



## Article

# The Relationship between *Career Calling* and Workaholism: The Mediating Role of Career Orientation

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**Abstract:** The difference between having workers involved in their work, on the one hand, or too exhausted to contribute, on the other, can be tenuous and compromise work orientation. The positive outcomes of career calling (a deep purpose and meaningfulness in work characterized by vigor, dedication, and absorption) to organizations are clear, namely the relationship of career calling with high levels of commitment and engagement. However, the dark side of career calling remains a less explored point. The main purpose of this study analyzes this side of career calling and explores the relationship between sense of work purpose—perceived career calling—and workaholism. The sample consists of 743 Portuguese employees from different sectors of activity. The main hypothesis intends to test the presence of career orientation as a mechanism to explain the ambiguity of career calling outcomes, that is, the mediating effect of career orientation on the relationship between career calling and workaholism. The results showed that the workers' career orientation helps to explain this relationship. Career orientation partially mediated the relation between career calling and the positive dimension of workaholism, involvement and enjoyment, and completely mediated the relation between career calling and negative dimensions of workaholism, drive. These results allow us to reflect on career calling, and how organizations manage workforce efforts to avoid work addiction and the negative consequences that compromise workforce sustainability. Career calling was looked at as an element of a mixed profile work orientation, rather than not just as a pure work orientation. Theoretical and practical implications are discussed.

**Keywords:** career calling; workaholism; career orientation; work orientation; work orientation dynamics



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## 1. Introduction

The concept of career calling is not new in the literature, but it has grown exponentially in recent decades. To Choi et al. (Choi et al. 2020) calling is a cognition process that drives individuals to a deep, meaningful, and fulfilling experience related to their work. The term calling was born out of the idea of divine connection, as a calling from God to fulfill the work (Dalton 2001). This divine connection disappeared, but the concept of calling remained in the literature with the meaning of a relationship with work marked by a strong internal source that drives towards a certain work (Wrzesniewski et al. 1997). The concept of career calling has been widely used in the literature (Chen et al. 2023; Cai et al. 2021; DiRenzo et al. 2022; Parola et al. 2023; Shang et al. 2022) and represents a perfect fit between work and an individual's identity and sense of destiny or inevitability (Duffy et al. 2014; Pitacho et al. 2019a). In career calling, a professional occupation is an extension of an individual themselves, of their values and interests. If vocation is 'what I love to do', career calling is 'who I am and how I express myself through work' (Wrzesniewski et al. 1997; Pitacho et al. 2019a).

Work plays a fundamental role in life and individual identity (Rodrigues et al. 2018) and plays an important role in meeting social and psychological needs (Morkevičiūtė et al.

2021). Career calling is the deepest way of experiencing work. Research has consistently shown the positive relation between living a career calling and positive outcomes of work, life, and well-being (Bunderson and Thompson 2009). Employees who live a career calling are often among the happiest, most committed, most satisfied, and most engaged (Duffy and Dik 2013; Wrzesniewski 2003).

Career calling has received increasing attention from researchers over the past two decades. Extensive research has been placed on career calling as a significant predictor of relevant individual and work outcomes. Usually, career calling seems to be a deep and truly positive experience (Bloom et al. 2021). It often even looks like something that was idyllic, with its proponents focusing on its benefits for employees (Sharma et al. 2022). For example, career calling orientation is positive and significantly related to higher levels of social and psychological well-being (Mesurado et al. 2022), as well as work engagement (Zhu et al. 2017).

However, some authors have warned of what they have called the double-edged sword of career calling (Bunderson and Thompson 2009; Yang and Chen 2020; Hirschi et al. 2019). These authors have demonstrated that career calling does not always have positive consequences. In their study with zookeepers, Bunderson and Thompson (2009) verified that workers who showed high levels of career calling were more predisposed to making personal sacrifices, which included both physical and time sacrifices; they are predisposed to working more and earning less. Consequently, the authors verified that these workers have the most risk of work–family conflict and suffered a higher risk of exploitation as well. The authors Dik et al. (2009) showed that students with high levels of career calling showed more difficulty in accepting career counselling. Additionally, career calling has a positive and significant relation with excessive work investment and workaholism (Keller et al. 2016). In a study with Chinese nurses, Yang and Chen (2020) showed that career calling has a positive impact on work–life conflict levels.

A disturbing and prominent example of the dark side of career calling is that living a career calling has been regularly associated with workaholism (Berkelaar and Buzzanell 2015; Dalla Rosa and Vianello 2020). Typically, common sense sees workaholism as something positive because such individuals work more. But it is also an addiction, and like other addictions, it has negative consequences for both individuals and organizations.

Knowledge about the dark side of career calling is scarce, but it is important to understand when and by what means career calling has good or bad consequences for individuals and organizations. The present research looks for explanations for and about this double-edged sword and has two main purposes: first, to deepen the study of the relationship between career calling and workaholism, and second, to test the role of career orientation on the relationship between career calling and workaholism.

This study contributes to filling an existing gap in the literature on work orientation, namely work orientation and its impact on workaholism. Specifically, this study explores how perceived career calling (or a sense of purpose in one's work) affects workaholism and how this relationship is more complex than a simple dichotomy between “positive” and “negative” work orientation. This study's findings suggest that career calling can be a double-edged sword, potentially leading to both positive outcomes (such as engagement and achievement) and negative outcomes (such as workaholism). The need for this study relative to existing research stems above all from the need for a nuanced understanding of work orientation, which has important implications for how we conceptualize and measure these constructs in research and how we design interventions to promote healthy work habits. Previous studies (Berkelaar and Buzzanell 2015; Dalla Rosa and Vianello 2020) only relate career calling to workaholism and say nothing about the relationship between the remaining work orientations (job and career) and workaholism. The present study also aims to fill this gap, as it studies the dynamics of work orientation as recently recommended by Schabram et al. (2022) in the *Academy of Management Annals*. Furthermore, this study investigated the relationship between the three dimensions of work orientation and the three dimensions of workaholism. Additionally, for the first time, this study links a hybrid

profile (Pitacho et al. 2021) of work orientation with workaholism and not just calling orientation. The aim is to verify whether the combination of the calling with a second orientation towards work can change the consequences of the calling and make it oscillate between positive and negative results, as demonstrated in the literature (Bunderson and Thompson 2009; Yang and Chen 2020; Hirschi et al. 2019).

Regarding the structure of this paper, the literature review focuses on work orientation. To give it consistency and analytical robustness, the analysis over some fundamental constructs was privileged, such as work orientation, workaholism, career calling, and career orientation, with a focus on improving workforce sustainability. The method section describes the empirical study, instruments, procedures, and sample. The results section presents the descriptive analysis, the comparison analysis, and the hypotheses test. The last section is dedicated to the discussion of results, conclusions, and implications.

### 1.1. Work Orientation

A large part of a human being's life is spent studying and preparing for professional life, and a third of an adults' time is spent at work (Sharabi 2017). Ortiz and Jaimes-Osma (2012) argue that suffering, love, and work are the three main areas of action from which individuals derive meaning for their lives. It is through work that people build identity and cultural integration, as well as seek dignity, socioeconomic freedom, status, and social prestige (Bendassolli and Tateo 2018).

The meaning of work has been a theme of research since at least the 1930s. However, the concept of career calling emerges later from the literature with the work of sociologists Bellah et al. (1985). These authors, in their work entitled *Habits of the Heart*, introduced the concept of work orientation into the literature. Work orientation addresses the purpose that work serves in an individual's life as a way of contributing meaning (Willner et al. 2020). This construct reflects different motivations and relationships with work, ranging from a more intrinsic to a more instrumental perspective (Jaffery and Abid 2020). This concept has been defined as the fundamental purpose that paid work assumes in one's life and a reflection on how one finds meaning in the work context (Fossen and Vredenburg 2014). Bellah et al. (1985) proposed a three-dimensional model of work orientation. In other words, the authors developed a model where they postulate the existence of three distinct ways of attributing meaning to work. Bellah et al. (1985) argue there are three ways of conceiving the relationship with work, job orientation, career orientation, and career calling orientation. The three dimensions of this theoretical model were later empirically tested and corroborated (Wrzesniewski et al. 1997). Each of these orientations guides individuals towards their basic goals, understanding the individuals' beliefs about the role of work in their lives, and reflects their feelings and behaviors regarding the organizational context (Wrzesniewski 2003).

While the literature has been consensual in definitions of job and career orientation, the same is not true of career calling itself (Dobrow 2004). People who see their work as a job seek to derive only material benefits from it and look at their work as an instrumental activity. That is, they do not see work as an end but as a means or instrument to receive financial resources that allow them to enjoy their leisure time (Wrzesniewski et al. 1997). For individuals with job orientation, the relationship with the worker is superficial and merely instrumental. Working is just a way to make money and make a living. All major and deepest interests are not expressed through work (Schabram et al. 2022).

On the other hand, the people who see their work as a career invest more deeply in their professional life or professional career, and they want to achieve high levels of recognition and self-esteem. These people look for success; such success includes advances in the organizational structure or career growth, recognition, social status, and power (Jaffery and Abid 2020; Fossen and Vredenburg 2014; Dobrow 2004). That is, in career orientation, the deepest personal investment in work arises not from monetary gains or personal fulfillment but rather from the motivation for career progression and hierarchical ascension, marked by status and the ambition for power (Schabram et al. 2022).

Finally, career calling has the least consensual definition but is the work orientation that has gleaned the most interest from researchers. Initially, in classic definitions, career calling was related to religion and seen as a divine appeal (Dalton 2001). Later, it appears in the literature with the neoclassic definition. Career calling gave up its divine character, but its source is still external and focuses instead on sense of mission or destiny and prosocial desire to positively impact society or community (Dik and Shimizu 2019). Wrzesniewski et al. (1997, p. 22) appeal to external sources of career calling and prosocial motivation. These authors argue that a work that is seen as a career calling is a “work that people feel called to do [that] is usually seen as socially valuable—an end in itself—involving activities that may, but need not be, pleasurable . . . and think that it contributes to making the world a better place”. Finally, in modern perspectives, some authors have reformulated the previous definitions focusing on passion and internal, personal, and deep motivation. From this perspective, the source of career calling is internal and can be illustrated, for example, by the definition of Dobrow and Tosti-Kharas (2011, p. 1005) that defines career calling as “a consuming, meaningful passion people experience toward a domain”. Recently, in a critical review of the literature, the authors consider that in the calling dimension, work constitutes a practical ideal of activity and is felt to be morally inseparable from life. For those who live with work as a career calling, do not work for financial gain or career progression but rather for the fulfillment that the work brings them (Schabram et al. 2022).

Based on the definitions of the different dimensions of work orientation, it can be considered that “calling versus job orientations are related to, yet conceptually different from, ostensibly similar constructs—especially intrinsic versus extrinsic motivation and passion” (Cho and Jiang 2022, p. 1355). These two dimensions of work orientation may be antagonistic, but career orientation appears as a possible orthogonal dimension. In other words, it is possible to combine career orientation with the remaining two dimensions. This conjunction of orientations has been discussed in the literature and presented as hybrid work orientation profiles (Schabram et al. 2022; Pitacho et al. 2021). Despite the enormous number of research articles that address career calling, the number of works that address work orientation capturing the three dimensions is scarce (Pitacho et al. 2019b). Furthermore, the study of the dynamics of work orientation and hybrid profiles is incipient, meaning more information is needed on the results of this type of mixed profile. Some articles point theoretically to their existence (Schabram et al. 2022; Fossen and Vredenburg 2014; Pitacho et al. 2019b) and a work that empirically proved the existence of these profiles (Pitacho et al. 2021).

Regardless of the definition of career calling, the literature has predominantly “paint[ed] a rosy picture” of career calling (Bunderson and Thompson 2009, p. 427). This picture has shown positive outcomes for those who live a career calling. For example, career calling has been associated with high levels of life and work satisfaction (Wrzesniewski et al. 1997) and enhanced overall health and health satisfaction (Wrzesniewski et al. 1997; Conway et al. 2015). Living a career calling has been associated with increased experiential work-related well-being, too (Duffy et al. 2012). Additionally, Dobrow and Tosti-Kharas (2011) contributed to the positive perception of career calling when they verified that career calling was associated with high levels of work engagement. Moreover, living a career calling has been associated with positive career outcomes. For example, Chen et al. (2018) verified that people who see their work as a career calling self-report more career success, and Kim et al. (2018) revealed that career calling was associated with self-reported high work performance.

However, despite the evident positive perception of living a career calling, it has a dark side, and negative outcomes of living a career calling have been gaining more attention from scholars. Understanding the potential dangers of a career calling contributes to a more balanced theoretical understanding of this construct (Duffy et al. 2018). In this study, we seek to deepen the understanding of the relationship between career calling and workaholism.



## 1.2. Workaholism

The labor market is very unstable, and organizations are increasingly differentiating their employees according to their performance and their effective contribution. Employees feel increasingly compelled to work hard to stand out favorably from their peers. However, the experience of this competitive climate seems to have both advantages and disadvantages: on the one hand, it is associated with excellent performance, but on the other, with work addiction (Morkevičiūtė and Endriulaitienė 2021a; Keller et al. 2016). Hard-working or workaholic behavior is commonly valued in this organizational environment and highly appreciated by employers (Molino et al. 2016). The workaholic is often seen as a more competitive, more productive, effective person who lives for the company and is always in search of work-related objectives, reaching high levels of professional performance (Van Wijnhe et al. 2014). However, like any other addiction, workaholism can lead to negative consequences for individuals and organizations (Choi et al. 2020; Van Beek et al. 2012).

Workaholism was initially defined as a need or uncontrollable compulsion to work incessantly (Oates 1971). More recently, Clark et al. (2020) defined workaholism as an addiction to work. Although it is not a recent concept, the definition of workaholism is far from being consensual. The ambiguity of this concept begins in its components or dimensions (Clark et al. 2020). Ng et al. (2007) argue that there are three components or dimensions: the behavioral, the cognitive, and the affective. The behavioral dimension corresponds to the time the individual dedicates to work. The cognitive dimension corresponds to the obsession with work being seen as an uncontrollable work involvement and to the presence of constant and invasive thoughts about work. Finally, the affective dimension is the most controversial of all. This dimension matches both positive or negative emotions related to work, depending on whether they are related to a source of satisfaction and pleasure or to feelings such as fear, guilt, and depression (Shkoler et al. 2017). Ng et al. (2007) point out that workaholics take pleasure in their work, arguing that the real enjoyment they take from the activity comes from the acts of working themselves and not necessarily from the real tasks they perform. On the other hand, Van Wijnhe et al. (2014) argue that workaholics continue to work incessantly not because they are enjoying the tasks or the work itself, but because they constantly feel that they have not done enough. In addition, when they are not working, they remain focused on work tasks, duties, or responsibilities, thinking about work continuously, even feeling guilt or anxiety. Additionally, such workaholism cannot be seen as a way of coping with heavy workloads. The excess of time and energy that a person with this behavior spends in their work is not justified by monetary needs or by the competitive environment; it is not just an external driver at play. The person with this behavior is internally motivated, as there is an internal force compelling the person to work, like a compulsion (Morkevičiūtė and Endriulaitienė 2021a).

Spence and Robbins (1992) presented a classic model of workaholism that is still one of the most used in the literature today. The authors introduced a triad into the workaholism literature: work involvement, feeling driven to work, and enjoyment in work. Work involvement represents a generalized attitude of psychological involvement with work (McMillan et al. 2002). It is the degree to which an individual is constructive in the use of their time at work and how committed the individual is to being productive at work (Erkmen et al. 2010). Enjoyment represents the level of pleasure and fun that individuals derive from their work (McMillan et al. 2002). And drive represents a compulsion to work, an acute need to be active, which causes anguish and guilt when the individual leaves work (Spence and Robbins 1992).

A workaholic or work addict can be identified as someone with a high involvement with work and a high drive for work. They have high performance and compulsion that represent a great deal of time dedicated to work but with little pleasure taken from work itself.

Combining these three dimensions of workaholism through cluster analysis identified three workaholic patterns (work addicts, work enthusiasts, enthusiastic addicts) and three nonworkaholic patterns (relaxed, disenchanted, unengaged). Work Addicts are represented

by high work involvement, high inner drive to work, and low enjoyment. In this pattern of workaholism, individuals work intensely and compulsively but do not derive pleasure or fun from their activity. Work addiction is the most serious and dangerous form of workaholism. Work enthusiasts present high work involvement and low inner drive but high enjoyment. In this pattern of workaholism, individuals feel deeply involved in work activities and derive pleasure and fun. However, they do not feel a compulsion and do not feel distressed or guilty when they are not working. Without compulsive behavior, there is a positive cognition and feeling towards work. In their turn, enthusiastic addicts are represented by high values in three dimensions: work involvement, inner drive to work, and work enjoyment. This is an ambiguous pattern of workaholism. The individual becomes deeply involved in their work and derives pleasure and fun from their activity, but they behave compulsively due to the acute need to be active and feels guilty when they are not working. Despite obtaining pleasure from their activity, compulsion is present, which is a relevant factor in characterizing addiction and its harmfulness for individuals. Relaxed workers manifest high enjoyment but low work involvement and low inner drive to work. Unengaged workers present low values in all three dimensions. Finally, disenchanted workers feel high inner drives to work and low work involvement and enjoyment. For this study, the workaholism model of [Spence and Robbins \(1992\)](#) was adopted.

### *1.3. Career Calling, Workaholism, and the Mediating Role of Career Orientation*

A person with career calling orientation is commonly viewed as a hard worker and seems to achieve excellent individual and organizational excellent. But where is the thin line between career calling and workaholic behavior that can have bad results for organizations and oneself?

Despite the positive consequences of living a career calling being ostensibly described and portrayed in the current literature, some authors demonstrate that it can increase the propensity for workaholism ([Berkelaar and Buzzanell 2015](#); [Clinton et al. 2017](#); [Dalla Rosa and Vianello 2020](#); [Keller et al. 2016](#)). Despite the reduced amount of literature showing the dark side of career calling, some studies have reported in a supported way the relationship between career calling and workaholism.

The relationship between career calling and workaholism can be complex and multidimensional. On one hand, career calling refers to a strong sense of purpose and meaning that an individual derives from their work. It is characterized by a deep connection to chosen profession or occupation, a strong desire to contribute and make a difference, and a sense of fulfillment and personal identity linked to work ([Wrzesniewski et al. 1997](#)). On the other hand, workaholism refers to an excessive and uncontrollable need to work, often resulting in neglect of other vital areas of life such as relationships, self-care, and leisure activities. Workaholics tend to define their self-worth through work achievements and may feel a compulsive need to remain constantly busy and engaged in work-related activities to the point of exhaustion ([Spence and Robbins 1992](#)). Like workaholism, career calling has been associated with working long hours and with personal sacrifices that take away from nonwork domains ([Bunderson and Thompson 2009](#); [Duffy and Dik 2013](#); [Clinton et al. 2017](#)). In an emblematic study with zookeepers, [Bunderson and Thompson \(2009\)](#) verified that because of their career calling that translates into there being a strong passion for their work, zookeepers work more hours, seem not to value extrinsic rewards, and present a high risk of being exploited by abusive employers. In another recent study, career calling not only motivated people to work longer hours but limited their psychological detachment from work in the evenings and when they were away from the workplace. The results of this are that sleep quality and morning vigor are reduced ([Clinton et al. 2017](#)). This means that intense career calling can limit the process of recovering work experiences. Looking at the constructs of career calling and workaholism, it is intuitive to perceive the relationship between career calling and work involvement and enjoyment ([Pitacho et al. 2018](#)) that characterizes workaholism, or more precisely, the work enthusiast pattern. However, the

relationship between career calling and drive, the compulsive dimension of workaholism, has not yet been explained or found.

In this study, we intend to contribute to the increasing knowledge of this relationship, studying more deeply the contribution of the career orientation dimension as a mediator of the relationship between career calling and workaholism. [Pitacho et al. \(2021\)](#) showed that the same person can have a dual orientation, and the hybrid orientation profile Calling–Career was the most represented in their sample (34.8%). Other recent studies also point to the existence of orthogonal dimensions of work orientation that can result in hybrid profiles ([Schabram et al. 2022](#); [Pitacho et al. 2019b](#)). That is, until now, previous studies assumed that career calling is a pure orientation, and the scales used only allow checking the career calling level but not the identification of a secondary or primary orientation. This means that previous studies only evaluated the relationship between career calling and its positive and negative outcomes. However, career calling cannot be a single orientation; high results in calling scale can represent the hybrid orientation profile Calling–Career as well ([Pitacho et al. 2021](#)). The outcomes of career calling can depend on the simple or hybrid profile of career calling.

With this information considered, we hypothesize the following:

**H1:** *Career calling has a positive and significative relation with the positive dimensions of workaholism (involvement and enjoyment).*

Both constructs, career calling and workaholism, seem to be correlated to job involvement and enjoyment with work. That is, apparently, people that see their work as a calling, as well as workaholic people, share these two characteristics ([Pitacho et al. 2018](#)). [Ng et al. \(2007\)](#) argue that workaholic employees are people who like to work, enjoy their work, and that can derive pleasure and fun from these activities. Remember that according to [Spence and Robbins \(1992\)](#), high levels of work involvement and high levels of enjoyment can be associated with two workaholics profiles, work enthusiastic and work addicted; the difference between these two profiles is the manifested level of drive. While there may be overlap between the two concepts, they can also diverge. Career calling can motivate individuals to engage deeply in their work, strive for excellence, and make a meaningful impact. When aligned with a healthy work–life balance and overall well-being, it can increase job satisfaction and overall happiness. This is contrary to workaholism, which is marked by compulsion-driven health hazards.

**H2:** *Career calling does not have a significative effect on the drive dimension of workaholism.*

This hypothesis reflects the difference between wanting to work and the compulsion to work. In the career calling orientation, people work from their own self-will, and people with the career calling orientation work because they want to work; it makes them feel good. Drive here is an internal force that compels workaholics to work even if it is painful for them. This dimension is not like living a career calling. We instead can see the drive dimension as the dark dimension of workaholism, and such a dimension can be associated with a pathological pattern of addiction. This difference can be seen in two studies. [Van Wijhe et al. \(2014\)](#) showed that workaholic employees work incessantly because they feel that still have not done enough, and not because they feel real pleasure in continue the activity; they are driven by this need like a compulsion. In the career calling orientation, the literature showed us the opposite: people that are living a career calling see their work as internally gratifying, and it provides them with feelings of fulfillment. This experience results in high levels of personal and professional satisfaction.

**H3:** *Career orientation mediates the relationship between career calling and the three dimensions of workaholism.*

This hypothesis is congruent with the recommendation of [Schabram et al. \(2022\)](#) that it is important to include career orientation in future research as a moderation or mediation variable to garner more knowledge regarding career calling. This idea assumes

that work orientation is organized into two orthogonal dimensions from which profiles result (Schabram et al. 2022).

Concerning work orientation theory, the terms “calling orientation” and “career orientation” represent distinct concepts. On the one hand, the career calling orientation refers to a fundamental belief that work is more than just a means of earning a living. It is seen as a higher calling or vocation that aligns with an individual’s values, passions, and purpose. Individuals with a calling orientation strongly identify with their work, seeing it as a path to making a meaningful contribution to society and finding fulfillment. They seek work that allows them to express their unique talents and make a positive impact. On the other hand, career orientation focuses more on the practical and strategic aspects of work. Career-oriented individuals make decisions based on financial stability, opportunities for advancement, and professional growth. The main goal of career-oriented individuals is to build a prosperous career that provides them with stability and advancement. In other words, although both the career calling orientation and career orientation are related to work; they differ in underlying motivations and perceptions. Calling orientation emphasizes a sense of purpose, meaning, and personal fulfillment, while career orientation focuses more on professional growth, financial rewards, and long-term stability. It is important to note that these orientations are not mutually exclusive, and individuals can have varying degrees of calling and career orientations.

The theoretical assumption about the existence of hybrid work orientation profiles was presented by Schabram et al. (2022) in their integrative review published in the *Academy of Management Annals*. But there are two previous empirical studies that prove this assumption. Pitacho et al. (2021) proved that two orthogonal dimensions exist. A mixed profile with two orientations, career calling and career orientation, also exists and has a high representation. Pure career calling is not the only manifestation of career calling that exists (Pitacho et al. 2021).

The high values of drive associated with high values of work involvement and enjoyment result in the enthusiastic addicted pattern of workaholism (Spence and Robbins 1992). The enthusiastic, addicted workaholic worked the longest hours and reported the least private time with negative consequences to work and family balance and satisfaction, health, and stress. Additionally, this group is represented by employees in higher hierarchical positions and the self-employed, who are strongly and intrinsically motivated; they manifest focus on self-development but worry little about their level of salary. These results differ from the enthusiastic worker pattern of workaholism (high levels of work involvement and enjoyment and low levels of drive) because enthusiastic workers do not report harm to their health or dissatisfaction with their work–family balance due the time spent at work, long hours, or few hours of sleep (Buelens and Poelmans 2004). This hypothesis assumes that the presence of career orientation potentiates the drive levels of individuals with the career calling orientation.

**H4:** *When mediated by career orientation, career calling has a positive impact on the drive dimension of workaholism.*

## 2. Materials and Methods

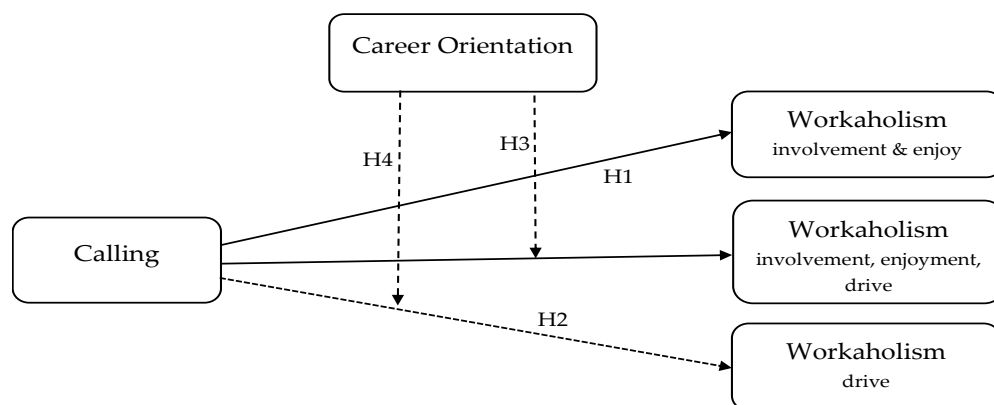
At the methodological level, this research configures a quantitative and correlational methodology (Field 2009) focused on the analysis of the relationship between the career calling and workaholism of employees from different Portuguese enterprises and industries.

### 2.1. Research Design

To carry out this study, a conceptual model following the analytical–interpretative logic postulated by Pitacho et al. (2018) is adopted, as well as Spence and Robbins’ (1992) work regarding the relationship between career calling and the drive dimension of workaholism, and Schabram et al.’s (2022) regarding the mediating effect of the career orientation variable in this relationship.



An ex post facto design was adopted in this study since the variables were not manipulated by the researcher. The independent variable of this study is “career calling”, while the dependent variable is “workaholism” through its two the positive dimensions— involvement and enjoyment. The variable “career orientation” is a mediator of the relationship between career calling and the drive dimension of workaholism (Figure 1).



Source: authors' own elaboration.

**Figure 1.** Conceptual framework.

Based on the main goals and the literature review, a cross-sectional research design was adopted (Ahiauzu and Asawo 2016). This study does not involve manipulating variables and can provide information about what is happening in a population. This kind of study can provide correlations that may exist at a particular point; that is, researchers can collect data on a few different variables to see how they affect a certain condition. In this specific case, trends are analyzed based on whether there are differences between career calling and workaholism.

## 2.2. Instruments

This is a descriptive and comprehensive study that aimed to describe the characteristics of a given phenomenon or population and relationships between variables. The facts were analyzed and interpreted by the researcher without being influenced by them.

The data for this study were collected using an online survey. The first part of this survey was composed of sociodemographic questions. The second and third parts of this survey are composed of the Work Orientation Questionnaire and the Workaholism Battery, respectively.

### 2.2.1. Work Orientation Questionnaire (WOQ)

The WOQ was initially developed and validated by Pitacho et al. (2019a) and is composed of three independent scales: career calling (fifteen items), job orientation (fourteen items), and career orientation (nine items). All items were scored on a 10-point Likert scale ranging from 0 (“not at all true of me”) to 10 (“totally true of me”). To test the validity of this instrument, a three-factor confirmatory factor analysis was performed. The adjustment indices obtained are adequate ( $KMO = 0.916$ ;  $\chi^2 (703) = 12,362.78$ ;  $p < 0.001$ ). In addition, this scale has an explained variance of 56%. As for internal consistency, career calling has a Cronbach alpha value of 0.87, career orientation has a value of 0.82, and job orientation has a value of 0.85. Regarding the composite reliability construct (CR), career orientation has a value of 0.91, career calling 0.92, and job orientation 0.90. Three dimensions showed good convergence validity, with the value of average variance extracted (AVE) for career orientation being 0.53, for career calling being 0.51, and for job orientation being 0.50 (Hair et al. 2019).

### 2.2.2. Workaholism Battery (Work BAT)

The Work Bat was developed by [Spence and Robbins \(1992\)](#). This battery is composed of three self-report scales that reflect the tridimensional theory of workaholism developed by [Spence and Robbins \(1992\)](#). The items on the Work Bat are divided into work involvement, drive, and enjoyment. This battery comprised a total of 25 items answered on a 5-point Likert scale ranging from “strongly disagree” to “strongly agree”.

To test the validity of this instrument, a three-factor confirmatory factor analysis was performed. The adjustment indices obtained are adequate ( $KMO = 0.870$ ;  $\chi^2 (325) = 9816.27$ ;  $p < 0.001$ ). Furthermore, this scale has an explained variance of 49%. As for internal consistency, drive has a Cronbach alpha value of 0.77, enjoyment has a value of 0.87, and involvement has a value of 0.65. Regarding the composite reliability construct (CR), enjoyment has a value of 0.89, drive 0.90, and involvement 0.86. Three dimensions showed good convergence validity, with the average variance extracted (AVE) value of enjoyment being 0.53, drive being 0.54, and involvement being 0.50 ([Hair et al. 2019](#)).

### 2.3. Procedures

Data were collected through an online survey available on the Google Forms platform over 3 months, between March 2021 and June 2021, with a response time of 15 to 20 min. The only requirement for the participants was that they be professionally active. The survey was randomly distributed by social and professional networks. In addition, respondents were invited to share the questionnaire with their colleagues (snowball technique).

At the beginning of the questionnaire, participants were informed about the objectives of this study, with the confidentiality of their answers being guaranteed since only an analysis of the results would be performed.

The research follows the standards set out in the declaration of Helsinki. As ethical procedures, participation was voluntary and anonymous, and confidentiality of the participants was also guaranteed. Participants did not receive any compensation for participating in this study. Before starting to answer any questions, the participants gave their free and informed consent, and the research team's contacts were made available to clarify doubts. Consent was made available on the web-based platform where the questionnaire was administered, and the access link was sent to the participants.

### 2.4. Sample

The sample was composed of 743 Portuguese employees. Concerning gender, 59.7% were females and 39.5% were males; the mean age for this sample was 40.61 years old ( $SD = 9.54$  years), and the mean of professional seniority was 14.87 years ( $SD = 10.00$  years). Additionally, 34.9% of the participants held a leadership position; 63.4% held a nonleadership position; 31.2% worked in the public sector; 56.2% worked in the private sector; and 10.7% worked in the social institutions. Finally, regarding the size of the organization, 57.3% of participants worked in SMEs and 40.5% worked in large or multinational enterprises. Regarding the sector of activity, 1.3% of participants worked in the primary sector (agriculture, fishing, and livestock). A total of 11.6% of respondents were employed in the secondary sector, namely industry. In the tertiary sector, 9.5% of respondents worked in commerce and 77.7% worked in the service industry.

As inclusion criteria, participants had to be 18 or older. All participants must have been professionally active, work in Portugal, and be a native Portuguese speaker.

### 2.5. Data Analysis

Once the process of applying the survey was completed, the data were exported and analyzed through the Haye' PROCESS Macro. The analysis was essentially quantitative, using univariate and multivariate analysis techniques to assess the strength and direction of associations between variables.

A descriptive analysis of the data was carried out through the analysis of means and standard deviation.

The reliability of the questionnaire was analyzed by Cronbach's alpha coefficient, where values of 0.70 were considered (Streiner 2003). Pearson's  $r$  correlation coefficient was used to perform the convergence validity analysis of the instrument items, assessing the magnitude and direction of the associations between the variables (Marôco 2018).

Factor analysis was performed, having considered as acceptable in all solutions factor loadings values ( $\lambda$ ) greater than 0.40 (Brown 2015). A normality analysis of the variables included in the model was performed. To understand if there are significative differences in workaholism dimensions in people with different primary work orientations, the parametric Kruskal–Wallis test was performed. The averages of the orders were compared using Dunn's test with Bonferroni correction. The error type I probability was considered ( $\alpha = 0.05$ ).

To test the research hypotheses, linear regression was used with the stepwise entry method ( $\alpha = 0.05$  to "Entry" and  $\alpha = 0.10$  to "Removal"), and the assumptions of independence and multicollinearity were checked through the Durbin–Watson Statistic and VIF. Finally, the Model 4 test of Haye' PROCESS Macro 4.1. was performed. The mediating effect is considered significant if the 95% bias-corrected and accelerated confidence intervals (cIs) (lower limit and upper limit) for the indirect effect (IE) based on 5000 bootstrapped samples are not equal to 0.

### 3. Results

The analysis was divided into three different steps: descriptive analysis, multivariate analysis, and hypotheses tests. Table 1 presents descriptive statistics for this study's variables (means, standard deviations, median and correlation coefficients).

**Table 1.** Descriptive statistics of this study's variables.

Variables	M	SD	M <sub>e</sub>	Career Calling	Career Orientation	Job Orientation	Involvement	Drive	Enjoyment
1. Career Calling	5.80	1.52	5.83	1					
2. Career Orientation	6.75	1.43	6.88	0.560 **	1				
3. Job Orientation	4.27	1.52	4.07	−0.313 **	−0.282 **	1			
4. Involvement	5.88	1.16	5.86	0.320 **	0.296 **	−0.313 **	1		
5. Drive	6.16	1.65	6.29	0.260 **	0.393 **	0.005	0.216 **	1	
6. Enjoyment	6.11	1.64	6.10	0.724 **	0.435 **	−0.528 **	0.316 **	0.337 **	1

N = 743; \*\*  $p < 0.01$ .

Before analyzing the correlations, it must be verified whether they are in fact due to the relationship between the variables or to the common method bias. Studies like this, where data for independent and dependent variables are obtained from the same context and the same person, are more susceptible to common method bias. Harman's one-factor test was run to confirm whether common method bias was present. If common method bias influenced the results, the total variance extracted by one factor is equal to or greater than 50% (Podsakoff et al. 2003). The results show that total variance extracted by one factor is 38.7%. This value is less than 50%; therefore, the common method bias is not present in this study and is not driving the results.

Table 1 allows us to verify the relationships between the different variables under analysis. As in previous studies, career calling, and job orientation have a negative (−0.313) significant correlation (Pitacho et al. 2020; Pitacho et al. 2019b; Podsakoff et al. 2003; Wrzesniewski et al. 1997). Additionally, career orientation has a positive significative correlation (0.560) with career calling but a negative significative correlation (−0.282) with job orientation. These results are like those previously collected (Pitacho et al. 2020; Pitacho et al. 2019a; Podsakoff et al. 2003).

As expected, workaholism dimensions are positively and significantly correlated with each other. The results of the relationship between work orientation dimensions and

workaholism dimensions reveal that career calling is positively and significantly correlated with the three variables. The high correlation between career calling and enjoyment (0.724) stands out. Like career calling, career orientation is positively and significantly correlated with the three variables, but the correlations with enjoyment (0.435) and involvement (0.296) are less strong than the correlations between career calling and these variables. In respect to drive, the correlation with career orientation is stronger (0.393) than between career calling and drive (0.260). Job orientation does not have significant correlation with drive, and it has a negative significant correlation with involvement ( $-0.313$ ) and enjoyment ( $-0.528$ ).

These results show that both career calling and career orientation seem to be associated with the experience of workaholism, contrary to job orientation.

Before testing the research hypotheses, we sought to understand whether sociodemographic variables influenced the variables under study. This research began with the three dimensions of work orientation.

A Wilcoxon–Mann–Whitney test was performed to compare career calling, career orientation, and job orientation depending on the gender of the participants. It was found that career calling ( $U = 74,097.00$ ;  $W = 183,375.00$ ;  $p = 0.842$ ), career orientation ( $U = 72,400.00$ ;  $W = 1,816,778.00$ ;  $p = 0.459$ ), and job orientation levels ( $U = 77,896.50$ ;  $W = 18,774.50$ ;  $p = 0.311$ ) are not affected by gender. There are no significant differences.

Concerning education, the Kruskal–Wallis test was performed. It appears that level of education did not influence participants' calling levels ( $\chi^2(3) = 6.910$ ,  $p = 0.075$ ). On the other hand, education levels influence career orientation levels ( $\chi^2(3) = 23.209$ ,  $p < 0.001$ ). A post hoc test (Dunn's test with Bonferroni correction) was performed, and the results show that participants with a university level of education had significantly higher levels of career orientation ( $Z = -88.468$ ;  $P_a = 0.000$ ) than participants with a high school level (Table 1). Job orientation levels also depend on education levels ( $\chi^2(3) = 17.730$ ;  $p < 0.001$ ). Participants with a high school level of education had significantly higher levels of job orientation ( $Z = 70.392$ ;  $P_a = 0.001$ ) than participants with a university education (Table 2).

As for leadership positions, a Wilcoxon–Mann–Whitney test was performed. It was found that leadership positions influence the manifest levels of the three dimensions of work orientation. The levels of career calling ( $U = 49,479.50$ ;  $W = 170,265.50$ ;  $p < 0.001$ ) and career orientation ( $U = 55,214.00$ ;  $W = 176,000.00$ ;  $p < 0.001$ ) were significantly higher for participants who occupy leadership positions. On the other hand, job orientation values ( $U = 92,265.50$ ;  $W = 213,051.50$ ;  $p < 0.001$ ) were significantly lower for participants who occupy leadership positions (Table 2).

Participants were divided into public, private, and social sectors. The Kruskal–Wallis test was performed, and the post hoc test (Dunn's test with Bonferroni correction) was run. It was found that the values of career calling ( $\chi^2(2) = 2.134$ ;  $p = 0.344$ ) and job orientation ( $\chi^2(2) = 2.844$ ;  $p = 0.241$ ) were not affected by the sector of activity. On the other side, career orientation values ( $\chi^2(2) = 36.519$ ;  $p < 0.001$ ) depended on the activity sector. The career orientation levels were significantly higher for participants working in the private sector than for participants working in the public sector ( $Z = -100.450$ ;  $P_a = 0.001$ ) or the social sector ( $Z = 97.177$ ;  $P_a = 0.001$ ).

Regarding the type of activity (agriculture, fishing, or livestock; commerce; and industry and services), it was found that the values of career calling ( $\chi^2(3) = 2.256$ ,  $p = 0.521$ ), career orientation ( $\chi^2(3) = 4.913$ ,  $p = 0.178$ ), and job orientation ( $\chi^2(3) = 7.136$ ,  $p = 0.068$ ) were not influenced by this variable.

Concerning the enterprise dimension there are no significant differences between career calling ( $\chi^2(3) = 7.557$ ;  $p = 0.063$ ), career orientation ( $\chi^2(3) = 6.727$ ;  $p = 0.081$ ), and job orientation ( $\chi^2(3) = 6.132$ ;  $p = 0.079$ ) levels. That is, the work orientation dimensions do not depend on the enterprise dimensions.

**Table 2.** Descriptive statistics of work orientation dimensions by demographic variables.

		Career Calling		Job Orientation		Career Orientation	
		Mean	Standard Deviation	Mean	Standard Deviation	Mean	Standard Deviation
Gender	Masculine	5.84	1.43	4.23	1.58	6.82	1.31
	Feminine	5.79	1.58	4.28	1.48	6.72	1.50
Education	Primary school	6.37	2.12	5.11	0.50	6.39	0.86
	Basic education	5.89	1.64	4.84	1.53	6.30	1.79
	High school	5.55	1.66	4.65	1.71	6.38	1.49
	University education	5.90	1.46	4.10	1.41	6.91	1.36
Leader Position	Leader	6.34	1.33	3.78	1.34	7.11	1.32
	Not Leader	5.50	1.55	4.55	1.55	6.55	1.45
Activity Sector	Public Sector	5.75	1.50	4.26	1.51	6.37	1.46
	Private Sector	5.79	1.50	4.29	1.51	7.01	1.34
	Social Sector	6.05	1.70	4.01	1.54	6.40	1.53
Activity Type	Agriculture, Fishing and Livestock	5.59	1.47	3.73	1.30	5.99	1.50
	Commerce	5.53	1.48	4.60	1.29	6.80	1.40
	Industry	5.78	1.53	4.26	1.47	6.97	1.44
	Services	5.85	1.53	4.23	1.54	6.75	1.42
Enterprise Dimension	Micro Enterprise	6.25	1.62	3.86	1.38	7.02	1.34
	Small Enterprise	5.72	1.55	4.37	1.63	6.64	1.41
	Medium Enterprise	5.70	1.56	4.38	1.53	6.59	1.46
	Big Enterprise	5.72	1.42	4.29	1.50	6.80	1.44

Finally, the bivariate correlation was tested for the relation between age and work orientation dimensions. The Pearson correlation results are significant only between age and career calling ( $r = 0.127$ ;  $p < 0.01$ ) and between age and career orientation ( $r = -0.176$ ;  $p < 0.01$ ). These correlations are weak but significant.

The same analysis was repeated for the three dimensions of workaholism (drive, enjoyment, and involvement). A Wilcoxon–Mann–Whitney test was performed to compare drive, enjoyment, and involvement depending on the gender of the participants. It was found that drive ( $U = 80,443.50$ ;  $W = 189,721.50$ ;  $p = 0.068$ ) and enjoyment ( $U = 77,436.50$ ;  $W = 186,174.50$ ;  $p = 0.386$ ) are not affected by gender, and there are no significant differences (Table 3). But there is a significant difference in levels of involvement ( $U = 77,896.50$ ;  $W = 18,774.50$ ;  $p = 0.311$ ): men have a significantly higher level of involvement than women ( $U = 62,691.00$ ;  $W = 172,662.00$ ;  $p < 0.001$ ).

Concerning education, the Kruskal–Wallis test was performed. It appears that the level of education did not influence participants' drive ( $\chi^2(3) = 2.303$ ,  $p = 0.512$ ), enjoyment ( $\chi^2(3) = 5.790$ ,  $p = 0.122$ ), or involvement levels ( $\chi^2(3) = 5.029$ ,  $p = 0.170$ ).

Regarding leadership positions, the Wilcoxon–Mann–Whitney test was performed. It was found that leadership positions influenced the manifested levels of enjoyment ( $U = 57,394.00$ ;  $W = 178,180.00$ ;  $p < 0.001$ ) and involvement ( $U = 59,458.00$ ;  $W = 180,244.00$ ;  $p < 0.001$ ). Participants with leadership positions had significantly higher values of enjoyment and involvement than those without leadership positions. The drive dimension of workaholism was not affected by leadership positions ( $U = 66,009.00$ ;  $W = 186,795.00$ ;  $p = 0.64$ ).

The Kruskal–Wallis test was performed, and the post hoc test (Dunn's test with Bonferroni correction) was run to clarify the effect of the activity sector. Enjoyment levels did not vary significantly depending on the sector of activity ( $\chi^2(2) = 5.182$ ;  $p = 0.075$ ). But the levels of drive ( $\chi^2(2) = 14.968$ ;  $p < 0.001$ ) and involvement ( $\chi^2(2) = 11.512$ ;  $p = 0.003$ ) did vary depending on the sector of activity. Concerning drive, participants who worked in the private sector had significantly higher drive values than participants who worked in the



public sector ( $Z = -70.302$ ;  $P_a = 0.000$ ). Finally, regarding involvement, participants who worked in the private sector had significantly higher involvement values than participants who worked in the public sector ( $Z = -70.302$ ;  $P_a = 0.000$ ).

**Table 3.** Descriptive statistics of work orientation dimensions by demographic variables.

		Involvement		Drive		Enjoyment	
		Mean	Standard Deviation	Mean	Standard Deviation	Mean	Standard Deviation
Gender	Masculine	6.06	1.14	6.03	1.60	6.07	1.56
	Feminine	5.77	1.16	6.25	1.68	6.16	1.69
Education	Primary school	6.00	1.01	4.14	3.64	6.20	0.42
	Basic education	5.90	1.03	6.22	1.66	6.30	1.67
	High school	5.73	1.20	6.03	1.77	5.92	1.57
	University education	5.94	1.15	6.22	1.59	6.20	1.65
Leader Position	Leader	6.10	1.12	6.30	1.66	6.50	1.58
	Not Leader	5.77	1.17	6.08	1.64	5.91	1.64
Activity Sector	Public Sector	5.71	1.19	5.79	1.82	5.90	1.63
	Private Sector	6.01	1.13	6.34	1.55	6.21	1.65
	Social Sector	5.71	1.18	6.19	1.59	6.30	1.53
Activity Type	Agriculture, Fishing and Livestock	6.00	1.10	6.07	1.22	6.49	1.36
	Commerce	5.94	0.94	6.29	1.63	6.14	1.64
	Industry	5.95	1.14	6.27	1.58	6.20	1.62
	Services	5.88	1.19	6.13	1.67	6.10	1.64
Enterprise Dimension	Micro Enterprise	6.04	1.12	6.00	1.60	6.46	1.72
	Small Enterprise	5.65	1.14	6.28	1.63	6.04	1.69
	Medium Enterprise	5.82	1.27	5.94	1.76	6.02	1.64
	Big Enterprise	5.96	1.10	6.32	1.61	6.07	1.58

For the type of activity, the Kruskal–Wallis test was also performed, and it was found that this sociodemographic variable did not influence the levels of drive ( $\chi^2 (3) = 1.015$ ;  $p = 0.798$ ), involvement ( $\chi^2 (3) = 1.135$ ;  $p = 0.769$ ), or enjoyment ( $\chi^2 (3) = 1.151$ ;  $p = 0.765$ ).

Later, we tested the enterprise size. The results of the Kruskal–Wallis test show that the values of drive ( $\chi^2 (3) = 6.916$ ;  $p = 0.062$ ), enjoyment ( $\chi^2 (3) = 3.885$ ;  $p = 0.274$ ), and involvement ( $\chi^2 (3) = 6.834$ ;  $p = 0.077$ ) did not depend on the size of the enterprise.

Finally, the bivariate correlation was tested for the relation between age and workaholism dimensions. The Pearson correlation results are significant only between age and drive ( $r = -0.177$ ;  $p < 0.01$ ). This correlation is weak but significant.

Once the descriptive analysis based on sociodemographic variables was completed, it was important to understand the workaholism dynamic in work orientations. That is, it was necessary to understand whether there were significative differences in the workaholism dimensions in people with different primary work orientations. According to the literature (Pitacho et al. 2021; Fossen and Vredenburg 2014; Wrzesniewski et al. 1997), an individual's primary orientation is the one where the value of the dimension is greater. Based on the scores obtained in each of the work orientation dimensions, three primary orientation groups were created: a career calling group, career orientation group, and job orientation group. The Kruskal–Wallis test was used (Table 4).

The results of the comparison test permit stating that there are significant differences between different work orientation for all dimensions of workaholism (Table 5).

To understand how workaholism dimensions vary according to primary work orientation, a pair-to-pair comparison was performed by running Dunn's test with Bonferroni correction.

**Table 4.** Kruskal–Wallis test for work orientation.

	$\chi^2$ (Kw)	G1	p-Value
Involvement	29.60	2	<0.001
Drive	19.90	2	<0.001
Enjoyment	155.60	2	<0.001

N = 743. Source: authors' own elaboration based on survey output.

**Table 5.** The values of workaholism dimensions by work orientation type.

Variables	Involvement		Drive		Enjoyment	
	Mean	SD	Mean	SD	Mean	SD
1. Career Calling	5.98	1.21	5.95	1.59	6.98	1.41
2. Career Orientation	5.97	1.09	6.33	1.62	6.16	1.50
3. Job Orientation	5.26	1.28	5.56	1.82	4.28	1.35
Total	5.88	1.16	6.16	1.65	6.11	1.64

N = 743.

Work orientation dimensions were compared one by one for each workaholism dimension. Drive is the negative dimension of workaholism, and it is not experienced in the same way by everyone (Table 6). It was found that people who see work as a career (career orientation group) experience a higher level of compulsion. The values of drive in the career orientation group are significantly higher than the average of the others—the career calling group and job orientation group. Between these two last groups, there are no significant differences.

**Table 6.** Pair-to-pair comparison (Dunn's test with Bonferroni correction)—Drive (according to primary work orientation).

Sample 1–Sample 2	Test Statistic	SD	p	P <sub>adj</sub> <sup>a</sup>
Job Orientation–Career Calling	47.908	29.178	0.101	0.302
Job Orientation–Career Orientation	102.008	25.462	<0.001	0.000
Career Calling–Career Orientation	−54.100	20.023	0.007	0.021

Note: Asymptotic significances are displayed (two-sided test). The significance level is 0.050. <sup>a</sup> Significance values were adjusted by Bonferroni correction for various tests.

Regarding the involvement dimension (Table 7), it was found that the values of this dimension in the job orientation group are significantly lower than those of involvement in the career calling and career orientation groups. Between the career calling and the career orientation groups, there are no significant differences in the manifestation of involvement, which means that a person who has a calling or career orientation is equally engaged with his or her work involvement.

**Table 7.** Pair-to-pair comparison (Dunn's test with Bonferroni correction)—Involvement (according to the primary work orientation).

Sample 1–Sample 2	Test Statistic	SD	p	P <sub>adj</sub> <sup>a</sup>
Job Orientation–Career Orientation	135.134	25.451	<0.001	0.000
Job Orientation–Career Calling	137.760	29.166	<0.001	0.000
Career Orientation–Career Calling	2.626	20.015	0.896	1.000

Note: Asymptotic significances are displayed (two-sided test). The significance level is 0.050. <sup>a</sup> Significance values were adjusted by Bonferroni correction for various tests.

Finally, regarding enjoyment (Table 8), it was found that in the group of people who see their work as a calling, the values of enjoyment are significantly higher than the values of enjoyment in the groups of people who see their work as a career or a job. The values of

enjoyment in the career orientation group are also significantly higher than the enjoyment values in the job orientation group.

**Table 8.** Pair-to-pair comparison (Dunn’s test with Bonferroni correction)—Enjoyment (according to the primary work orientation).

Sample 1–Sample 2	Test Statistic	SD	<i>p</i>	<i>P</i> <sub>adj</sub> <sup>a</sup>
Job Orientation–Career Orientation	247.887	25.466	<0.001	0.000
Job Orientation–Career Calling	363.301	29.183	<0.001	0.000
Career Orientation–Career Calling	115.414	20.026	<0.001	0.000

Note: Asymptotic significances are displayed (two-sided test). The significance level is 0.050. <sup>a</sup> Significance values were adjusted by Bonferroni correction for various tests.

These results show that career calling is strongly associated with the two positive dimensions of workaholism, involvement and enjoyment. On the other hand, career orientation is strongly associated with the negative dimension of workaholism, drive.

In the next steps, we present the results referring to the tests of the research hypotheses. The hypotheses were tested through linear regressions and through a mediation analysis with Hayes’ PROCESS Macro 4.1.

As the hypotheses describe, we analyzed the mediation for each workaholism dimension. We started from the mediation model in the positive dimensions of workaholism (involvement and enjoy).

First, the linear regression showed that career calling is a predictor of involvement and enjoyment (Tables 9 and 10).

**Table 9.** Linear regression (Enter method) for the effect of calling orientation on involvement.

Predictor Variable	Criterion Variable	Z	R <sup>2</sup>	B	t	<i>p</i> -Value
Career Calling	Involvement	90.528 *	0.103	0.245 *	9.515 *	<0.001

N = 743. Note: \* *p* < 0.001.

**Table 10.** Linear regression (Enter method) for the effect of calling orientation on enjoyment.

Predictor Variable	Criterion Variable	Z	R <sup>2</sup>	B	t	<i>p</i> -Value
Career Calling	Enjoyment	871.541 *	0.524	0.7795 *	29.522 *	<0.001

N = 743. Note: \* *p* < 0.001.

The linear regression showed that career calling positively affects involvement ( $\beta = 0.245$ ;  $t(792) = 9.515$ ;  $p < 0.001$ ). That is, the highest career calling explains the highest involvement levels. An  $R^2$  value of 0.103 was obtained, indicating that career calling explains 10.3% of the variability of involvement. Career calling positively affects enjoyment, too ( $\beta = 0.779$ ;  $t(792) = 29.522$ ;  $p < 0.001$ ). And the  $R^2$  value indicates that career calling explains 52.4% of the variability of enjoyment. The relationship between career calling and involvement is weak, but it demonstrates a trend that should be valued.

Subsequently, the simultaneous effect of career calling and career orientation on involvement and enjoyment was tested using multiple linear regression (Tables 11 and 12). The results show that career calling and career orientation, together, explain 12.2% of involvement.

**Table 11.** Multiple linear regression (stepwise method) for the effect of career calling and career orientation on involvement.

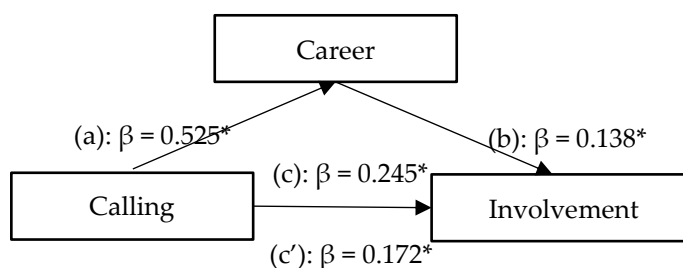
Predictor Variable	Criterion Variable	Z	R <sup>2</sup>	$\beta$	t	p-Value
Career Calling	Involvement	90.528 *	0.122	0.172 *	5.600 *	<0.001
Career Orientation	Involvement			0.138 *	4.219 *	<0.001

N = 743. Note: \*  $p < 0.001$ .**Table 12.** Multiple linear regression (stepwise method) for the effect of career calling and career orientation on enjoyment.

Predictor Variable	Criterion Variable	Z	R <sup>2</sup>	$\beta$	t	p-Value
Career Calling	Enjoyment	871.541 *	0.524	0.779 *	29.522 *	<0.001
Career Orientation	Enjoyment			0.042 *	1.432 *	0.153

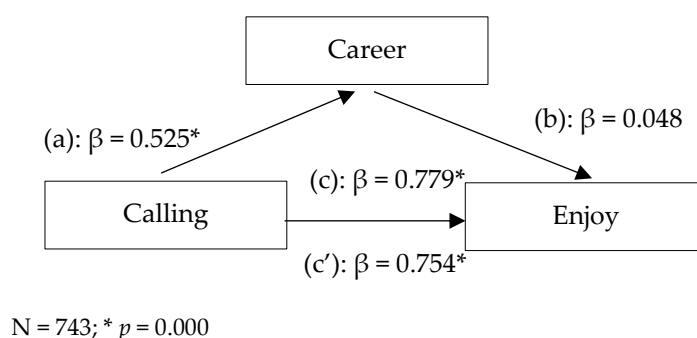
N = 743. Note: \*  $p < 0.001$ .

To test the mediation hypothesis, model 4 of the PROCESS Macro developed by Hayes was carried out. The result shows that the total effect of this mediation model explains 12.2% of involvement variability, as obtained by multiple linear regression. The impact of career calling on involvement ( $c'$ :  $\beta = 0.172$ ;  $p = 0.000$ ) is partially mediated by career orientation ( $a*b = 0.072$ ;  $p = 0.000$ ; 95% CI = 0.0333 to 0.1126) (Figure 2). The presence of career diminishes the effect of career calling on involvement. This means that individuals with a hybrid work orientation who simultaneously manifest high levels of career calling, and high levels of career orientation tend to experience lower levels of involvement than individuals who only present high levels of calling, that is, a pure profile.

N = 743; \*  $p = 0.000$ **Figure 2.** Mediation model in positive dimensions of workaholism—Involvement.

The same analysis was performed for the relationship with enjoyment.

The multiple linear regression results show that, although career orientation has a significant correlation with the enjoyment dimension, career orientation has no predictive value for the enjoyment dimension when combined with career calling. Career orientation was excluded by the multiple linear regression model. Model 4 of the PROCESS Macro confirms that career orientation does not mediate the relationship between career calling and the enjoyment dimension (Figure 3). That is, the impact of calling on enjoyment ( $c'$ :  $\beta = 0.754$ ;  $p = 0.000$ ) is not mediated by career orientation ( $a*b = 0.0253$ ;  $p = 0.152$ ; 95% CI = −0.0099 to 0.0388). This means that the hybrid profile marked by high levels of career orientation and career calling tends not to differ from the pure career calling profile regarding enjoyment values.



**Figure 3.** Mediation model in positive dimensions of workaholism—Enjoyment.

These results allow us to state that the H1 was corroborated; that is, career calling has a positive impact on the positive dimensions of workaholism (involvement and enjoyment). Additionally, career orientation mediates the relationship of career calling with at least one of the positive workaholism dimensions. Career orientation does not mediate the relationship between career calling and enjoyment but has a significant partial mediator effect on the career calling and involvement relationship.

In what concerns H2, the results show that career calling has a positive and significant effect on the drive dimension ( $\beta = 0.283$ ;  $t(792) = 7.588$ ;  $p < 0.001$ ) (Table 13). That is, the highest level of career calling can explain the highest levels of drive. An  $R^2$  value of 0.068 was obtained, indicating that career calling explains 6.8% of the variability of the drive dimension of workaholism. This value is weak, but it is significant; so, it should not be ignored. This result reveals that H2 was refuted. Career calling has a positive and significant effect on the drive dimension.

**Table 13.** Linear regression (Enter method) for the effect of the dimension “career calling” on the dimension “drive”.

Predictor Variable	Criterion Variable	Z	R <sup>2</sup>	B	t	p-Value
Career Calling	Drive	57.581 *	0.068	0.283 *	7.588 *	<0.001

N = 743. Note: \*  $p < 0.001$ .

Subsequently, multiple linear regression tested the simultaneous effect of career calling and career orientation on drive (Table 14). The results show that although career calling has a significant effect on drive dimension, career calling has no predictive value for the drive dimension when combined with career orientation. Career calling was excluded by the multiple linear regression model.

**Table 14.** Multiple linear regression (stepwise method) for the effect of career calling and career orientation on drive.

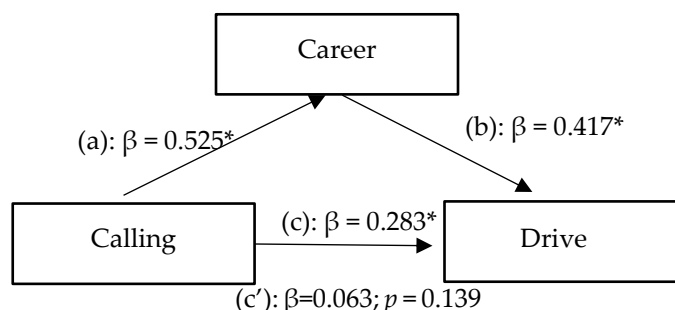
Predictor Variable	Criterion Variable	Z	R <sup>2</sup>	B	t	p-Value
Career Calling	Drive	144.811 *	0.154	0.063	1.481	0.139
Career Orientation				0.417 *	12.034 *	<0.001

N = 743. Note: \*  $p < 0.001$ .

Model 4 test of the PROCESS Macro confirms that career orientation mediates the relationship between career calling and the drive dimension (Figure 4). The impact of career calling on drive ( $c'$ :  $\beta = 0.172$ ;  $p < 0.001$ ) is totally mediated by career orientation ( $a*b = 0.219$ ;  $p < 0.001$ ; 95% CI = 0.1626 to 0.2814). The effect of career calling on drive through the career orientation dimension is significant and positive and explains 15.4%



of drive behavior. This result means that high career values enhance high compulsion values, even when there are high career calling values. Therefore, the hybrid profile with high career calling and career orientation values may increase the likelihood of compulsive behaviors (negative dimension of workaholism) compared with the pure calling profile.



N = 743; \*  $p = 0.000$

**Figure 4.** Mediation model in negative dimensions of workaholism—Drive.

These results show that H3 (“Career orientation mediates the relationship between career calling and the three dimensions of workaholism”) was partially corroborated. Career orientation mediates the relation between career calling and involvement, as well as between career calling and drive, but it does not mediate the career calling and enjoyment relationship. Finally, H4 (“When mediated by career orientation, career calling has a positive impact on the drive dimension of workaholism”) was corroborated. Career orientation potentiates the effect of career calling on the drive dimension.

#### 4. Discussion and Conclusions

The interest and relevance of studying the dynamics of work orientation and the dark side of career calling are growing and occupy a prominent place on research agendas. The research objectives of the present study were achieved, and the results bring new knowledge to this research agenda. This study found interesting results to deepen the knowledge of work orientation and its dynamics. Firstly, an individual’s gender does not seem decisive in the development of their work orientation. However, the age of individuals is related to their work orientation. There is a significant positive relationship between age and career calling—calling-oriented individuals are the oldest. Career orientation has a significant negative relationship with career orientation—career-oriented individuals are younger. This finding is congruent with previous studies (Fossen and Vredenburg 2014). The consistency of these findings may point to the evolving nature of work orientation. This evolution can be characterized by human development and professional maturity that bring individuals closer to the calling orientation. As the individual learns to extract meaning from their reality and their motivation matures, they develop a more positive and sophisticated vocational self-concept (Schabram et al. 2022).

Still, about sociodemographic variables, we could expect a higher prevalence of calling-oriented individuals in the public sector, mainly due to high public service motivation values. Public Service Motivation (PSM) is a motivational force that induces individuals to perform meaningful work, and workers with high levels of PSM find serving the public more rewarding, because they consider the missions of public organizations to be vital and personally meaningful (Uluturk et al. 2023). This construct is distinct from career calling, but they are close. However, we found that career calling cuts across all sectors of activity, unlike career orientation. Career orientation values were higher among workers in the private sector. This result can be explained in two different ways. On the one hand, individuals with high levels of career orientation deliberately choose the private sector because they can find better opportunities for their desired progression. On the other hand, public sector workers have moderated their career expectations depending on the reality

that determines difficult and very slow progression in the public sector. Due to the absence or scarcity of opportunities, public workers may have moderated their expectations as a protective strategy to moderate frustration and protect their mental health.

Regarding leadership positions, it was found that leaders present higher values of calling, career orientation, involvement, and enjoyment but not higher values of drive. This result leads to the following questions: Can calling and career guidance contribute to career advancement, or do people in leadership positions love their work more and value their careers more? Can drive/compulsion negatively affect career progression, or does drive/compulsion decline when the individual reaches a leadership position? We did not find data in this regard, and longitudinal studies are needed to clarify this issue.

As expected, this work allows deepening the study of the relationship between career calling and workaholism and the mediation of this relationship by career orientation, and it permits us to reflect on the dangerous and dubious relationship between career calling and workforce sustainability.

First, in respect to the career calling and workaholism relationship, we verified that this relationship is complex and can be ambiguous. Career-calling-oriented individuals are more likely to develop two positive dimensions of workaholism, namely involvement and enjoyment. Focusing on the classic model of [Spence and Robbins \(1992\)](#), career calling can directly explain the tendency of work enthusiast behavior, marked by strong involvement, strong enjoyment, and low inner drive. Enjoyment is the workaholism dimension that career calling most explains. These results bring career calling closer to work engagement, but the negative and “uncontrollable” side of addiction, drive, is not present or weak. Our conclusions follow the same direction as previous studies ([Choi et al. 2020](#); [Dobrow and Tosti-Kharas 2011](#)). This result reinforces the positive relationship between career calling and positive outcomes, such as work engagement and enjoyment, and can be associated with workforce well-being and sustainability. In short, there is a positive relationship between career calling and a workaholic pattern, namely, work enthusiasts are marked by a high presence of involvement and enjoyment and low levels of inner drive. But, contrary to expectations, career calling predicts inner drive, too; despite a weak effect, it is significant. This unexpected result can be explained by the career calling–obsessive passion relationship. [Choi et al. \(2020\)](#) showed that career calling has a positive and significant relationship with obsessive passion, and obsession can be associated with compulsion or drive.

But the novelty and innovation introduced by this study is the addition of career orientation as a mediating variable and the results obtained. When individuals have a mixed profile, that is, when they combine high values of career calling and career orientation simultaneously, the results of the relationship with work addiction change.

In the presence of career orientation, the effect of career calling on drive is greater. The direct effect of career calling on drive disappears, and the indirect effect via career is more substantial than the direct effect. This means that in the presence of career orientation, career calling manifests itself in a different way in the form of workaholism. Career orientation mediates the relationship between career calling and involvement, too. Despite the effect of career calling on involvement remaining positive and significant, it decreases. In the presence of career orientation (the calling–career hybrid orientation profile), the levels of involvement are smaller, and drive levels are the largest and greater than the levels in a pure career calling profile.

The significant differences in the mediation model lie in the relationship between career calling and drive. That is, in the presence of career orientation, career calling predicts not only involvement and enjoyment but also drive. This configuration brings workers closer to the enthusiastic addict pattern of workaholics more than to a work enthusiastic pattern ([Spence and Robbins 1992](#)). This association not only reinforces the dark side of career calling but also alerts us to another side or effect of career calling in workforce sustainability. Commonly, career calling is associated with positive outcomes such as work engagement, employee well-being, job satisfaction, or organizational commitment.

Focusing on this relationship, career calling must be seen as a driver of workforce sustainability (Uluturk et al. 2023), but this relationship with work addiction should alert us to a more complex relationship. When combined with career orientation, career calling can drive workers to workaholic behavior. Workaholism or work addiction has been positively associated with burnout and negatively associated with work engagement and employee well-being. This relationship points to another side of the career calling–workforce sustainability relationship and can highlight the double-edged sword of career calling on workforce sustainability. We should point out that although the results presented are weak ( $R^2 < 50\%$ ), they are statistically significant and demonstrate a clear trend in the relationships presented here.

The results contribute to the work orientation dynamics discussion and support the idea that one individual can have more than one work orientation simultaneously. That is, one individual can assign more than one subjective and individual meaning to work at the same time. In other words, the work orientation may not be pure: one individual can express a hybrid profile of work orientation, as previously proposed in the literature (Schabram et al. 2022; Pitacho et al. 2021; Fossen and Vredenburg 2014; Cardador 2008; Dalton 2001). More than that, this study reinforces the relevance of knowing the work orientation to understand the attitudes and behaviors of individuals in an organizational context. It is important to know the employee's primary work orientation but also the employee's secondary work orientation, that is, their work orientation profile.

Focusing on the studied relationships, workaholism can be seen as the result of a combustion, where career calling is a great spark, and focusing on one's career is the right flammable material to ignite the flame. The term burn-out is very appropriate. But the competitive climate may be the perfect wind to spread the fire and thus undermine workforce sustainability.

Several lines of research converge on the importance of meaning in work. So, more attention is needed to understand the factors that help create this sense of meaning and to continue to inquire about the role of career calling and workaholism. By creating meaningful work based on career calling and workaholism, strengthening a sense of belonging in the workforce, and increasing behavioral connections, organizations will enable the enhancement of workers' roles in cultivating and sustaining their workforce (Mesurado et al. 2022; Morkevičiūtė et al. 2021; Rodrigues et al. 2018; Zhu et al. 2017; Keller et al. 2016).

#### 4.1. Theoretical and Practical Implications

This study has five main theoretical implications. First, this study makes relevant contributions to the discussion of the theory of work orientation and its dynamics. This allowed us to contribute new data to the discussion of the implications of sociodemographic variables in determining everyone's work orientation. The possible evolutionary character of work orientation stands out, signaling the need for more longitudinal studies to improve understanding of work orientation dynamics. Furthermore, it reinforces the existence of hybrid work orientation profiles, demonstrating the importance of considering them to understand the impact of career calling on workers' behavior.

Second, this study contributes towards formulating a new insight based on a relational and reflexive perspective of the phenomenon studied, clarifying its multidimensional and multidisciplinary nature. Research on career calling and workaholism can contribute to the integration of multiple theoretical perspectives. This can lead to a more comprehensive understanding of the complex relationship between career calling and workaholism.

Third, this study clarifies the relationship between career calling and workaholism and contributes to the extant literature by clarifying how perceiving career calling affects addiction behavior. Provides innovative ideas for verifying the career calling orientation theory and provides evidence for the importance of establishing the constructs of career calling, workaholism, and career orientation, as well as emphasizes the potential usefulness of these constructs in research. It is important to distinguish between a healthy sense of

career calling and workaholism. Career calling can be enjoyable, fulfilling, and aligned with a person's values, while workaholism is characterized by compulsive and excessive work behavior that negatively affects various aspects of life. Striking a balance between a meaningful career and a healthy work–life integration is crucial to maintaining overall well-being and satisfaction. The career calling orientation has an ambiguous relationship with workaholism patterns. Career calling is related to two patterns of workaholism, namely the enthusiastic addict pattern and the work enthusiastic pattern. These two patterns derive from the compulsion component. However, compulsion values depend more on high career orientation values combined with high calling values than on career calling values alone.

Fourth, the results of this study unequivocally contribute to the study of the dark side of career calling, highlighting the importance of looking at work orientation as a mixed profile and not as a pure one only in order to explain the ambiguous outcomes of living a career calling orientation.

This study has practical implications for society, organizations, managers, and employees.

First, a better understanding of the relationship between career calling and workaholism can contribute to a larger conversation about the value of work in society. This can include discussions about the importance of finding meaning and purpose in work, as well as the potential risks of overworking.

Society can promote a culture by advocating for policies that support this value. This can include policies that encourage individuals to pursue their sense of career calling, while also recognizing that this can be a complex and multifaceted process. This can involve promoting education and resources around work orientation, career orientation, and development, as well as encouraging individuals to seek out mentors and support networks.

Second, the results of this study allow us to reflect on career calling and how organizations manage workforce efforts to avoid work addiction and the negative consequences that compromise workforce sustainability.

Career calling is connected to multiple career-related outcomes, and the assessment of an individual's level of vocation can provide useful information in the career decision process for career counsellors and their clients. That is, by pointing out how the search for occupational career calling can bring negative effects, this research provides new evidence for career counsellors and for the workers themselves, contributing to raising awareness of how the search for professional fulfilment can bring negative consequences for those who live this reality. Counsellors should guide their clients with a precise diagnosis of their career calling and provide adequate intervention to deter them from experiencing negative psychological outcomes (Choi et al. 2020).

Organizations can design jobs that enable employees to fulfil their sense of career calling while reinforcing the positive aspects of workaholism and avoiding the negative consequences of workaholism. Organizations can provide opportunities for employees to engage in meaningful work and pursue their passions. Organizations can provide training to managers and supervisors on how to identify signs of workaholism and how to promote healthy work habits. This can include education on the importance of rest and recovery, as well as strategies for reducing workload and managing stress.

Third, this study provides contributions to strengthen the management practices of several companies. Managers and leaders should treat workers with a career calling carefully to avoid the development of obsessive behaviors or the negative dimensions of workaholic behaviors by providing supportive human resource practices and planning strategies. Therefore, enterprises can improve the working engagement of employees by recruiting career-calling-oriented employees to raise the level of career calling orientation of existing employees, as well as to raise the level of positive dimensions of workaholism. Moreover, enterprises should choose potential career-calling-oriented staff from their recruitment and must also emphasize the development of career calling within the enterprise. To achieve this, enterprises must carry out relevant management practices, such as setting

career calling orientation as a standard of assessment in recruitment and emphasizing the importance of career calling orientation in the corporate culture (Zhu et al. 2017).

Managers and leaders can encourage employees to pursue their sense of calling, while also setting realistic expectations and boundaries around work hours and workload. This can involve regular check-ins with employees to ensure that they are not overworking or neglecting other areas of their life. They can create a culture where employees feel comfortable prioritizing their well-being, rather than feeling pressure to work excessively, and can provide support and resources to employees who may be struggling with workaholism, such as counselling services or access to wellness programs.

Fourth, this study has practical implications for employees in several ways. Overall, the results of this study can provide valuable insights for employees and help them make more informed choices about their work and life.

The results show that having a strong sense of calling can lead to the positive dimensions of workaholism (involvement and enjoyment). By reflecting on their own sense of calling, employees may be able to find more meaning and purpose in their work, which could reduce the negative aspects of workaholism. In addition, when mediated by career orientation, career calling has a positive impact on the drive dimension of workaholism. So, by learning about this relationship, employees can become more aware of the potential benefits and risks of overworking and take steps to prevent it. By understanding the risks of workaholism and the benefits of seeking support, employees may be more likely to reach out to colleagues, friends, or mental health professionals for help.

In summary, it can be said that the emphasis on career calling orientation is of great significance. Living an occupational career calling tends to be linked to greater levels of the positive dimensions of workaholism, which lead to better involvement, enjoyment, and performance, with decisive implications for the sustainability of workforces, reinforcing the already available evidence in the literature on the subject. By creating work with meaning, instilling a sense of belonging in their workforce, and increasing the emotional connections found in the alignment of values, organizations will be able to reinforce their workforce's sustainability.

Initially, and in the short term, career calling can be very positive and translate into good results for individuals and organizations. But in the medium and long term, it can become a danger that the organization must learn to manage.

#### *4.2. Study Limitations and Future Research*

This study has some limitations. The first limitation is the use of a cross-sectional design. Therefore, we did not evaluate the temporal relations among the constructs. Establishing longitudinal data would allow us to analyze the relationship between career calling and the outcomes over time and provide support for the causal relation between career calling, workaholism, and career orientation. A second limitation is the use of a convenience sample with a single source of data collection. It is not clear that these findings would generalize, and correlations may raise some concerns about common method bias. Thirdly, among the fundamental dimensions that allow us to carry out a global analysis of work and workforce sustainability is the analysis of work–life balance as a central axis. Despite not being the focus of this study there is an innocuous analysis of an extremely important dimension—work–life balance—that nowadays makes indispensable contributions to understanding the role of work and workforce sustainability, and that has several ramifications for the constructs analyzed here, such as the meaning of work, work as a calling, work orientation, and career orientation, among others. Workaholism can often lead to neglect of other important areas of life, such as relationships, hobbies, and self-care. By understanding the importance of work–life balance, employees can strive to create a healthier balance between their work and personal lives. Still, regarding limitations, the data were collected during the pandemic. However, this factor was not considered in the analysis. Although all the participants had an active professional life, that is, they were working at the time of answering the questionnaire, it was not verified, for example,



whether they worked in person or remotely. So far, the data linking workaholism to the pandemic is controversial. In a cross-sectional study carried out during the pandemic (Allam et al. 2021), data indicated that levels of workaholism were higher among workers who were exclusively teleworking compared with the levels presented by the remaining workers who worked in person or in a hybrid system. On the other hand, a longitudinal study (Morkevičiūtė and Endriulaitienė 2021b) carried out during the pandemic period and “normal period” points out that levels of workaholism were higher in the “normal period” when compared with those in the pandemic period, despite workers no longer teleworking.

Future studies can replicate this research with employees of a specific company—with a case study methodology—or even with employees of a given sector to consolidate knowledge about the relationship between career calling and workaholism and the importance of career orientation as a mediating variable. Also, a longitudinal cross-sectional study accompanying employees over a certain period, with the understanding that the relationships analyzed, when evaluated continuously and progressively, can reveal how relationships are processed, is recommended. Focusing on results and the sustainability of workforces is an important exploration of the effect of human resource practices as a mediator variable between the career calling or calling–career orientation profile and workaholism, especially for the all-important enjoyment dimension.

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