different types of relations (synergetic, antagonist, or null) and the evolution of those relationships in the long term is a promising agenda.

Finally, this study contributes to systematize research

developed in Brazil about the topic, as it pointed out study gaps, and recommended lines of study. We extend prior reviews in this domain (García-Buades et al., 2020; Peiró et al. 2021), presenting new insights into its relation in another context (Ayala et al., 2017). One could say that besides being optimistic, the integrative perspective suggests that the synergistic relationship between the constructs is feasible, but further research is needed about the dynamics of these relationships across time, how they occur between and within persons, as well as at the collective level, and what would be the triggering and leveraging variables that may enable more sustainable relationships among these constructs.

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