

# CONCEPTUALIZATION, RISK FACTORS AND PSYCHOSOCIAL EFFECTS ASSOCIATED WITH WORK ADDICTION: A SYSTEMATIC LITERATURE REVIEW

DANIELA DÍAZ

<https://orcid.org/0000-0002-1650-6220>

Universidad Católica Luis Amigó

CANDELARIO SMITH BOCANEGRA

<https://orcid.org/0009-0005-4853-5447>

Universidad Católica Luis Amigó

OLENA KLIMENKO

<https://orcid.org/0000-0002-8411-1263>

Institución Universitaria de Envigado

DAVID ALBERTO LONDOÑO-VÁSQUEZ

<https://orcid.org/0000-0003-1110-7930>

Institución Universitaria de Envigado

ELIZABETH RUIZ-ZULUAGA

<https://orcid.org/0000-0001-7446-6039>

Universidad Católica Luis Amigó

Correo electrónico: [eklimenco@correo.iue.edu.co](mailto:eklimenco@correo.iue.edu.co)

Received July 4, 2024 / Accepted: January 15, 2025

doi: <https://doi.org/10.26439/persona2025.n1.7253>

**ABSTRACT.** *Introduction:* Work addiction, or workaholism, is a behavioral addiction linked to significant physical, mental, and social health problems. Although not recognized in the Diagnostic and Statistical Manual of Mental Disorders (DSM), its conceptualization has emerged from research addressing psychological, personality, psychosocial, and organizational determinants. *Objectives:* This review analyzes the concept of work addiction, differentiates it from work engagement and overcommitment, identifies predisposing factors, and examines its psychosocial effects. *Methodology:* Following Cochrane Collaboration guidelines, a qualitative review of empirical articles published between 2019 and 2024 in English and Spanish was conducted in selected academic databases. Inclusion/exclusion criteria were applied, and the process was summarized in a PRISMA flow diagram. *Discussion and Conclusions:* Findings show that work addiction is influenced by personal (e.g., personality traits, neurobiology), organizational (e.g., workload, role conflict, lack of balance policies), and societal (e.g., cultural values, economic pressures, hyperconnectivity) factors. It is distinct from engagement and overcommitment,

although overlaps exist. Work addiction is an underrecognized psychosocial problem with consequences such as stress, burnout, and risk of other addictions. The lack of studies in Latin America underscores the need for region-specific research to inform prevention and intervention strategies.

Keywords: engagement, overcommitment, predisposing factors, psychosocial affectations, work addiction

## CONCEPTUALIZACIÓN, FACTORES DE RIESGO Y AFECTACIONES PSICOSOCIALES ASOCIADOS A LA ADICCIÓN AL TRABAJO: UNA REVISIÓN SISTEMÁTICA DE LITERATURA

**RESUMEN.** *Introducción:* la adicción al trabajo es una adicción conductual vinculada a problemas significativos de salud física, mental y social. Aunque no está reconocida en el Manual diagnóstico y estadístico de los trastornos mentales (DSM), su conceptualización ha surgido a partir de investigaciones que abordan determinantes psicológicos, de personalidad, psicosociales y organizacionales. *Objetivos:* esta revisión analiza el concepto de adicción al trabajo, lo diferencia del compromiso laboral (work engagement) y de la sobreimplicación (overcommitment), identifica factores predisponentes y examina sus efectos psicosociales. *Metodología:* siguiendo las directrices de la Colaboración Cochrane, se realizó una revisión cualitativa de artículos empíricos publicados entre 2019 y 2024, en inglés y español, en bases de datos académicas seleccionadas. Se aplicaron criterios de inclusión y exclusión, y el proceso se resumió en un diagrama de flujo PRISMA. *Discusión y conclusiones:* los hallazgos muestran que la adicción al trabajo está influida por factores personales (p. ej., rasgos de personalidad, neurobiología), organizacionales (p. ej., carga de trabajo, conflicto de roles, ausencia de políticas de equilibrio) y sociales (p. ej., valores culturales, presiones económicas, hiperconectividad). Es distinta del compromiso laboral y de la sobreimplicación, aunque existen puntos de solapamiento. La adicción al trabajo es un problema psicosocial poco reconocido, con consecuencias como estrés, burnout y riesgo de otras adicciones. La escasez de estudios en América Latina subraya la necesidad de investigaciones específicas para orientar estrategias de prevención e intervención.

Palabras clave: adicción al trabajo, afectaciones psicosociales, compromiso, engagement, factores predisponentes.

## INTRODUCTION

Work is an inherent aspect of human existence, allowing individuals to obtain economic resources and to achieve subjective well-being, satisfaction and even self-realization in certain areas of life. However, work can also become a source of significant discomfort, as in the case of work addiction —also known as “workaholism”—, a behavioral pattern characterized by an obsession with work and a constant need to be busy and productive, even at the expense of health, personal relationships and overall quality of life (Soroka et al., 2020). The most characteristic symptoms of work addiction include an excessive compulsion to work, withdrawal symptoms when away from work, lack of interest in non-work-related activities, neglect of health and personal relationships and a decline in overall satisfaction and well-being (Jung et al., 2023; Malinowska & Tokarz, 2021).

Work addiction is associated with mental health problems such as depression, anxiety, and post-traumatic stress, as well as physical health problems related to cardiovascular diseases, musculoskeletal disorders, and sleep disorders (Ten Brummelhuis et al., 2017; Mohan & Lone, 2021).

Some authors indicate that conditions in contemporary society—such as highly competitive work environments, based on the philosophy of high performance and labor productivity, use of technological tools, and remote working methods that allow work to be done at any time and in any place—act as predisposing factors which, when combined with certain personality traits of the worker, can lead to the development of work addiction (de la Cruz Ayuso, 2020).

In light of this situation in contemporary society—where technological tools have transformed traditional workplaces, schedules and other work-related factors, increasing the number of hours devoted to work—, it is important to distinguish between behavior (working long hours) and mindset (a compulsion to work, or what is known as work addiction). Ten Brummelhuis et al. (2017) report that workers addicted to work exhibit high levels of stress, an inability to disconnect from work, and negative consequences for mental and physical health, even though they do not necessarily work more than the established hours.

Work addiction stems from an internal impulse or need, rather than from external rewards—whether economic or otherwise (Avanzi et al., 2020; Ten Brummelhuis et al. 2017). Authors highlight several personal-level factors associated with the emergence of work addiction, such as perfectionism, ambition, low self-esteem, compulsive tendencies, obsession, low mental flexibility, low emotional stability, fear of failure, and lack of control over work, among others (Atroszko & Atroszko, 2020; Cubides et al., 2021).

As can be seen, work addiction is a complex problem that may be related to multiple factors, including personality, the work environment, and cultural aspects in general. In

addition, it is important to have a clear definition of the distinguishing elements in order accurately determine , in each particular case, whether the behavior constitutes work addiction or something else, even if some similar features are present.

In this respect, it is necessary to distinguish, for example, between work addiction and engagement, which share some external behavioral aspects but correspond to completely different internal states of the worker (Gillet et al., 2018). Studies show that engagement at work is associated with higher levels of physical and psychological health (Lu et al., 2022), higher performance and productivity (Abdelwahed & Doghan, 2023), lower levels of work-family conflict (Yucel et al., 2021) and fewer difficulties in disconnecting from work and sleeping (Reis et al., 2016)— in contrast to the situation observed in cases of work addiction. Van Beek et al. (2011) proposed distinguishing, in addition to employees addicted to work (workaholic) and employees engaged in work (engaged), a third type—addicted employees who were also engaged (engaged workaholics)— focusing on differences in motivation, number of working hours and mental health consequences among these work-related behavioral patterns.

Likewise, authors draw attention to the concept of overcommitment—or excessive commitment to work—which describes an individual's excessive involvement in their own work but which must be distinguished from work addiction (Avanzi et al., 2020).

Considering the complexity of the relationship that individuals establish with work in contemporary society, it is necessary to further explore the concept of work addiction in order to create healthier and more balanced labor policies and practices that value both productivity and workers' well-being. This could include promoting flexible working hours, encouraging self-care and mental health in the workplace, and fostering a work and organizational culture that values worker's free time and personal life as an important part of overall success in life.

Considering the above, this systematic review aims to analyze the concept of work addiction, contrasting with other problems which have similar symptoms, and to identify the risk factors and psychosocial effects associated with this behavioral disorder. The aim is to provide a reference text, based on updated information, for human resources professionals, employers and workers, enabling them to recognize the presence of this problem and become aware of the need for its prevention and approach in different work contexts.

## METHODOLOGY

This systematic literature review follows the criteria of Cochrane Collaboration (Higgins et al., 2022) and adopts a qualitative approach, providing readers with an update on specific terms that are in continuous development (Vera, 2009). The corpus search

was conducted in the Data Archival Resource Centre (QUALIDATA), Dialnet, EBSCOhost, ESRC Qualitative, PsycEXTRA, PsycINFO, PubMed, Scopus, Scielo, and Web of Science.

The following keywords, combined using Boolean operators, were used in the search: “work addiction [and/same/with/near/adj] risk factors”, “work addiction [and/same/with/near/adj] psychosocial effects”, “work addiction [and/same/with/near/adj] engagement/overcommitment”.

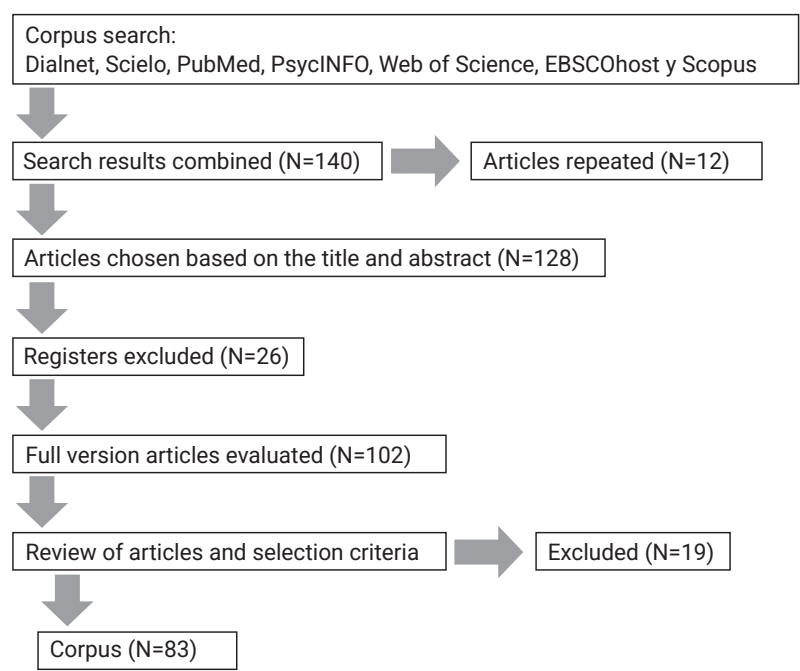
Included Studies

For this review, we selected only the articles in Spanish or English published in peer-reviewed scientific journals that reported results from quantitative and qualitative empirical studies aimed at examining the variable of work addiction, within the publication range of 2019 to 2024, thus considering only studies from the last five years.

Excluded Studies

Review articles, theoretical reflection articles, and theoretical books were excluded, as well as texts published before the defined publication range.

Figure 1  
*Article Selection Flowchart*



## Procedure

As shown in Figure 1, the texts were selected for review according to the procedure established in this type of study (Moreno et al., 2018). Keywords were defined for use in the search engines of the selected databases; titles were screened and duplicate articles retrieved from different databases were removed. Abstracts were then read and articles that did not meet inclusion criteria were discarded. To increase the validity and reliability of the search results, the reading of abstracts and selection of texts were carried out independently by the three researchers on the team, who then compared their review results and discussed patterns of inclusion and exclusion. The flowchart was organized to reflect the text selection process. The full texts of the selected articles were then read and an ad hoc checklist—developed in Excel for this study and based on the STROBE guidelines— was completed: Finally, a quantitative analysis of information regarding the items in the analysis guide was performed, along with a qualitative analysis of the selected studies.

## Ethical Aspects

The text was prepared in strict accordance with APA guidelines, to ensure the preservation of copyright and the protection of intellectual property.

## RESULTS

### Differential Analysis of Constructs: Addition to Work, Engagement and Overcommitment

In recent years, the phenomenon of compulsive overwork has been systematically investigated, leading to a consensus that it is a genuine mental health problem. At a general level, this problem has been framed within the context of behavioral addictions, and labeled as an addiction to work (Andreassen et al., 2019; Atroszko et al., 2019; Bereznowski, et al., 2024).

In this respect, the conceptualization of work addiction is based on a model of common components of addiction, which identifies seven symptoms: predominance, referring to the constant concern with work and its dominance in the individual's thoughts, feelings and behavior; tolerance, involving the need to increase the amount of work to achieve the previously experienced mood-altering effects, leading the person to gradually spend more time working each day; mood changes in which the subjective experience of working allows the individual to escape from negative states (e.g. anxiety, guilt or hopelessness) or to experience the "euphoric" excitement associated with work; relapse, referring to the repeated return to previous patterns of excessive work (often quickly reestablished, even in the most extreme patterns) after periods of control;

abstinence, involving affective distress and/or unpleasant physical symptoms when the individual is unable to work; the conflict between the individual and those around him or her, between work and other activities such as social life and hobbies, as well as intrapsychic conflicts such as incompatible needs; and finally, the problem component, referring to health problems and/or other problems resulting from excessive work (Bereznowski & Konarski, 2020; Bereznowski et al., 2023; Sun et al., 2023).

On the other hand, Clark et al. (2020) propose a multidimensional conceptualization of work addiction that encompasses the motivational dimension (an internal pressure or compulsion to work), the cognitive (persistent and uncontrollable thoughts about work), the emotional (experiencing negative emotions when not working or being prevented from working) and the behavioral (engaging in excessive work that goes beyond what is required or expected).

To delineate the concept of work addiction, it is important to consider its relationship with other work-related constructs, such as engagement and overcommitment.

Engagement is a positive work-related mental state characterized by vigor—associated to high levels of energy and mental resilience while working—, dedication, reflected in a strong involvement in work, and absorption, marked by complete concentration and even the experience of flow during work-related activities (Shimazu et al., 2019).

Work addiction and engagement both involve an intense dedication to work and emotional involvement in work tasks. Both also entail a strong connection to work responsibilities and can contribute to high performance. While both can entail intense dedication, the key difference lies in their impact on quality of life and overall well-being. Work addiction is characterized by an excessive compulsion to work, often at the expense of health and personal relationships. In contrast, engagement refers to being immersed in work in a positive way, without the harmful aspects associated with addiction. Engagement is generally associated with positive outcomes, whereas work addiction can result in exhaustion and health problems (Di Stefano & Gaudiino, 2019).

Studies indicate that work addiction and work engagement are two distinct concepts. However, committed workers can become addicted to work, with absorption and mood modification serving as key elements that form a bridge between work addiction and work engagement (Bereznowski et al., 2023). Atroszko et al. (2020) state that engagement can turn into an addiction when absorption is frequently used for mood modification by individuals with chronic stress who experience negative emotional states.

In turn, work addiction can lead to exhaustion. Authors indicate that work addiction can undermine engagement by causing occupational exhaustion, which in turn diminishes work commitment (Bereznowski, Bereznowska et al., 2021).

One of the key elements in distinguishing between work addiction and engagement is motivation. From this perspective, four types of workers can be distinguished: employees addicted to work; engaged employees; workers both addicted and engaged in work, and employees who are neither addicted nor engaged. One of the most distinguishing factors is controlled motivation (in case of workaholics) versus autonomous motivation (in case of engaged employees).

Likewise, Taris et al. (2020), showed that work addiction promotes introjected regulation and reduces intrinsic motivation over time. This occurs because employees addicted to work become increasingly motivated by partially internalized external standards of self-esteem and social approval (introjected regulation), feeling compelled to demonstrate their competencies and avoid failure in order to experience feelings of self-worth, such as pride, and avoid feelings of shame, guilt and worthlessness.

This ultimately undermines their intrinsic motivation and growth-oriented tendencies, potentially leading to exhaustion and loss of interest in work. In the case of engagement, this leads over time to identified regulation and an intrinsic motivation. This is because committed employees become increasingly motivated by the underlying value of their work (identified regulation) and by the pleasure and satisfaction derived from it (intrinsic motivation). Similar to workaholics, engaged employees can also become more extrinsically motivated over time. While workaholics may adopt external standards of self-esteem and social approval that, in turn, regulate their motivation (introjection), engaged employees recognize the underlying value of their work and are more likely to internalize external standards (identification), thereby fostering growth-oriented tendencies and enhancing job satisfaction.

On the other hand, it is also important to differentiate between the concepts of work addiction and overcommitment, which, although both relate to excessive dedication to work, have distinct nuances. In terms of commonalities, both involve intense dedication, as individuals experiencing work addiction or overcommitment may devote long hours and considerable effort to their work responsibilities. Furthermore, both work addiction and overcommitment can negatively affect physical and mental health, as they may both contribute to exhaustion and stress if not properly managed (Chen et al., 2023).

However, it is necessary to consider the difference in the nature of the commitment to work in each case. Work addiction entails excessive compulsion and a lack of control over the time spent at work, often with a negative effect on health and relationships. On the other hand, overcommitment refers to taking on too many responsibilities, which can lead to an overwhelming workload but not necessarily to the same extreme compulsion associated with work addiction (Du Prel et al., 2018).



On the other hand, there is a difference between motivation and job satisfaction. People experiencing work addiction may feel compelled to work constantly, even when this negatively affects their well-being. In contrast, overcommitment may stem from positive motivation, such as the desire to contribute to the team or meet expectations, but it might lead to negative consequences if not managed properly (Hommelhoff et al., 2020).

Finally, the impact on personal life differs from case to case. Work addiction is often associated with an imbalance between work and personal life, characterized by an extreme prioritization of work at the expense of relationships and health. In contrast, overcommitment may affect the ability to manage multiple responsibilities, but it does not necessarily result in the same degree of imbalance in personal life (Kunz, 2019; Hommelhoff et al., 2020).

Avanzi et al. (2020) state that, despite some degree of overlap, the constructs of work addiction and overcommitment are independent, each being uniquely related to different organizational and personal aspects. Work addiction is less related to job demands, as work addicts are driven to work hard mainly by internal pressure rather than external factors; whereas overcommitment is more strongly related to external pressures from an overwork climate. Differences between these two constructs were also observed in relation to key personality traits: work addiction appears to be more closely associated with scrupulosity, whereas excessive involvement is particularly associated with neuroticism. Finally, authors suggest that work addiction may stem from a history of excessive commitment, which, in turn, could act as a mediating variable between work addiction and job exhaustion.

### **Theoretical Construct**

For a better understanding of the differences among the three theoretical constructs of work addiction, engagement and overcommitment, Table 1 presents a comparison of 10 categories that represent distinct work-related behaviors with specific motivational and health implications.

**Table 1**  
*Comparison Between Work Addiction, Engagement and Overcommitment*

Aspect	Work Addiction	Engagement	Overcommitment	Autors
Definition	Compulsive, uncontrollable need to work excessively	Positive, focused involvement in work	Persistent tendency to invest excessive energy in work	Andreassen et al., 2019; Atroszko et al., 2019; Bereznowski et al., 2024; Clark et al., 2020; Shimazu et al., 2019; Di Stefano y Gaudiino, 2019.
Motivation	Driven by internal compulsion and fear of inadequacy	Intrinsic enjoyment and enthusiasm for work	Need to meet high standards, often from external pressure	Bereznowski, Bereznowska et al., 2023; Bereznowski, Atroszko et al., 2023; Van den Broeck y Van Beek, 2019; Taris et al., 2020; Hommelhoff et al., 2020.
Emotional State	Anxiety, guilt, stress	Positive emotions, fulfillment	Stress, anxiety, fear of failure	Di Stefano y Gaudiino, 2019; Shimazu et al., 2019
Behavioral Traits	Inability to detach from work, neglect of personal life	High energy and focus while at work	Difficulty saying "no," extended work hours	du Prel et al., 2018; Sun et al., 2023; Di Stefano y Gaudiino, 2019; Bereznowski, Bereznowska et al., 2023.
Effect on Health	Negative impact, high stress, burnout risk	Generally positive, though risks with excess	High stress, risk of burnout, sleep problems	Bereznowski et al., 2024; Chen et al., 2023;
Effect on Performance	May initially be high but declines over time	High performance, sustainable long-term	Can improve short-term performance but risks long-term issues	Hommelhoff et al., 2020; Chen et al., 2023; Bereznowski et al., 2024
Life Balance	Poor, often sacrifices personal relationships	Balanced, work doesn't overshadow personal life	Struggles with balance; work often intrudes on personal life	Hommelhoff et al., 2020; Kunz, 2019; Di Stefano y Gaudiino, 2019.
Control Over Work	Feels compelled and lacks control over work habits	Chooses to work hard with full control	Overextends out of perceived duty, not out of desire	Avanzi et al., 2020; Bereznowski, Bereznowska et al., 2023; Taris et al., 2020.
Need for Recovery	High; often doesn't recover properly	Recovers well and maintains resilience	Often neglects recovery, leading to fatigue	Taris et al., 2020; Van den Broeck y Van Beek, 2019.
Associated Risks	Burnout, mental health issues, relationship strain	Minimal if work-life balance is maintained	Stress-related health problems, potential burnout	Bereznowski et al., 2024; Bereznowski, Atroszko et al., 2023; Taris et al., 2020; Kunz, 2019.

## **Predisposing Factors Associated with Work Addiction**

Several predisposing factors may enable the emergence of an addiction to work, where the psychosocial and health risk increases, affecting the integral well-being of the subjects.

### *Neurobiological and Genetic Factors*

First, it should be noted that, as the phenomenon of work addiction has been less studied compared to other behavioral addictions, there are no studies that explore in depth the neurobiological aspects associated with this problem. However, considering that addictive behaviors—both substance-related and behavioral—share common neurobiological bases (Tereshchenko, 2023), below are some relevant studies that have examined these factors in other behavioral addictions, such as gambling and internet use, among others.

Authors highlight that there are neurobiological alterations typical of addictive behavior—whether related to substances or specific behaviors—including activation in brain regions associated with reward, indicating the involvement of dopamine-mediated reward mechanisms; reduced activity in the areas responsible for impulse control and decision-making; and reduced functional connectivity in brain networks involved in cognitive control, executive function, motivation and reward (Weinstein & Lejoyeux, 2020).

Neuroimaging studies have identified alterations in the activity of the ventromedial prefrontal cortex during activities related to addictive behavior and decision-making (Dong et al., 2021).

Zhang et al. (2021) identified a common pattern of structural brain changes related to chemical and behavioral addictions: alterations in the prefrontal and insular areas associated with increased impulsivity. Authors also note that diminished executive control and impaired functionality in the right dorsolateral prefrontal cortex appear to be a shared central feature of both addictive disorders and impulse control disorders (Choi et al., 2019; Seok & Sohn, 2018).

Impulsivity is considered an important characteristic associated with the development of addictions. One of the main neural networks that plays a crucial role in behavioral addiction is the salience network, which coordinates the “shift” between neural networks to guide appropriate responses. Alterations in the salience network are associated with impulsivity, leading to a predominant orientation toward stimuli linked to addiction, which in turn results in craving and poor control over addictive behaviors. These alterations have been associated with increased insular cortical thickness (Wang et al., 2018) and variations in the patterns of the subregions of the anterior cingulate cortex (Lee, Lee et al., 2018).

The deterioration of self-regulation is one of the main psychopathological features of addiction. Kim et al. (2018) indicate that self-regulation capacity is related to the degree of satisfaction of basic psychological needs. These basic psychological needs—autonomy, competence and relationship—are important factors associated with self-evaluation and self-image. Authors found that, neurobiologically, deficient emotional regulation and negative self-assessment are associated with dysfunction in the lower parietal lobe in individuals with behavioral addictions.

Autonomic nervous system dysfunction has also been associated with substance abuse and behavioral addiction, given its role in adaptive adjustments to behavioral strategies (Li et al., 2020). Hong et al. (2018) report that an altered heart rate variability response in situations associated with addictive behavior is related to addictive patterns and may reflect decreased executive control in individuals with such behaviors.

Based on resting-state electroencephalography coherence analysis in individuals with behavioral addiction disorder, Park et al. (2018) propose that greater intra-hemispheric beta and gamma coherence be an important neurophysiological trait marker associated with the risk of developing addictive behaviors.

Several neurotransmitters and neurotrophic factors may be involved in the neurobiological mechanisms underlying the formation of addictive behavior. Neurochemical pathways include metabolic disorders of dopamine, serotonin, opioids and other neurotransmitters that affect reward processing, executive functioning, salience attribution and habit formation, similar to those observed in substance use disorders (Romer et al., 2019; Tereshchenko, 2023).

A significant number of studies show a pathophysiological relationship between the functioning of the oxytocinergic system and the development of various forms of addictive behavior, indicating that this neuropeptide plays an important role as a protective factor (Leong et al., 2018). Likewise, there is evidence that dopaminergic activation can reduce compulsive and addictive behaviors (McLaughlin et al., 2018).

Some studies indicate the presence of genetic factors associated with the risk of developing addictive behaviors. In this regard, twin studies suggest that there may be a genetic predisposition to develop certain behavioral addictions (Tereshchenko, 2023).

On the other hand, neurobehavioral phenotypes are epigenetically regulated by non-coding RNAs, including microRNAs, which have the advantage of serving as non-invasive biomarkers in neuropsychiatric and behavioral disorders, as they can be detected in blood (plasma or serum). Lee, Cho et al. (2018) identified three miRNAs associated with behavioral addictions (hsa-miR-200c-3p, hsa-miR-26b-5p, and hsa-miR-652-3p), noting that individuals with downregulation of these three miRNAs have a high risk of exhibiting such behaviors.

As a consequence, it can be stated that neurobiological factors may play a significant role in predisposing individuals to work addiction. These neurobiological factors, combined with environmental influences, may contribute to a predisposition toward compulsive work behaviors, similar to those seen in other addictive behaviors. Table 2. outlines some key neurobiological mechanisms and elements that may contribute to this behavior.

**Table 2**  
*Neurobiological Factors Predisposing to Work Addiction*

Neurobiological Factor	Description	Authors
Dopaminergic System	Work addiction can be driven by dopamine release associated with goal achievement, deadlines, or recognition, reinforcing compulsive work behaviors.	Tereshchenko, 2023; Wang et al., 2018; Kim et al., 2018.
	Similar to substance addictions, dopamine spikes create a “reward” that the brain begins to crave, driving repetitive, work-focused behaviors.	Leong et al., 2018; McLaughlin et al., 2018.
Cortisol and Stress Response	Chronic work stress can lead to elevated cortisol levels, which impacts the brain’s reward circuitry and may make individuals reliant on work to relieve stress.	Tereshchenko, 2023; Zhang et al., 2021;
	This creates a cycle where stress both triggers work addiction and is temporarily mitigated by more work, trapping individuals in a loop.	Kim et al., 2018; Li et al., 2020.
Prefrontal Cortex Dysfunction	The prefrontal cortex (responsible for decision-making and impulse control) may be less effective, impairing the ability to regulate work urges or set boundaries.	Tereshchenko, 2023; Weinstein & Lejoyeux, 2020; Dong et al., 2021;
	Dysfunction here can result in difficulties with self-regulation and lead to poor boundary-setting, as seen in addiction-like behaviors.	Zhang et al., 2021; Choi et al., 2019
Serotonergic System	Imbalances in serotonin levels can contribute to anxiety and depressive symptoms, leading some individuals to use work as a coping mechanism.	Seok y Sohn, 2018; Choi et al., 2019;
	Work becomes a substitute for mood regulation, helping to manage negative emotions or avoid them temporarily.	Lee, Lee et al., 2018; Romer et al., 2019; Tereshchenko, 2023.
Endorphins and Stress Relief	Work can trigger endorphin release, especially when high levels of effort or physical stress are involved, leading to an addiction-like response.	Weinstein & Lejoyeux, 2020; Zhang et al., 2021;
	This creates a “rush” similar to a runner’s high, reinforcing work as a means of emotional relief and pleasure.	Choi et al., 2019; Park et al., 2018.

(continues)

(continued)

Neurobiological Factor	Description	Authors
Genetic Factors	Genetic predispositions affecting neurotransmitter regulation (dopamine, serotonin) or traits like impulsivity may heighten susceptibility to work addiction.	Tereshchenko, 2023; Lee, Cho et al., 2018.
HPA Axis Dysregulation	Dysregulated hypothalamic-pituitary-adrenal (HPA) axis, which governs stress response, may increase vulnerability to stress-induced work patterns. Chronic activation of the HPA axis can impair the body's ability to manage stress, making individuals more prone to coping by overworking.	Weinstein & Lejoyeux, 2020; Lee, Cho et al., 2018; Leong et al., 2018.

**Personal, Organizational and Societal/Cultural Factors predisposing to work addiction**

*Gender*

Regarding the relationship between gender and work addiction, some authors state that, on average, women score significantly higher than men, particularly in the components of exaggeration and emotional excitement/perfectionism, and also show a stronger tendency to self-justification (Dudek & Szpitalak, 2019; Morkevičiūtė & Endriulaitienė, 2024). However, other authors report that men have a greater tendency toward work addiction (Cha, 2022). Finally, some studies do not report an association between gender and work addiction (Atroszko et al., 2016).

*Personality*

In terms of personality, studies based on Costa & McCrae’s five-factor model have shown that the neuroticism factor is positively associated with work addiction, specifically in relation to job satisfaction (Sayan, 2021). In addition, enjoyment at work and work commitment—components often linked to addiction— have been found to be associated with the personality factor of agreeableness (Sayan, 2021).

Authors indicate that perfectionism, overall and performance-based self-esteem, and negative affect show the strongest associations as personality risk factors for work addiction. Among the five major traits, extraversion, conscientiousness and intellect/ imagination show positive relationships with work addiction (Kun et al., 2021; Soraci et al., 2022).

Sayan (2021) likewise indicates a positive correlation between extraversion and work addiction; however, in this association, it is important to consider the role of emotion regulation as a mediating factor.

Kızıloğlu et al. (2024) argue that, to understand the relationship between work addiction and personality traits, it is necessary to study not only classic traits (i.e., extroversion, neuroticism, agreeableness, openness, conscientiousness) but also dark traits such as narcissism, Machiavellianism, psychopathy, sadism and spite. Authors indicate that lower extroversion, lower openness to experience, greater narcissism, and higher resentment were positively associated with work addiction among private sector employees.

Morkevičiūtė & Endriulaitienė (2022) report that perfectionism, both in self-oriented and socially oriented forms, shows positive links with employee work addiction. In addition, the perception of the manager as a workaholic acts as a mediator, strengthening the relationship between employees' socially prescribed perfectionism and work addiction. In the same line of research, Falco et al. (2017) argue that beliefs related to failure and performance demands act as mediators between socially oriented perfectionism and work addiction. This is because individuals with high levels of socially oriented perfectionism are more likely to endorse irrational beliefs associated with fear of failure, which leads them to set extremely high work performance standards in order to avoid negative emotions and protect their self-esteem.

As for problems related to personality disorders, Demetrovics et al. (2020) indicate that obsessive-compulsive personality disorder may be associated with work addiction, as one of the main symptoms of this disorder is an excessive preoccupation with productivity to the exclusion of pleasure and interpersonal relationships.

In this regard, greater impulsivity and compulsiveness as personality traits have been observed in individuals at risk of work addiction, underscoring the importance of fostering inhibition and working memory, among other executive functions, as a protective factor (Berta et al., 2023).

Likewise, personality aspects such as low cognitive flexibility, low emotional stability, fear of failure, and lack of control over work have been identified as associated with the emergence of work addiction (Cubides et al., 2021; Atroszko, P. and Atroszko, B., 2020).

### *Organizational, Cultural, and Social Aspects*

On the other hand, we present studies that examine the impact organizational factors may have on the emergence and maintenance of work addiction among employees.

Andreassen et al. (2019) state that the high job demands, role conflicts and negative acts present in the organizational environment contribute substantially to work addiction. In addition, work addiction was more strongly associated with increasing demands on workers who reported high organizational control compared to those who reported low control.

Afota et al. (2021) found that leader-member exchange is positively associated with subsequent work addiction when the organizational psychological climate for overwork is high. This indicates that when overwork is perceived as positively valued in the organization, subordinates' work addiction may be encouraged, indirectly leading to greater work stress.

Research shows that effective work-life balance strategies can improve employees' health and productivity, acting as a protective factor against work addiction (Marecki, 2024; Bello et al., 2024).

Recent research on the subject identifies presentism as an important organizational factor which, in addition to being related to higher levels of work-family conflict, is associated with work addiction. This highlights the importance of managerial support in preventing workaholics from being compelled to attend work when they are ill (Zhou et al., 2016; Mazzetti et al., 2019).

Organizational opportunities for professional growth are important for the development of both individuals and organizations. In this respect, limited career advancement in organizations can lead to overcompensation through overwork, resulting in work addiction (Wang & Abu Hasan, 2024).

Last but not least, it is important to mention cultural and social factors related to the social philosophy of consumption and material wealth as symbols of success; the high cultural value placed on hard work and high performance; the influence of social networks, which foster comparison and display "successful" lifestyles; economic pressures arising from high living costs; the social stigma associated with relaxation or leisure time as unproductive; and technological advances that enable 24/7 work connectivity, extending working hours without spatial or temporal limits (Negura et al., 2023; Dogutas, 2023; Trașcă, 2023; Charkhabi et al., 2024; Junker et al., 2024; Gomes et al., 2023).

Table 3 summarizes that factors that may predispose individuals to work addiction, grouped into personal, organizational, and societal categories. These factors can interact and reinforce one another, creating conditions in which work addiction is more likely to develop and persist.



**Table 3**  
*Personal, Organizational and Societal/Cultural Factors Predisposing to Work Addiction*

Factor Category	Predisposing Factors	Authors
Personal Factors	Gender	Dudek & Szpitalak, 2019; Morkevičiūtė & Endriulaitienė, 2024; Cha, 2022; Atroszko et al., 2016.
	Personality traits (e.g., type A personality, obsessive-compulsive traits; perfectionism; high achievement orientation, et al.)	Sayan, 2021; Kızıloğlu et al., 2024; Morkevičiūtė & Endriulaitienė, 2022.
	Low self-esteem or fear of failure; emotional insecurity, seeking validation through work	Soraci et al., 2022; Kun et al., 2020; Falco et al., 2017; Cubides et al., 2021.
	Difficulty setting boundaries	Atroszko, Demetrovics et al., 2020; Berta et al., 2023.
	Family history of work addiction or related addictions	Kun et al., 2020; Cubides et al., 2021; Atroszko, P. & Atroszko, B., 2020.
Organizational Factors	High-pressure work environments	Andreassen et al., 2019; Taris & de Jonge, 2024.
	Reward structures focused on productivity and long hours	Afota et al., 2021.
	Lack of policies promoting work-life balance	Marecki, 2024; Bello et al., 2024.
	Poor managerial support or overly demanding supervisors	Mazzetti et al., 2019
	Culture of presenteeism (valuing time spent at work over productivity)	Mazzetti et al., 2019; Zhou et al., 2016.
	Limited career advancement, leading to overcompensation through excessive work	Wang & Abu Hasan, 2024.
Societal/Cultural Factors	Societal emphasis on success and material wealth	Negura et al., 2023; Dogutas, 2023; Gomes et al., 2023.
	Cultural value on hard work and high performance	Negura et al., 2023; Junker et al., 2024; Gomes et al., 2023.
	Social comparison and influence of social media, showcasing "successful" lifestyles	Negura et al., 2023; Dogutas, 2023
	Economic pressures or high cost of living	Charkhabi et al., 2024
	Stigma associated with relaxation or taking time off	Taris & de Jonge, 2024.
	Technological advances enabling 24/7 work connectivity	Trașcă, 2023.

## **Psychosocial Effects in Workaholics**

Work addiction can have various psychosocial consequences in a person's life. These consequences can affect both the individual and his or her social environment.

First, authors indicate that this behavior negatively affects mental health, causing stress, anxiety, and increasing the risk of depression. Moreover, physical and mental exhaustion is common among people addicted to work due to prolonged working hours and insufficient breaks. In addition, lack of time for adequate rest can lead to sleep disorders and a general decline in physical health, negatively affecting the quality of life and general well-being of employees (Koseoglu Ornek & Kolac, 2020).

Balducci et al. (2018) draw attention to the psychophysical costs of work addiction and report that it is associated with experiencing negative emotions, high systolic blood pressure and mental distress.

Workaholics have lower levels of psychological well-being, higher levels of stress, and a lower quality of life than non-workaholics (Krishnan et al., 2023).

Authors also point out that workaholics, because of this problem, have little time for their spouses, relatives, and friends, or for leisure activities, and do not experience the enjoyment and satisfaction that accompany such relationships or activities (Shimazu et al., 2019; Daniel et al., 2022). Obsession with work can lead to social isolation, as individuals tend to neglect social relations in favor of work (Krishnan et al., 2023).

The lack of balance between work and personal life can lead to the abandonment of recreational activities and self-care, which, in turn, results in a loss of enjoyment in life and negatively affects overall quality of life in general (Abdel Maksoud & Saad, 2022). In this sense, Wettstein et al. (2022) indicate that work addiction is associated with vital exhaustion, which affects people's lives in the long term.

On the other hand, work performance is also affected, leading to decreased productivity since, despite working long hours, the quality of work may decline due to fatigue and exhaustion. According to Balducci et al. (2021), work addiction increases negative emotions related to work, fostering daily emotional exhaustion, which ultimately reinforces the link between burnout and work addiction.

Work performance can be affected in workaholics because they often have difficulty delegating tasks, which can reduce the efficiency and overall performance of the team (Loscalzo et al., 2023).

Work addiction also carries the risk of developing other associated addictive behaviors. Some people addicted to work may resort to abusing various substances, both illegal and legal (e.g. stimulants, opioids), to cope with stress and work pressure (Kun et al., 2023).

Similarly, work addiction can be associated with compulsive behaviors in other areas of life such as technology use, shopping, and food intake (Buono et al. 2023; Uzarska et al., 2023; Fekih-Romdhane et al., 2024).

Finally, it is important to note that work addiction is not officially recognized as a mental disorder in all classification systems; however, the psychosocial effects described are observed in people who exhibit patterns of compulsive and excessive work behavior. In extreme cases, work addiction can have serious consequences for a person’s health and general well-being, underscoring the importance of seeking diverse prevention and intervention strategies to address the problem (Daniel et al., 2022).

Table 4 summarizes the psychosocial effects commonly observed in individuals who struggle with work addiction. These effects are grouped into categories for clarity. They underscore how work addiction can have pervasive impacts on various aspects of life, often creating a cycle in which the individual feels compelled to work even more to escape the consequences.

**Table 4**  
*Psychosocial Effects Commonly Observed in Individuals with Work Addiction*

Category	Psychosocial Effects	Authors
Mental Health	Increased stress and anxiety	Koseoglu Ornek & Kolac, 2020; Krishnan et al., 2023; Wettstein et al., 2022.
	Higher rates of depression	
	Emotional exhaustion and burnout	
Social Relationships	Deterioration in family and social relationships	Shimazu et al., 2019; Daniel et al., 2022; Loscalzo et al. 2023.
	Isolation and withdrawal from social activities	
Physical Health	Sleep disturbances	Koseoglu Ornek & Kolac, 2020; Balducci et al., 2018; Wettstein et al., 2022.
	Increased risk of chronic illnesses (e.g., cardiovascular disease)	
	Fatigue	
Self-Identity	Over-identification with work	Abdel Maksoud & Saad, 2022; Daniel et al., 2022.
	Self-worth closely tied to work performance	
Productivity and Focus	Loss of personal interests	Krishnan et al., 2023; Balducci et al., 2021; Loscalzo et al., 2023.
	Decreased overall productivity due to burnout	
	Difficulty concentrating on tasks	
	Frequent mental fatigue	

(continues)

(continued)

Category	Psychosocial Effects	Autors
Emotional Regulation	Irritability and frustration	Abdel Maksoud & Saad, 2022; Balducci et al., 2021.
	Impaired ability to manage emotions	
	Increased feelings of guilt or shame	
Life Satisfaction	Lower overall life satisfaction	Krishnan et al., 2023; Shimazu et al., 2019; Daniel et al., 2022; Abdel Maksoud & Saad, 2022
	Sense of emptiness when not working	
	Perceived loss of purpose outside work	
Coping and Resilience	Limited ability to cope with non-work-related stress	Krishnan et al., 2023; Kun et al., 2025; Buono et al. 2023; Uzarska et al., 2023; Fekih-Romdhane et al., 2024.
	Difficulty disconnecting from work	
	Poor stress tolerance	

DISCUSSION AND CONCLUSIONS

Firstly, work is highlighted as an activity inherent to human existence, as it not only contributes to obtaining economic means and subjective well-being but can help in achieving self-realization (Botero & Delfino, 2019). However, in addition to being a positive feature, work can also become a problem, most commonly known as workaholism—particularly in contemporary society, characterized by technology, competitiveness, and other factors that contribute as predisposing elements.

Addiction to work, or workaholism, is therefore a complex problem, particularly considering the contemporary social discourse on productivity and high labor efficiency, which can both promote and mask an addictive disorder. This disorder is characterized by a tendency to spend large amounts of time on work activities, to think about work when not engaged in it, and to work beyond organizational and monetary expectations, needs or demands (Reig-Botella & Cabarcos Fernández, 2020).

There are two approaches for the conceptualization of work addiction. The first is based on a model of the common components of addiction. This approach indicates that in workaholism there is a predominance of factors that lead to tolerance, emotional changes, relapse and withdrawal; it also points out that health problems and other issues may arise (Bereznowski & Konarski, 2020; Bereznowski et al., 2023; Sun et al., 2023). The second approach, proposed by Clark et al. (2020), is the multidimensional and indicates that work addiction develops due to four dimensions present in the individual: the motivational dimension, with an intrinsic character; the cognitive dimension, related to the loss of control over thoughts about work; the emotional dimension, characterized by feelings of self-blame for not working; and the behavioral dimension, related to a compulsion to work.

On the other hand, a distinction is made between workaholism and the concepts of engagement and overcommitment, because although these constructs present some similarities, they do not refer to work addiction. In this regard, the point of convergence between work addiction and engagement is that both involve intense dedication to work; however, the divergence lies in the degree of impact. Workaholism affects the quality of life and general well-being of the individual. In contrast, in engagement, the strong and positive commitment does not cause harm to health, although, as the authors claim, it can eventually become an addiction (Di Stefano & Gaudiino, 2019).

Similarly, in the case of overcommitment, an intense dedication to work is combined with positive motivation and a desire to contribute significantly to the work environment, accepting as a consequence multiple responsibilities that, if not managed properly, can cause physical and mental harm. On the other hand, work addiction is driven by intrinsic motivation related to the need to work excessively, causing a negative impact both on the individual's health and relationships (Chen et al., 2023).

Regarding the predisposing factors, the present review identifies two types: those specific to the individual, such as genetics, neurobiology, gender, and , and those related to the environment. Among the individual-specific factors, two are particularly relevant: the neurobiological factor, as the activation of the reward system is essential in the development of an addiction. One of these is dopamine, one of the most important neurotransmitters in the nervous system, which reinforces behavior by prompting its constant repetition (Weinstein & Lejoyeux, 2020).

Regarding personality as a predisposing factor, it is important to highlight that "classic traits" proposed by Costa & McCrae's five-factor model, such as neuroticism, perfectionism, and scrupulosity, and also some "dark traits" such as narcissism, sadism, and Machiavellianism can be decisive in the development of work addiction (Kızıloğlu et al. 2024). Lower extraversion, lower openness to experience, greater narcissism, and greater resentment are positively associated with work addiction.

It is worth noting that few studies have examined the relationship between gender and work addiction, and these present contradictory results. This highlights the importance of further research in this topic, especially considering the increasing number of women in the workforce worldwide.

As a predisposing factor, the organizational context directly affects the employee behavior. High and demanding workloads accelerate employee's work pace, in the hope of completing assigned tasks as quickly as possible, which constitutes a risk factor for the development of work addiction (Platania et al., 2022; Andreassen et al., 2019).

Finally, the main result of the review is that workaholism causes a serious but poorly recognized psychosocial impact, with implications for the physical and mental health of the individual and his or her social environment. Some consequences caused by

addiction to work include stress, anxiety, risk of depression, insomnia, social isolation, and exhaustion, which in turn reduce work quality. In addition, there is a risk of developing other addictions—either chemical, due to the consumption of psychoactive substances, or behavioral, such as excessive use of technology or other activities.

Taking into account the results of the present systematic review, it is concluded that there are multiple factors associated with work addiction. To identify the existence of such addiction, it is necessary to distinguish between work commitment, overcommitment, and the different values that individuals attribute to work as an activity inherent to human being, for personal livelihood and self-fulfillment.

Although there is a variety of literature and research on work addiction as a behavioral addiction, it should be noted that it is not recognized as a psychological disorder in the Diagnostic and *Statistical Manual of Mental Disorders* (DSM). Therefore, its conceptualization has been shaped by various studies, which have become increasingly frequent in recent years, focusing on work and its implications in daily life. These studies identify an etiology that includes psychological aspects, personality traits, psychosocial characteristics of individuals and organizational characteristics of the workplace, as well as and the possible psychosocial effects it generates. Consequently, it is a problem that needs to be addressed.

In short, this review makes paves the way for future empirical research to collect data on the existence of work addiction in the Latin American context. Since most of the articles reviewed were in English and based on research conducted in North American, European and Asian countries, it is necessary to foster discussions about this addiction in Latin American. Such discussions would support the development of both organizational and therapeutic strategies to prevent and address the problem.

## CONFLICT OF INTEREST

The authors declare that they have no conflicts of interest of a labor, contractual or ethical nature regarding the conduct of the study and the preparation of this article.

## REFERENCES<sup>1</sup>

Abdel Maksoud, Y., & Saad, M. (2022). The relationship between workaholism and employee wellbeing: The mediating role of work-family balance (WFB). *Journal of Business and Management Sciences*, 10(4), 220-232. <https://doi.org/10.12691/jbms-10-4-5>

---

<sup>1</sup> References marked with \* were included in the review.

- Abdelwahed, N. A. A. & Doghan, M. A. (2023). Developing employee productivity and performance through work engagement and organizational factors in an educational society. *Societies*, 13, 65-73. <https://doi.org/10.3390/soc13030065>
- Andreassen, C. S., Nielsen, M. B., Pallesen, S., & Gjerstad, J. (2019). The relationship between psychosocial work variables and workaholism: Findings from a nationally representative survey. *International Journal of Stress Management*, 26(1), 1-10. <https://doi.org/10.1037/str0000073>
- Afota, M-C., Robert, V., & Vandenberghe, C. (2021). The interactive effect of leader-member exchange and psychological climate for overwork on subordinate workaholism and job strain. *European Journal of Work and Organizational Psychology*, 30 (4), 495-509. <https://doi.org/10.1080/1359432X.2020.1858806>
- Atroszko, P. A., Andreassen, C. S., Griffiths, M. D., & Pallesen, S. (2016). The relationship between study addiction and work addiction: A cross-cultural longitudinal study. *Journal of behavioral addictions*, 5(4), 708-714. <https://doi.org/10.1556/2006.5.2016.076>
- Atroszko, P. A., Demetrovics, Z., & Griffiths, M. D. (2019). Beyond the myths about work addiction: Toward a consensus on definition and trajectories for future studies on problematic overworking. A response to the commentaries on: Ten myths about work addiction (Griffiths et al., 2018). *Journal of Behavioral Addictions*, 8(1), 7-15. <https://doi.org/10.1556/2006.8.2019.11>
- Atroszko, P. A., Demetrovics, Z., & Griffiths, M. D. (2020). Work addiction, obsessive-compulsive personality disorder, burn-out, and global burden of disease: Implications from the ICD-11. *International Journal of Environmental Research and Public Health*, 17(2), 660. <https://doi.org/10.3390/ijerph17020660>
- Atroszko, P., & Atroszko, B. (2020). Integrating national and international research and exploring country-specific factors contributing to work addiction. Commentary to "Workaholism – psychological and social determinants of work addiction". *Current Problems of Psychiatry*, 21(4), 189-192. <https://doi.org/10.2478/cpp-2020-0017>
- Avanzi, L., Perinelli, E., Vignoli, M., Junker, N. M., & Balducci, C. (2020). Unravelling work drive: A comparison between workaholism and overcommitment. *International Journal of Environmental Research and Public Health*, 17(16), 5755. <https://doi.org/10.3390/ijerph17165755>
- Balducci, C., Avanzi, L., & Fraccaroli, F. (2018). The individual "costs" of workaholism: An analysis based on multisource and prospective data. *Journal of Management*, 44(7), 2961-2986. <https://doi.org/10.1177/0149206316658348>

- Balducci, C., Spagnoli, P., Avanzi, L., & Clark, M. (2021). A daily diary investigation on the job-related affective experiences fueled by work addiction. *Journal of Behavioral Addictions*, 9(4), 967-977. <https://doi.org/10.1556/2006.2020.00102>
- Bello, B.G., Tula, S.T., Omotoye, G.B., Kess-Momoh, A.J., Daraojimba, A.I. (2024). Work-life balance and its impact in modern organizations: An HR review. *World Journal of Advanced Research and Reviews*, 21(01), 1162-1173, <https://doi.org/10.30574/wjarr.2024.21.1.0106>
- \*Bereznowski, P., & Konarski, R. (2020). Is the polythetic approach efficient in identifying potentially addicted to work individuals? Comparison of the polythetic approach with the item response theory framework. *Polish Psychological Bulletin*, 51(2), 98-115. <https://doi.org/10.24425/ppb.2020.133768>
- Bereznowski, P., Atroszko, P.A., & Konarski, R. (2023). Work addiction, work engagement, job burnout, and perceived stress: A network analysis. *Frontiers in Psychology*, 14, Artículo 1130069. <https://doi.org/10.3389/fpsyg.2023.1130069>
- Bereznowski, P., Atroszko, P. A., & Konarski, R. (2024). Network approach to work addiction: A cross-cultural study. *SAGE Open*, 14(2), 1–16. <https://doi.org/10.1177/21582440241245414>
- Bereznowski, P., Bereznowska, A., Atroszko, P.A., & Konarski, R. (2023). Work addiction and work engagement: A network approach to cross-cultural data. *International Journal of Mental Health and Addiction*, 21, 2052-2076. <https://doi.org/10.1007/s11469-021-00707-8>
- Berta, K., Pesthy, Z.V., Vékony, T., Farkas, B.C., Németh, D., & Kun, B. (2023). The neuropsychological profile of work addiction. *Scientific Reports*, 13, article 20090. <https://doi.org/10.1038/s41598-023-47515-9>
- Botero, C., & Delfino, G. (2019). Adicciones al trabajo: factores psicológicos predisponentes, consecuencias de la adicción y tratamientos psicológicos. *Hologramatica*, 30(1), 69-87. <https://dialnet.unirioja.es/servlet/articulo?codigo=7037753>
- Buono, C., Farnese, M. L., & Spagnoli, P. (2023). The workaholism-technostress interplay: Initial evidence on their mutual relationship. *Behavioral Sciences*, 13(7), article 599. <https://doi.org/10.3390/bs13070599>
- Cha, O. (2022). Gender differences in workaholism as a behavioral addiction: Gender group analysis on the path model of workaholism. *Journal of Organization and Management*, 46(4), 103-140. <https://doi.org/10.36459/jom.2022.46.4.103>
- Charkhabi, M., Firoozabadi, A., Seidel, L., Habibi Asgarabad, M., De Paola, F., & Dutheil, F. (2024). Work addiction risk, stress and well-being at work: testing the mediating role of sleep quality. *Frontiers In Public Health*, 12, article 1352646. <https://doi.org/10.3389/fpubh.2024.1352646>



- Chen, S-W., Pikhart, H., Peasey, A., Pajak, A., Kubinova, R., Malyutina, S., & Bobak, M. (2023). Work stress, overcommitment personality and alcohol consumption based on the effort-reward imbalance model: A population-based cohort study. *SSM-Population Health*, 21, 101320. <https://doi.org/10.1016/j.ssmph.2022.101320>.
- Choi, J-S., King, D.L., & Jung, Y-C. (2019). Editorial: Neurobiological perspectives in behavioral addiction. *Frontiers in Psychiatry*, 10 (3), 1-15. <https://doi.org/10.3389/fpsyt.2019.00003>
- Clark, M. A., Smith, R. W., & Haynes, N. J. (2020). The Multidimensional Workaholism Scale: Linking the conceptualization and measurement of workaholism. *Journal of Applied Psychology*, 105(11), 1281-1307. <https://doi.org/10.1037/apl0000484>
- Cubides, J., Hernandez, M., Maldonado, J., Rivera, J., & Rodriguez, Y. (2021). *Características asociadas a la adicción al trabajo, según la percepción de un grupo de trabajadores de cargos estratégicos y administrativos en 4 empresas del sector de servicios en Bogotá*. [BA thesis, Universidad Piloto de Colombia]. <http://repository.unipiloto.edu.co/bitstream/handle/20.500.12277/9903/Trabajo%20de%20Grado.pdf?sequence=1&isAllowed=y>
- Daniel, C., Gentina, E., & Mesmer-Magnus, J. (2022). Mindfulness buffers the deleterious effects of workaholism for work-family conflict. *Social Science & Medicine*, 306, Artículo 115118. <https://doi.org/10.1016/j.socscimed.2022.115118>.
- de la Cruz Ayuso, D. (2020). *Prevención y riesgo de las adicciones en el trabajo. Un enfoque desde la responsabilidad de las empresas y la salud del trabajador*. [Master's thesis, Universitat Politècnica de València]. RiuNet, Repositorio Institucional UPV. <https://riunet.upv.es/handle/10251/158878>
- Demetrovics, Z., van den Brink, W., Paksi, B., Horváth, Z., & Maraz, A. (2022). Relating compulsivity and impulsivity with severity of behavioral addictions: A dynamic interpretation of large-scale cross-sectional findings. *Frontiers in Psychiatry*, 13, article 831992. <https://doi.org/10.3389/fpsyt.2022.831992>
- Dogutas, A. (2023). Sociological influences on addiction: Culture and ethnicity. *Open Journal of Social Sciences*, 11, 617-629. <https://doi.org/10.4236/jss.2023.119038>.
- Dong, G. H., Wang, M., Zheng, H., Wang, Z., Du, X., & Potenza, M. N. (2021). Disrupted prefrontal regulation of striatum-related craving in Internet gaming disorder revealed by dynamic causal modeling: results from a cue-reactivity task. *Psychological Medicine*, 51(9), 1549-1561. <https://doi.org/10.1017/S003329172000032X>
- Di Stefano, G. & Gaudiino, M. (2019). Workaholism and work engagement: how are they similar? How are they different? A systematic review and meta-analysis. *European Journal of Work and Organizational Psychology*, 28 (3), 329-347. <https://doi.org/10.1080/1359432X.2019.1590337>

- Du Prel, J.-B., Runeson-Broberg, R., Westerholm, P., Alfredsson, L., Fahlén, G., Knutsson, A., Nordin, M., & Peter, R. (2018). Work overcommitment: Is it a trait or a state? *International Archives of Occupational and Environmental Health*, 91(1), 1-11. <https://doi.org/10.1007/s00420-017-1253-8>
- Dudek, I., & Szpitalak, M. (2019). Gender differences regarding workaholism and work-related variables. *Studia Humanistyczne AGH*, 18(4), 59-76. <https://doi.org/10.7494/human.2019.18.4.59>
- Falco, A., Dal Corso, L., Girardi, D., De Carlo, A., Barbieri, B., Boatto, T., & Schaufeli, W. B. (2017). Why is perfectionism a risk factor for workaholism? The mediating role of irrational beliefs at work. *Testing, Psychometrics, Methodology in Applied Psychology*, 24(4), 583-600. <https://doi.org/10.4473/TPM24.4.8>
- Fekih-Romdhane, F., Sawma, T., Akel, M., Obeid, S., Brytek-Matera, A., & Hallit, S. (2024). Work addiction and depression, anxiety, and stress: The mediating role of food addiction among Lebanese young adult workers. *International Journal of Mental Health and Addiction*, 22, 1008-1028. <https://doi.org/10.1007/s11469-022-00909-8>
- Gillet, N., Morin, A. J. S., Sandrin, E., & Houle, S. (2018). Investigating the combined effects of workaholism and work engagement: A substantive-methodological synergy of variable centered and person-centered methodologies. *Journal of Vocational Behavior*, 109, 54-77. <https://doi.org/10.1016/j.jvb.2018.09.006>
- Gomes, P., Diogo, A., Santos, E., Ratten, V. (2023). Modeling the influence of workaholism on career success: a PLS-SEM approach. *Journal of Management & Organization*, 29(5), 893-911. <https://doi.org/10.1017/jmo.2022.14>
- Higgins, J., Thomas, J., Chandler, J., Cumpston, M., Li, T., Page, M., & Welch, V. (Eds.). (2022). Cochrane handbook for systematic reviews of interventions version 6.3 (updated February 2022). Cochrane. [www.training.cochrane.org/handbook](http://www.training.cochrane.org/handbook)
- Hong, S.-J., Lee, D., Park, J., Namkoong, K., Lee, J., Jang, D.P., Lee, J.E., Jung, Y.C., Kim, I.Y. (2018). Altered heart rate variability during gameplay in internet gaming disorder: The impact of situations during the game. *Frontiers in Psychiatry*, 9, article 429. <https://doi.org/10.3389/fpsyt.2018.00429>
- Hommelhoff, S., Richter, D., Niessen, C., Gerstorf, D. & Heckhausen, J. (2020). Being unengaged at work but still dedicating time and energy: A longitudinal study. *Motivation Science*, 6(4), 368-373. <https://doi.org/10.1037/mot0000155>
- Jung, H.-S., Jung, Y.-S., & Yoon, H.-H. (2023). The effects of workaholism on employee burnout and turnover intent at deluxe hotels during the COVID-19 pandemic: Evidence across generations. *Sustainability*, 15(6), artículo 5227. <https://doi.org/10.3390/su15065227>

- Junker, N. M., Theisges, L., Avanzi, L., van Dick, R., & Kaluza, A. J. (2024). The link between workaholism and well-being via self-care and the moderating role of group identification. *European Journal of Social Psychology*, 54(2), 545-557. <https://doi.org/10.1002/ejsp.3031>
- Kim, M-K., Jung, Y.H., Kyeong, S., Shin, Y-B., Kim, E., & Kim. J-J, (2018). Neural correlates of distorted self-concept in individuals with internet gaming disorder: A functional MRI study. *Frontiers in Psychiatry*, 9, article 330. <https://doi.org/10.3389/fpsyt.2018.00330>
- Kızıloğlu, M., Kircaburun, K., Özsoy, E., & Griffiths, M. (2024). Work addiction and its relation with dark personality traits: A cross-sectional study with private sector employees. *International Journal of Mental Health and Addiction*. Advance online publication. <https://doi.org/10.1007/s11469-022-00973-0>
- Krishnan, C., Singh, S., & Baba, M.M. (2023). Effect of work from home and employee mental health through mediating role of workaholism and work-family balance. *International Journal of Social Psychiatry*, 70(1). <https://doi.org/10.1177/00207640231196741>
- Koseoglu Ornek, O., & Kolac, N. (2020). Quality of life in employee with workaholism. In Palaniappan, K., & McCauley, P. (Eds.). *Occupational wellbeing* (chapter 12). IntechOpen. <https://doi.org/10.5772/intechopen.95353>
- Kun, B., Takacs, Z. K., Richman, M. J., Griffiths, M. D., & Demetrovics, Z. (2020). Work addiction and personality: A meta-analytic study. *Journal of Behavioral Addictions*, 9(4), 945-966. <https://doi.org/10.1556/2006.2020.00097>
- Kun, B., Fetahu, D., Mervó, B., Magi, A., Eisinger, A., Paksi, B., & Demetrovics, Z. (2025). Work addiction and stimulant use: Latent profile analysis in a representative population study. *International Journal of Mental Health and Addiction*, 23, 1-22. <https://doi.org/10.1007/s11469-023-01076-0>
- Kunz, C. (2019). The influence of working conditions on health satisfaction, physical and mental health: testing the effort-reward imbalance (ERI) model and its moderation with over-commitment using a representative sample of German employees (GSOEP). *BMC Public Health*, 19, article 1009. <https://doi.org/10.1186/s12889-019-7187-1>
- Lee, D., Lee, J., Namkoong, K., & Jung, Y-C. (2018). Subregions of the anterior cingulate cortex form distinct functional connectivity patterns in young males with internet gaming disorder with comorbid depression. *Frontiers in Psychiatry*, 9, Artículo 380. <https://doi.org/10.3389/fpsyt.2018.00380>
- Lee, M., Cho, H., Jung, S. H., Yim, S.-H., Cho, S.-M., Chun, J.-W., Paik, S.-H., Park, Y. E., Cheon, D. H., Lee, J. E., Choi, J.-S., Kim, D.-J., & Chung, Y.-J. (2018). Circulating

- microRNA expression levels associated with internet gaming disorder. *Frontiers in Psychiatry*, 9, article 81. <https://doi.org/10.3389/fpsyt.2018.00081>
- Leong, K.-C., Cox, S., King, C., Becker, H., & Reichel, C. M. (2018). Oxytocin and rodent models of addiction. *International Review of Neurobiology*, 140, 201-247. <https://doi.org/10.1016/bs.irn.2018.07.007>
- Li, S., Wu, Q., Tang, C., Chen, Z., & Liu, L. (2020). Exercise-based interventions for internet addiction: Neurobiological and neuropsychological evidence. *Frontiers in Psychology*, 11, article 1296. <https://doi.org/10.3389/fpsyg.2020.01296>
- Loscalzo, Y., Tziner, A., & Shkoler, O. (2023). Heavy work investment, workaholism, servant leadership, and organizational outcomes: A study among Italian workers. *Journal of Work and Organizational Psychology*, 39(2), 55-64. <https://doi.org/10.5093/jwop2023a7>
- Lu, X., Yu, H., & Shan, B. (2022). Relationship between employee mental health and job performance: Mediation role of innovative behavior and work engagement. *International Journal of Environmental Research and Public Health*, 19(11), article 6599. <https://doi.org/10.3390/ijerph19116599>
- Malinowska, D., & Tokarz, A. (2021). Workaholism components in relation to life and work values. *International Journal of Mental Health and Addiction*, 19, 529-545. <https://doi.org/10.1007/s11469-019-00089-y>
- Marecki, L. (2024). Impact of work-life balance on employee productivity and well-being. *Journal of Management and Financial Sciences*, 50, 1-15. <https://doi.org/10.33119/JMFS.2023.50.9>
- Mazzetti, G., Vignoli, M., Schaufeli, W.B. and Guglielmi, D. (2019). Work addiction and presenteeism: The buffering role of managerial support. *International Journal of Psychology*, 54(29), 174-179. <https://doi.org/10.1002/ijop.12449>
- McLaughlin, T., Blum, K., Steinberg, B., Modestino, E. J., Fried, L., Barón, D., Siwicki, D., Braverman, E., & Badgaiyan, R. (2018). Pro-dopamine regulator, KB220Z, attenuates hoarding and shopping behavior in a female, diagnosed with SUD and ADHD. *Journal of Behavioral Addictions*, 7(1), 192-203. <https://doi.org/10.1556/2006.6.2017.081>
- Mohan, H., & Lone, Z. A. (2021). Work addiction and its risk factors. *International Journal of Emerging Technologies and Innovative Research*, 8(3), 324-339. <https://dx.doi.org/10.2139/ssrn.3836618>
- Moreno, B., Muñoz, M., Cuellar, J., Domancic, S., & Villanueva, J. (2018). Revisiones sistemáticas: definición y nociones básicas [Systematic reviews: Definition and basic notions]. *Revista Clínica de Periodoncia, Implantología y Rehabilitación Oral*, 11(3), 184-186. <https://doi.org/10.4067/S0719-01072018000300184>

- Morkevičiūtė, M., & Endriulaitienė, A. (2022). Moderating role of perceived work addiction of managers in the relationship between employees' perfectionism and work addiction: A trait activation theory perspective. *Baltic Journal of Management*, 17 (5), 586-602. <http://www.jetir.org/papers/JETIR2103051>
- Morkevičiūtė, M., & Endriulaitienė, A. (2024). Explaining work addiction through perceived behaviors of significant others in a family and organization: Gender differences. *Scandinavian Journal of Psychology*, 65(3), 411-420. <https://doi.org/10.1111/sjop.12990>
- Negura, L., Plante, N., Namian, D. (2023). The social construction of workaholism as a representational naturalization. *Heliyon*, 9(6), e17447. <https://doi.org/10.1016/j.heliyon.2023.e17447>
- Park, S., Ryu, H., Lee, J-Y., Choi, A., Kim, D-J., Kim, S.N., & Choi, J-S. (2018). Longitudinal changes in neural connectivity in patients with internet gaming disorder: A resting-state EEG coherence study. *Frontiers in Psychiatry*, 9, 252. <https://doi.org/10.3389/fpsyt.2018.00252>
- Platania, S., Morando, M., Caruso, A., & Scuderi, V. E. (2022). The effect of psychosocial safety climate on engagement and psychological distress: A multilevel study on the healthcare sector. *Safety*, 8(3), article 62. <https://doi.org/10.3390/safety8030062>
- Reis, D., Arndt, C., Lischetzke, T., & Hoppe, A. (2016). State work engagement and state affect: Similar yet distinct concepts. *Journal of Vocational Behavior*, 93, 1-10. <https://doi.org/10.1016/j.jvb.2015.12.004>
- Reig-Botella, A., & Cabarcos Fernández, A. (2020). El impacto de la adicción al trabajo en las organizaciones: causas y repercusiones en el bienestar laboral de los trabajadores. *Revista de Investigación del Departamento de Humanidades y Ciencias Sociales*, (17), 3-24. <https://www.redalyc.org/articulo.oa?id=581963108001>
- Romer, A. L., Kang, M. S., Nikolova, Y. S., Gearhardt, A. N., & Hariri, A. R. (2019). Dopamine genetic risk is related to food addiction and body mass through reduced reward-related ventral striatum activity. *Appetite* 133, 24-31. <https://doi.org/10.1016/j.appet.2018.09.010>
- Sayan, I. (2021). The mediator role of the use of emotion in the association between personality traits and workaholism, *Annals of Psychology*, 37(2), 221-232, <https://doi.org/10.6018/analesps.451711>
- Shimazu A., Balducci C., & Taris T. (2019). Workaholism: About the concept, its antecedents, consequences and prevention. En Taris, T., Peeters M., De Witte, H. (Eds.), *Fun and frustration of modern working life* (pp. 164-176). Pelckmans Pro.

- Seok, J-W., & Sohn, J-H. (2018). Altered prefrontal and inferior parietal activity during a stroop task in individuals with problematic hypersexual behavior. *Frontiers in Psychiatry* 9, 460. <https://doi.org/10.3389/fpsy.2018.00460>
- Soraci, P., Griffiths, M. D., Melchiori, F. M., Bravo, G., Guitoli, E., Del Fante, E., Scali, L., Grieco, F., Cimaglia, R., Di Bernardo, C., & Pisanti, R. (2022). Work addiction and its association with personality traits, general distress, and self-esteem among adult Italian workers. *Mediterranean Journal of Clinical Psychology*, 10 (3), 1-27. <https://cab.unime.it/journals/index.php/MJCP/article/view/3513/pdf>
- Soroka, E., Iwanicka, A., & Olajossy, M. (2020). Workaholism – psychological and social determinants of work addiction. *Current Problems of Psychiatry*, 21 (1), 7-14. <https://doi.org/10.2478/cpp-2020-0001>
- Sun, R., Lam, L.W. & Wu, A.M.S. (2023). Work addiction in Chinese white-collar workers: the psychometric properties of its measure and its comorbidity with general anxiety in network analysis. *BMC Psychology*, 11, article 214. <https://doi.org/10.1186/s40359-023-01247-7>
- Taris, T. W., van Beek, I., & Schaufeli, W. B. (2020). The motivational make-up of workaholism and work engagement: A longitudinal study on need satisfaction, motivation, and heavy work investment. *Frontiers in Psychology*, 11, 1419. <https://doi.org/10.3389/fpsyg.2020.01419>
- Taris, T. W., & de Jonge, J. (2024). Workaholism: Taking stock and looking forward. *Annual Review of Organizational Psychology and Organizational Behavior*, 11, 113-138. <https://doi.org/10.1146/annurev-orgpsych-111821-035514>
- Ten Brummelhuis, L. L., Rothbard, N. P., & Uhrich, B. (2017). Beyond nine to five: is working to excess bad for health? *Academy of Management Discoveries*, 3 (3), 262-283. <https://doi.org/10.5465/amd.2015.0115>
- Tereshchenko, S.Y. (2023). Neurobiological risk factors for problematic social media use as a specific form of Internet addiction: A narrative review. *World Journal of Psychiatry*, 13(5), 160-173. <https://dx.doi.org/10.5498/wjp.v13.i5.160>
- Trașcă, O.M. (2023). Workaholism: A modern epidemic in professional environments. *Ovidius University Annals, Economic Sciences Series*, 23(2), 595-602, <https://doi.org/10.61801/OUAESS.2023.2.72>
- van Beek, I., Taris, T. W., & Schaufeli, W. B. (2011). Workaholic and work engaged employees: Dead ringers or worlds apart? *Journal of Occupational Health Psychology*, 16 (4), 468-482. <https://doi.org/10.1037/a0024392>
- Van den Broeck A., & Van Beek I. (2019). Being engaged and productive rather than burned-out? The right type of motivation helps! En Taris T., Peeters M., De

- Witte, H. (Eds.), *The fun and frustration of modern working life* (pp. 177-186). Pelckmans Pro.
- Vera, O. (2009). Cómo escribir artículos de revisión. *Revista Médica La Paz*, 15(1), 63-69. [http://www.scielo.org.bo/scielo.php?script=sci\\_arttext&pid=S1726-89582009000100010&lng=es&tlng=es](http://www.scielo.org.bo/scielo.php?script=sci_arttext&pid=S1726-89582009000100010&lng=es&tlng=es)
- Uzarska, A., Czerwiński, S.K. & Atroszko, P.A. (2023). Measurement of shopping addiction and its relationship with personality traits and well-being among Polish undergraduate students. *Current Psychology*, 42, 3794-3810. <https://doi.org/10.1007/s12144-021-01712-9>
- Wang, S., Liu, J., Tian, L., Chen, L., Wang, J., Tang, Q., Zhang, F., & Zhou, Z. (2018). Increased insular cortical thickness associated with symptom severity in male youths with internet gaming disorder: A surface-based morphometric study. *Frontiers in Psychiatry*, 9, 99. <https://doi.org/10.3389/fpsyt.2018.00099>
- Wang, L., & Abu Hasan, N. (2024). Exploring organizational career growth: a systematic literature review and future research directions. *Cogent Business & Management*, 11(1), article 2398728. <https://doi.org/10.1080/23311975.2024.2398728>
- Weinstein, A., & Lejoyeux, M. (2020). Neurobiological mechanisms underlying internet gaming disorder. *Dialogues in Clinical Neuroscience*, 22(2), 113-126. <https://doi.org/10.31887/DCNS.2020.22.2/aweinstein>
- Wettstein, A., Schneider, S., Jenni, G., Grosse Holtforth, M., Tschacher, W., & La Marca, R. (2022). Association between workaholism, vital exhaustion, and hair cortisol concentrations among teachers: A longitudinal study testing the moderation effect of neuroticism. *Frontiers in Psychology*, 13, article 1046573. <https://doi.org/10.3389/fpsyg.2022.1046573>
- Yucel, I., Şirin, M. S., & Baş, M. (2021). The mediating effect of work engagement on the relationship between work-family conflict and turnover intention and moderated mediating role of supervisor support during global pandemic. *International Journal of Productivity and Performance Management*, 72(3), 577-598, <https://doi.org/10.1108/IJPPM-07-2020-0361>
- Zhang, M., Gao, X., Yang, Z., Wen, M., Huang, H., Zheng, R., Wang, W., Wei, Y., Cheng, J., Han, S., & Zhang, Y. (2021). Shared gray matter alterations in subtypes of addiction: A voxel-wise meta-analysis. *Psychopharmacology*, 238(9), 2365-2379. <https://doi.org/10.1007/s00213-021-05920-w>
- Zhou, Q., Martinez, L.F., Ferreira, A.I., Rodrigues, P. (2016). Supervisor support, role ambiguity and productivity associated with presenteeism: A longitudinal study. *Journal of Business Research*, 69(9), 3380-3387, <https://doi.org/10.1016/j.jbusres.2016.02.006>

