Can top managers’ impostor feelings affect performance?

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Abstract

Purpose – Building on the premise that top managers’ characteristics affect firm outcomes, the study aims to examine whether the impostor feelings of top managers are associated with firm performance.

Design/methodology/approach – This study uses survey and regression estimation.

Findings – The results show that there is no strong association between the impostor phenomenon and firm performance, when considering the overall sample. However, in the case of women who experience strong impostor feelings, performance is negatively affected. There is no evidence that being a CEO or workload are mechanisms that explain this result.

Practical implications – Improving the understanding of whether top manager impostor feelings sabotage or improve firm performance can encourage managers to engage in preventive actions to overcome or explore its effects adequately so that positive firm outcomes are fostered.

Originality/value – Despite the economic importance of how top managers’ judgment affects their decisions, little is known about how the cognitive frames of their top managers affect firm outcomes. In particular, there is no clear understanding of how top managers’ feelings of inadequacy, intellectual phoniness and deceitfulness (the impostor phenomenon) affect firm profitability.

Keywords Impostor phenomenon, Impostor syndrome, Performance, Top management, Upper echelons

Paper type Research paper

Introduction

The top management team constitutes the chairperson, chief executive, general managers and other managers that are responsible for the firm’s strategy and oversee the direction of the firm. In the top echelons of the firm where strategy is defined and the major decisions are taken, top managers’ experiences, values, personalities and human factors of varying kinds matter in considering firm outcomes (Hambrick and Mason, 1984; Hambrick et al., 2005; Hambrick, 2018). This is the central premise of the upper echelons theory proposed by Hambrick and Mason (1984).

In addition, top managers have limited resources and alternatives at their disposal that constrain their latitude for action – that is to say, there are limits to the managerial discretion they can exercise (Hambrick and Finkelstein, 1987). This can be particularly relevant in small and medium firms (SMEs) because size has been shown to matter when it comes to accessing resources and funds (Fonseca et al., 2022). Although SMEs are the beating heart of economies, representing more than 90% of the firms in Europe, little is known about how the cognitive frames of top managers in SMEs affect firm outcomes. One characteristic that has, surprisingly, been excluded from scrutiny is the influence that top managers’ feelings of inadequacy, intellectual phoniness and deceitfulness may have on firm outcomes. In other
words, there is still an imperfect understanding of how the impostor phenomenon can affect performance.

The purpose of this exploratory study is to investigate whether the impostor feelings of top managers affect firm performance. Improving our understanding of whether the impostor feelings of top managers sabotage or improve firm performance can encourage managers to engage in preventive actions to overcome negative outcomes or to accrue further benefits. Furthermore, we show that the impostor phenomenon may not be experienced by men and women in the same way, and that appropriate actions need to be considered in order to minimize the effects of the impostor phenomenon on firm outcomes.

Top managers’ characteristics and performance
The debate on the role that top managers play in the strategy of the firm has been in the agenda of management scholars for decades and has been fueled by interesting and contrasting evidence. On one side of the argument, the literature stream based on the premises of the new institutional theory and ecology contends that those top manager characteristics are almost irrelevant when considering firm outcomes. They argue that firm outcomes are influenced by firm, industry and country factors (Hannan and Freeman, 1987; 1984; Pfeffer, 1977).

The opposing stream of literature, based on the premises of the upper echelons theory, contends that top management characteristics matter. According to this theory, top managers’ experiences, values and personalities govern their interpretation of the situations they face (Hambrick, 2007). Consequently, their views will be reflected in the choices and decisions taken in running their firms. However, the influence that top managers exert on firms is conditional on the managerial discretion they possess (Finkelstein and Hambrick, 1990). For that reason, the environmental and organizational factors that the firm has at its disposal, in conjunction with the characteristics of top management, will determine their latitude for action and will affect their choices (Hambrick and Finkelstein, 1987; Finkelstein and Hambrick, 1990; Hambrick, 2018).

In reconciling the upper echelons argument with the managerial discretion perspective, one might predict that top managers’ characteristics affect firm outcomes in proportion to the managerial discretion they have (Finkelstein and Hambrick, 1990; Hambrick, 2007).

Taking this prediction into consideration, research has tried to understand what are the top managers’ characteristics that have the greatest power to influence their decisions and affect firm outcomes – for example, demographic characteristics, such as the tenure of top managers (Finkelstein and Hambrick, 1990). Likewise, research has investigated what psychological characteristics may explain or condition the strategic choices taken and are reflected in performance and other outcomes. To unlock this black box characteristics such as narcissism, extroversion and other personality traits have been investigated (e.g. Guedes, 2017).

One characteristic that is still poorly understood in the management literature is the impostor phenomenon. In this exploratory study, we investigate whether the impostor phenomenon influences the performance of a firm. If top managers have illusory feelings about their influence and can change their behaviors and attitudes in response to their intentional or unintentional deceitfulness in a more overt manner or in response to engaging in self-handicapping, then it is likely that firms cannot be shielded from these feelings and will be affected by them.

Impostor phenomenon and performance
The impostor phenomenon (also known as impostor syndrome) is a term coined by Clance and Imes (1978) that describes the feeling of unworthiness or lack of value that some individuals experience, especially in high-pressure and high-achievement environments. These individuals, despite high accomplishments, perceive themselves as fraudulent and are afraid of being
exposed. Individuals that suffer from the impostor phenomenon are unable to internalize their achievements, and so they maintain the illusion that they are frauds (Chrisman et al., 1995). They feel that their achievements are due to luck rather than ability. They have low levels of confidence and place extremely high demands on themselves (Ross et al., 2001), sometimes verging on perfection (Clance, 1985). The constant doubt they experience creates high levels of pressure and anxiety (Clance and O’Toole, 1987) and even depression (Bernard et al., 2002), which can be very disruptive. Thus, this phenomenon can have a serious impact in the business context and in the family environment (Ibrahim et al., 2020).

From medical doctors (Gottlieb et al., 2020), to students (Gable, 2021) or to academics (Bothello and Roulet, 2019), most people may have, on at least one occasion, felt like an impostor in their careers. Although it is undoubtedly unpleasant, experiencing the impostor phenomenon on one occasion is unlikely to have major consequences for a person’s professional (or private) life. However, there is a difference between rarely feeling like an impostor and cyclically experiencing it. People with more robust psychological courage, self-efficacy and/or psychological capital are better equipped to deal with the impostor phenomenon (Sanford et al., 2015; Kark et al., 2022). But, considering the prevalence of such inauthenticity and the dearth of value feelings, we may conjecture what impact this feeling would have if individuals were to experience it chronically. Constant feelings of inadequacy and self-doubt can destroy lives and undermine performance. In fact, past research has shown that the impostor phenomenon impacts outcomes at work. Badawy et al. (2018) point to several negative feelings and attitudes displayed by people experiencing the impostor phenomenon, such as low self-efficacy, low affective commitment, low citizenship behaviors and biased managerial decision making. Taken together, these can negatively impact the career progression. For this reason, and because the impostor phenomenon is prevalent among high-achieving individuals (Rohrmann et al., 2016), due consideration should be given to how impostor feelings shape their attitudes and/or behaviors in the workplace and impact the overall performance of firms.

The mechanism that ascribes such feelings to the outcomes is yet to be adequately explained. One possible explanation lies in the tension experienced by individuals suffering from the impostor phenomenon who may feel under-rewarded or over-rewarded. According to McDowell et al. (2007), the impostor phenomenon can be examined as an outcome of over-reward. According to the authors, individuals experience over-reward if they feel that the job they hold is above their self-perceived qualifications, talent and capabilities. They will respond by trying to adjust their attitudes and behaviors with perceived over-reward (Pritchard et al., 1972). However, because they doubt their ability to succeed in the job, their attempts to show increased levels of performance may sabotage not only their own performance but also the firm’s performance as a whole.

This subversiveness can be aggravated when these individuals compare themselves to a ratio of inputs to outputs that they imagine is the reference or norm for those who succeed in similar positions. According to equity theory (Adams, 1963, 1965), individuals perform a cost versus benefits (or rewards) analysis to decide the inputs they should bring to work and the outcomes that expect to receive from it, comparing their analysis with the inputs and outcomes of others (“social comparison”). They expect a fair return on their contributions (“equity norm”) and avoid inequalities among members of the group based on the ratio of inputs (e.g. time, effort, loyalty, hard work and commitment) to outcomes (e.g. compensation, responsibility and reputation) they believe is adequate. Therefore, the individuals that feel that the outcomes they receive are unfair or inequitable will seek to reduce such inequity, either via inputs or via outputs (or both) (Carrell and Dittrich, 1978; McDowell et al., 2007). For example, they can expend less effort and weaken their commitment to the job, which in turn will affect their job performance and may sabotage the firm’s overall outcomes. The impact on performance will depend on the extent to which the influence and discretion of
top managers is reflected in the firm’s strategies (Hambrick and Finkelstein, 1987; Finkelstein and Hambrick, 1990; Hambrick, 2018). Furthermore, the perception that top managers hold of their influence over situations and the extent of their control over them and over others also shape firm outcomes (Hogan and Kaiser, 2005).

In addition, top managers who experience the impostor phenomenon have doubts about their capacities, and so they may avoid important decisions or situations that they fear may expose their weaknesses (Bothello and Roulet, 2019). Such discretion may have positive or negative consequences for firm outcomes. On the one hand, top managers may try to compensate for their perceived feelings of inadequacy with workaholism and the pursuit of perfectionism (Ling et al., 2020). They may be tied to arduous and perfectionist work to avoid mistakes (Ross and Krukowski, 2003; Dudäu, 2014; Rohrmann et al., 2016), to make up for rewards they believe are over and above what is deserved or because they believe that through these means they can protect themselves against negative feedback and not have their competencies called into question (Kumar and Jagacinski, 2006). Such hard work can lead to higher performance but can, however, fuel impostor feelings and lead inevitably to greater tension and self-doubt (Clance, 1985). For example, if choices expand as a result of their (over) compensating work, they are still inclined to believe that any unintended results are their fault because they should have seen them coming (Schwartz et al., 2002).

On the other hand, in contrast to the over-preparation and hard work scenarios, top managers experiencing impostorism can procrastinate and defer action until the very last moment, which translates into reduced effort and lack of preparedness for the tasks at hand (Chrisman et al., 1995; Rohrmann et al., 2016). Moreover, they can adopt self-handicapping behaviors – namely, concocting alibis from impediments, such as illness and fatigue, to provide cover for failure (Ferrari and Tice, 2000; Ferrari and Thompson, 2006). There may be some costs associated with such self-handicapping behaviors – for example, challenging authority or control can undermine the image, trust and reputation that subordinates have of their leader. Therefore, it can be an unattractive option for top managers. To date, there are no studies that expressly investigate whether top managers in particular exhibit self-handicapping behaviors, but some studies (e.g. Ferrari and Thompson, 2006) have confirmed that individuals with strong impostor feelings are unlikely to admit their imperfections publicly because they fear loss of respect and affection from others (Rohrmann et al., 2016).

Irrespective of working hard or escaping from it, the impostor phenomenon undermines the work context and can reduce job satisfaction and jeopardize career advancement (Vergauwe et al., 2015). Considering the potential dysfunctional nature that impostor feelings may have on the latitude that top managers feel in decision making, the demands of the job and the inability to adequately deal with their work, their emotions may suffer impairment with a consequent impact on performance. To that end, we posit the exploratory hypothesis that impostor feelings exert a negative impact on performance.

\( H1. \) Impostor phenomenon is negatively associated with performance.

**Moderators of the relationship between impostor phenomenon and performance**

The first mention of the impostor phenomenon concerned high-achieving women, who were experiencing feelings of intellectual phoniness and perceived inadequacy and felt they did not deserve credit for their achievements (Clance and Imes, 1978). Now, however, it is believed that both men and women experience the phenomenon. Yet, research so far has failed to deliver robust conclusions and the evidence is mixed (e.g. Clance and Imes, 1978; Kumar and Jagacinski, 2006; Topping and Bravata et al., 2020).

Despite being commonly associated with highly successful individuals, to date, there is no clear evidence on whether the impostor phenomenon hinders the attainment of success, especially for those in the top rank. However, when linked with psychological characteristics,
such as low self-esteem, self-efficacy and success expectation, it can have a deleterious effect on the chances (and the desire) to move up the ranks of the firm (or to feel fulfilled in those positions) and can, therefore, constitute a significant barrier to advancement (Vergauwe et al., 2015). Ascending to the top ladder of the firm may generate the feeling of being more exposed and subject to close scrutiny. Consequently, it may lead to the adoption of behaviors that undermine firm performance. For example, since people experiencing impostorism are keen to impress others, they can adopt protective strategies or strategies that they think others expect, such as excessive risk taking, in a desperate attempt to achieve results and win accolades. However, up to now, none of these propositions has been tested in the management literature, and the effect of impostor phenomenon has still to be deciphered.

In addition to the professional challenges (related to the difficulty of the tasks, the conditions of the firm, the conditions of the industry, among others) that subject top managers to high demands, heavy workloads and unrelenting pressure (Hambrick et al., 2005), they also face their own personal challenges. In the case of top managers with impostor feelings, the desire to work extra hours can collide with, for example, family obligations. Crawford et al. (2016) reported that there is a positive relationship between impostor feelings and a self-reported conflict in managing work-life balance. If people experience impostor feelings on a regular basis, that can be conducive to being under constant strain, struggling to cope with the demands of the job and family commitments and feeling depleted of resources to deal with the exigencies in all aspects of their lives (Grandey and Cropanzano, 1999; Hudson and González-Gómez, 2021). Vergauwe et al. (2015) find support for the finding that impostor tendencies have an impact on career attitudes and organizational behaviors, indicating lower levels of job satisfaction and commitment to the organization. These endeavors can lead to emotional exhaustion (Whitman and Shanine, 2012; Crawford et al., 2016), which is almost certain to negatively impact firm outcomes.

The pressure of being in the upper echelons of a firm, where demands can be expected to grow with every additional achievement, may lead to the persistence or intensification of impostor feelings (Clance and Imes, 1978). Both men and women experience impostor feelings, but it is conceivable that the effects will be experienced by women and men in different ways. It is likely that those who face an unsupportive environment (Feenstra et al., 2002) at work and at home may struggle with it to a greater extent, and sometimes experience strain in their relationships (Mount, 2015). People who experience impostorism may feel like a fraud in responding rationally to the workplace climate. If they are already likely to feel an intense lack of acceptance, it may reset or further intensify impostor feelings and create the feeling of not being able to achieve future success (Tulshyan and Burey, 2021). Research has shown that masculine and heteronormative environments have been associated with more microaggressions. Thus, for example, environments where stereotyping or sexism is present may explain gender differences in the phenomenon (Haar and de Jong, 2022).

In addition, the pressure derived from having impostor feelings may not be felt equally by men and women, nor do they face similar consequences from it. On the one hand, according to the KPMG (2020) survey of managers in corporate America, 81% of women felt that they put themselves under greater pressure to succeed than men. Moreover, the study shows that 85% of respondents believe that other women feel the same way, but men are less affected by such feelings, with 74% believing that men do not question themselves the way women do. On the one hand, Badawy et al. (2018) found that, among those with impostor feelings, men react more negatively under conditions of negative feedback and high accountability and experience worse performances. The authors attribute these results to existing gender norms that expect men to be more competent.

Taken together, male and female top managers experience impostor feelings, but the impact of the impostor phenomenon on performance will be different depending on gender – in particular, for those who face an unsupportive environment at work and at home.
H2. Gender moderates the relationship between the impostor phenomenon and performance.

Along with potential differences due to gender, it is interesting to investigate whether the impact of gender differs according to certain buffers or exacerbators of the previous relationship. To date, there is no study showing the role that possible characteristics may play. Thus, we take the investigation forward with two exploratory possibilities: (1) having a heavy workload; and (2) being the prominent figure at the firm (CEO).

As mentioned before, there is the view that being at the top of a firm carries very high demands – for example, heavy workloads (Hambrick et al., 2005). This may create pressure for top managers, irrespective of gender. However, past research built on gender stereotypes and social gender roles has typically characterized women as “care givers” whereas men are seen as “bread winners” (Eagly, 1987), cementing the idea of women as “mothers” who are highly committed to children and family (Hewlett et al., 2010). Therefore, besides professional commitments, women may have to tailor their agendas to suit family commitments, such as taking children to and from school, skillfully juggling paid and unpaid demands and trying to cope with this idealized version of motherhood (Watson, 2020). Such expectations can impact performance in two ways. First, that may translate into a reduced workload. In fact, according to OECD. Stat database (2021), the average weekly hours worked on the main job for women is 33.9, which is lower than for men with 39.4. However, this does not necessarily mean that women are less productive. There are studies that support both results (see Astegiano et al., 2019 for a review on this matter). On top of a heavy workload, women have to deal with the illusional idea of “shared responsibilities” (Hewlett, 2002). Gender disparities in the household division of labor persist, and women are still the ones who shoulder the burden of household chores and parenting demands (Perista et al., 2016; Augustine and Prickett, 2022).

Indeed, some studies revealed that these disparities were even aggravated during the Covid-19 pandemic (Pabilonia and Vernon, 2023). In sum, it is reasonable to assume that the heavy workload and family responsibilities are likely to play a role in determining what top managers can deliver at the firm and how, ultimately, firm performance will be affected.

Second, being at the very top of the ladder is demanding in terms of hours and commitment to the firm. Moreover, it is a position of high visibility and, consequently, more likely to attract attention and scrutiny. This makes the leader more aware of not only of her/his own expectations but also of others’ expectations of what the role requires (Kark et al., 2022), with the likely prospect of experiencing negative feedback (Ibarra and Petriglieri, 2016). Although previous research has identified positive outcomes related to power positions, such as a sense of control (Guedes et al., 2017) or optimism (Keltner et al., 2003), recent studies have shown that a threat to their power is more likely the perception of those rising to top positions, especially when linked to past negative work experiences, such as gender discrimination or denigrating treatment, as is more particularly the experience of women (Feenstra et al., 2022). Such conditions can make managers feel an imperfect fit and trigger impostor feelings.

In the case of a manager in the spotlight as CEO who experiences impostor feelings, is afraid of exposure as a fraud, and feels inadequate in the top echelons of the firm, an adverse work environment of this kind can pose real challenges for the incumbent and generate doubts about his/her suitability for such a prominent position (Feenstra et al., 2022).

Moreover, if top managers have less latitude over the possible actions they can take, that shortcoming will be adversely translated into workplace outcomes. This may be particularly relevant in smaller firms, and especially in family firms, where private and professional spheres are sometimes indistinguishable, even in wealth terms. The principal challenges for the manager in such a scenario are likely to be experienced as issues to do with well-being and the ability to deliver results.
Thus, we aim to subject these issues to scrutiny to see whether the experience of top managers who encounter impostor feelings and face high levels of exposure (as CEO) translates into detrimental effects on performance.

Taken together, it is reasonable to expect these variables to have a moderating effect on the aforementioned relationship.

**H3.** Gender moderates the relationship between the impostor phenomenon and performance, but it depends on other characteristics, such as workload and being the CEO.

**Methods**

**Data and variable definitions**

**Participants.** The survey was part of a broader project that included all management levels and was sent to the 10,836 Portuguese public limited firms. The participants were contacted by email, which was sent to the general email address of the firm that we obtained from Informa D&B, a provider of yearly financial data (from *IES – Informação Empresarial Simplificada*) certified by a chartered accountant and general contact email information on firms.

In total, 1,034 complete responses from individuals in different hierarchical positions were obtained (with a response rate of around 12%, taking into account emails that bounced or were no longer valid). For the purpose of this study, the selected participants are top managers from small to medium firms (criterion of less than 250 employees).

Our final sample comprises 116 top managers (37 women and 79 men). The mean age of the participants is 52 years old (SD = 9.5, ranging from a minimum of 24 years old and a maximum of 77 years old). The participants have a mean of 14 years’ experience as top managers (SD = 8.98, ranging from a few months to 40 years) and about 60% are CEOs (or the equivalent most senior manager in the firm). They work approximately 48.5 h per week (SD = 10.9, ranging from 8 to 80 h). Approximately 46% of the participants have an undergraduate degree, 36% have a master’s degree or executive-level education, and 16% have not attended university. Approximately 77% are married or participate in a union or civil partnership, 8% are single and the remainder are divorced or widowed.

The participants work mainly in medium firms (mean of 31.3 employees) and 49% are family firms with an average board size of 2.5 members. The most representative industries are real estate with 14.7% of the sample (N = 17) and accommodation with 9.5% of the sample (N = 11). There are several industries represented by just one firm (N = 1), such as computer programming, consultancy and related activities and other professional, scientific and technical activities.

**Dependent variable.** We use return on assets (ROA) as a measure for firm performance, defined as the ratio of net income to total assets (e.g. Fonseca et al., 2022).

**Independent variable.** We use the impostorism scale proposed by Leary et al. (2000). It provides a unidimensional conceptualization of the impostor phenomenon by focusing on a sense of being an impostor or a fraud. It is appropriate for successful people, such as top managers and has been subject to systematic evaluation of their psychometric properties (Mak et al., 2019). It comprises a seven-item measure (1 – Not at all characteristic of me to 5 – Extremely characteristic of me). Items include “Sometimes I am afraid I will be discovered for who I really am” or “I tend to feel like a phony”. The Cronbach alpha is 0.92, showing the scale has very good reliability (DeVellis, 1991).

The remaining data variables were also obtained from Informa D&D. The financial data variable is composed of the average of the past three financial years.

**Moderator variables.** The moderator variables are gender, which equals 1 if the top manager is a woman, and 0 otherwise. CEO is a dummy variable, which equals 1 if the top
manager is the CEO of the firm, and workload represents the (average) of the total number of hours worked per week.

Control variables. We included a set of control variables related to the firm and the participants. To account for the nature of our firms (SMEs) in terms of liability of smallness, we use the natural logarithm of employees to proxy for the size of the firm. Firms that have greater resources at their disposal can take advantage of greater production capacity, and economies of scale or scope. Thus, we use the natural logarithm of assets. Smaller firms face greater constraints in accessing funds, in fulfilling legal obligations and maintaining adequate levels of liquidity and cash flow for future investments. Thus, we control for the natural logarithm of the current ratio (current assets to current liabilities). Finally, we use management team size to account for the number of managers that manage the firm and to account for the latitude for action that top managers have (Patel et al., 2017; Patel and Guedes, 2022).

For the controls variables related to participants, we use: (i) age – namely, the biological age of participants. Although impostor feelings may affect anyone from any age, the evidence is not conclusive (Bravata et al., 2020), with some research finding that these feelings decrease (e.g. Thompson et al., 1998; Brauer and Proyer, 2017) or there is no association with age (e.g. Want and Kleitman, 2006); (ii) tenure, defined as the number of years s/he has been in the current position. Previous research has shown that impostors’ fears tend to be related to organizational tenure and career stage (Gardner et al., 2019; Kumar et al., 2022). Managers that have greater experience in the role of top manager may be more familiar with the role and challenges that it poses (Kark et al., 2022); (iii) education – namely, the highest academic level achieved. Although considerable research has focused on prominent and successful individuals (e.g. Clance and Imes, 1978; Vergauwe et al., 2015), the phenomenon can affect any individual, with any education level, from children to teenagers, to the elderly (Bravata et al., 2020); and (iv) marital status, because research has shown that impostor feelings are correlated with marital status (Egwurugwu et al., 2018) and can have consequences for these relationships (Mount, 2015).

Finally, we include two-digit industry to control for industry-specific heterogeneity.

Results and discussion
Table 1 presents the descriptives and correlations, and Table 2 presents the regressions results, using an ordinary least square estimation with standard errors clustered at two-digit industry.

The results show some evidence that the impostor phenomenon, per se, does not hurt the profitability of the firm (Model 1: $\beta = 0.044, p < 0.05$). However, these results need to be interpreted with caution because, when we add the control variables, the significance of the coefficient disappears. Nevertheless, contrary to our hypothesis (H1), there is no indication that the profitability of SMEs is associated with the impostor phenomenon. More research is needed to unveil the complex mechanism linking the phenomenon to firm outcomes. For example, we suggest that the recent claim of Tewfik (2022) is further investigated by exploring whether a bright side to the impostor phenomenon exists for firms.

Then, we account for a possible gender moderation effect. Our results show no difference between male and female top managers in terms of impostorism value ($W = 1.07; M = 1.19, t$-value = 1.48; $p > 0.10$). However, the regression analysis found support for our second hypothesis (H2), showing that male and female top managers with impostor feelings impact performance differently (Model 3: $\beta = -0.256, p < 0.05$ and Figure 1). According to our results, in firms where top managers are women who experience strong impostor feelings, performance is lower.

To unveil the obtained result, we explored some possible moderators for this gender-moderated relationship. There may be a myriad of possible explanations but, as the first
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**Note(s):** N = 116; SD is the standard deviation; Min. is the minimum, and Max. is the maximum; *p < 0.10, **p < 0.05, ***p < 0.01

**Source(s):** Created by author
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Table 2. Impostor phenomenon and performance: regression results three-way interactions of impostor phenomenon (continued)
study to address this complex phenomenon, we chose some that we felt had the potential to shed light on these issues – namely, mechanisms associated with the prominent figure in the firm (CEO) and the burden of a heavy workload.

Previous research has shown that engagement and dedication pay off when it comes to performance (e.g. Gorgievski et al., 2014). Thus, we investigated the time spent working for the firm, exploring how working long hours might play a role in determining performance. On the one hand, long working hours could demonstrate greater commitment, pressure, dedication and engagement. On the other hand, less hours can demonstrate an attempt to balance family and professional engagements whilst maintaining productivity. The results show that there is no relationship between workload and imposter feelings. We did not find a three-way interaction when considering gender (Model 5: $\beta = -0.002, p > 0.10$). Despite the evidence that women with high impostorism levels do negatively impact firm performance (as seen in hypothesis 2), it is not related to workload. Therefore, the idea that working more hours will improve firm performance is not supported in our study. It may indicate that those suffering from this phenomenon will adapt strategies to overcome these feelings, but they do not work more hours. Future research can investigate whether they will tend to focus on productivity and create a balance in all spheres of their lives. Forthcoming
studies may wish to explore avenues that reveal whether productivity is the key to explaining this complex relationship.

Considering the particular context of Portugal, this is noteworthy. On the one hand, the traditional division of household still persists in the country, since domestic and family work is mainly undertaken by women (Perista et al., 2016). According to a national survey on the use of time by men and women in Portugal (Perista et al., 2016) women are overwhelmed, with 64.2% of women (52.4% of men) mentioning they were too tired after work to enjoy a personal life. Work is seen as an impediment to dedicating more time to family (51.4% of women against 43.8% of men). Women, rather than men, have to perform most of the juggling between paid and unpaid work. On average, the daily paid number of hours is 09h 02m for men and 08h 35m for women, while for the unpaid work (domestic work), women had a daily average of 03h 14m and men 02h 19m. Adding to the discrepancies in the number of hours worked, a gender pay gap also persists – 11.9% in 2021 (Eurostat, 2023). On the other hand, similar to the results of KPMG (2020), Portuguese women express feelings of guilt and anxiety because they feel they can neither meet the expectations imposed on them by others nor those they impose on themselves (Perista et al., 2016). Taken together, these could have detrimental effects on performance, but that was not supported in our study.

Then, we investigated whether being under scrutiny as CEO can affect firm performance when the leader experiences the impostor phenomenon. Thus, the idea that, at the uppermost echelons, managers who have to deal with greater demands and responsibilities that can damage their well-being, possibly affect their cognition and behavior, impair their ability to make decisions and strategic choices (e.g. Mannor et al., 2016) and impact firm performance, is not supported in our study. Although previous studies find that Portugal is a country where expectations for high qualification professions differ according to gender and, therefore, give support to stereotypical perceptions of men and women (see, for example, Amâncio and Santos, 2021), our results show that there is no three-way interaction when considering gender (Model 4: $\beta = -0.122$, $p > 0.10$). Previous research has found that being in a top position itself is not necessarily more demanding, nor does it impact performance (Guedes and da Conceição Gonçalves, 2019). One possible explanation is that top managers adapt to situations and have a greater sense of control (Guedes et al., 2017). For example, top managers can simplify their decisions, delegate some of the work, or just select the most important tasks to be undertaken. On the other hand, they can become overly stressed and incapable of fulfilling what is expected of them. No matter what the adaptive behavior is, they perform substantially less well under high demand situations (Hambrick et al., 2005). Thus, it is likely that recurrent high demands will generate high levels of stress. More extensive research is needed to uncover the potential linkages between the sense of control, stress and other myriad challenges faced by CEOs who experience the phenomenon and performance.

In sum, we contribute to the field by showing impostorism does not strongly impact performance but, in the case of women who experience strong impostor feelings, performance is negatively affected. As our chosen moderators failed to provide an explanation for the gender differences, there is room for future studies to investigate why such gender differences exist. Future research could choose top manager characteristics, firm characteristics, or contextual characteristics (Kark et al., 2022; Vial et al., 2022).

Concluding remarks; limitations and suggestions for future research
Impostor feelings can be experienced by both men and women, in any position, anywhere, but it is most prevalent among high achieving individuals. Our study is among the first to
investigate the impact of impostor phenomenon on the level of the firm, using a sample of top managers from public limited companies. Other notable exceptions are Rohrmann et al. (2016) and Leonhardt et al. (2017) who have also studied managers, but they have not investigated the relationship with firm performance.

Building on the premise that top manager characteristics affect firm outcomes, we examined whether the impostor feelings of top managers are likely to damage or boost firm profitability. Our study shows that the impostor phenomenon does not hurt firm performance. In the main, the results show that the impostor phenomenon is not associated with firm profitability. Future studies should consider our findings and those of Tewfik (2022) as a basis for studying the positive benefits that these feelings may have on firm outcomes, looking beyond performance to other firm dimensions, such as innovation, growth and the inclusivity of the cultural environment.

To shed further light on the relationship between the impostor phenomenon and firm performance, we directed our attention to aspects of this knowledge still to be explored. Thus, we examined the moderator effect of gender. Indeed, men and women with impostor feelings exert different impacts on firm performance. The results show that women experiencing strong impostor feelings negatively affect firm performance. However, we failed to find evidence that being a CEO and workload are mechanisms that explain this result. One possible explanation may lie in the structures, processes and cultures that allow IP to flourish. This is an area that we did not explore and represents a limitation of this study. A variety of other aspects are still to be investigated: (1) top manager characteristics, such as stress levels; (2) psychological characteristics, such as a sense of being in control or perfectionism; (3) firm-related characteristics, such as the type of business (family firm, listed versus non-listed) and the type of ownership (main shareholder); (4) leaders’ impostorism as an experience produced by organizational contexts and culture, as suggested by Kark et al. (2022) — a claim that has yet to be explored.

A greater understanding of the mechanism bearing on how the impostor phenomenon can impact firm outcomes is a pivotal matter for firms. Accordingly, a proper grasp of this issue can help firms to engage in preventive actions to overcome consequent difficulties or to fully explore the phenomenon’s impact so that positive firm outcomes are fostered.

References


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KPMG (2020), Advancing the future of women in business: a KPMG women’s leadership summit report.


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