

# **Are gritty leaders happier *or* unhappier? It depends on how prudent they are**

Rego, A., Bluhm, D., Valverde, C. & Cunha, M. P. (2022). Are gritty leaders happier or unhappier? It depends on how prudent they are. *Group and Organization Management*. DOI: 10.1177/10596011221147439

## **Abstract**

Grit in leaders (and, in general, all employees) typically results in greater success and well-being but also has potential downsides. We propose that gritty leaders *also* need to be prudent or they may spend excessive time and resources at work, leading to greater work-to-family conflict and, as a result, lower well-being. Findings of two studies support this reasoning. Grittier *and imprudent* leaders experience greater work-to-family conflict and lower affective well-being, whereas grittier *and prudent* leaders experience lower work-to-family conflict and greater affective well-being. We therefore conclude that the *agentic* resource of grit in leaders may be either positively or negatively related to their affective well-being depending on their prudence. Considering that work-to-family conflict and affective well-being are important for the leader's health and performance, which in turn may influence team/organizational performance, our study contributes to a better understanding of the routes leading to better leadership and team/organizational functioning.

**Keywords:** Grit, Perseverance of Efforts, Prudence, Work-to-family Conflict, Affective Well-Being, Leadership

## **Introduction**

In 2011 the former Lloyds Bank CEO, António Horta-Osório, became exhausted as a result of the way he had immersed himself in running the company (Florent-Treacy & Manzoni, 2012). He said “My family is complaining they haven't seen me very much these last few weeks. I have to make it up to them. It's been very tough.” (*in* Treanor, 2011). Following medical advice, he took a two-month sick leave, acknowledging that he had neglected everything else to focus entirely on the bank. Lloyds' shares went down almost seven percent, as investors feared the consequences for the bank of losing its “energetic playmaker” (Kar-Gupta, 2011). The case illustrates the theoretical and practical relevance of understanding the complex relationship of leader grit and well-being: although grit (“the ability to stay focused for as long as it takes to complete a task or achieve a goal, neither giving up nor out, nor giving in to any diversions”; Motro, Comer, & Lenaghan, 2021, p. 370) may contribute to success, performance, and well-being (Duckworth, 2016), there is also value in being prudent and “knowing when to quit” (Lucas, Gratch, Cheng, & Marsella, 2015, p. 22), otherwise work-life dysfunctions and negative consequences for leaders' well-being (and, indirectly, their performance) may arise.

We thus posit that only when grit is regulated by prudence will it result in leaders' optimal functioning and the recuperation of resources to continue persistence toward work and family goals. We interpret prudence as a kind of “switching” regulatory resource that, when switched on, lights up the bright side of grit but, when turned off, allows the manifestation of its dark side. This paper thus contributes to a recent research line that has discussed potential downsides to the prized resource of grit in the workplace, including a warning that scholars “know very little about how grit might precipitate work-life dysfunction” (Southwick, Tsay, & Duckworth, 2019, p. 12). As some literature about grit in the workplace has suggested (e.g., Jordan, Ferris, Hochwarter, & Wright, 2019; Lucas et al., 2015), and the above anecdote illustrates, caution

must be adopted regarding the alleged merits of grit in leaders (Lee & Duckworth, 2018). Despite being a key resource, grit has several downsides, including inappropriate persistence (Howard & Crayne, 2019) and an overcommitment to work that may interfere with family responsibilities and goals. Whether grit results in positive or negative outcomes for leaders likely depends on boundary conditions such as how grit is regulated (Jordan, Ferris, et al., 2019). Unless gritty leaders are *also* prudent (e.g., have “a farsighted and deliberative concern for the consequences of their actions and decisions”; Peterson & Seligman, 2004, p. 478), they may spend excessive time and resources at work, leading to greater work-to-family conflict (WFC) and, as a result, lower well-being (Clark, Michel, Zhdanova, Pui, & Baltes, 2016; Lancefield, 2020).

Considering that leaders’ well-being spills over to employees’ well-being and performance (Jin, Seo, & Shapiro, 2016), and affects team/organizational performance (Quick, Cooper, Gavin, & Quick, 2008), it is important to adopt a more realistic perspective about the possible merits of grit in leaders on their well-being and, indirectly, their performance. In this paper we rely on the conservation of resources (COR) theory (Hobfoll, Halbesleben, Neveu, & Westman, 2018) and the dual-systems models of self-regulation (Inzlicht, Werner, Briskin, & Roberts, 2021) to examine prudence as a key boundary condition that moderates the relationship between grit in leaders and their affective well-being (AWB) via WFC.

Prudence, as a self-regulatory resource, is “a cognitive orientation to the personal future, a form of practical reasoning and self-management that helps to achieve the individual’s long-term goals effectively” (Peterson & Seligman, 2004, p. 478). Prudence may buffer grit’s downsides as it encompasses moderation and balance in the pursuit of goals, and a flexible approach to goals and their attainment. Further, grit is among the resources whose maintenance requires expending other resources and, without adequate self-regulation, may therefore lead to net resource loss and missed opportunities to regain resources in other domains (Schonpflug,

1985). Specifically, if gritty leaders are not prudent, they risk making poor choices, and other resources that contribute to well-being such as intimate family ties may be lost (Hobfoll, 2002). In line with this reasoning, we propose that grit's influence on leader AWB is not only moderated by prudence to avoid poor choices, but also mediated by WFC. When grit pushes leaders to overcommit and consume resources and energies at work that make them less able to handle the demands of family life, WFC increases, resulting in reduced AWB.

Drawing on the dual-systems models of self-regulation, we thus posit that the perseverance of gritty leaders boosts their AWB via lowering WFC *only* when the leader also activates the reflective system ingrained into their prudence. Without prudence, grit results in a behavioral pattern that leads to greater WFC and lower AWB. In sum (Figure 1), we argue that grit in leaders may cause them to experience greater or lesser WFC (and, respectively, lower or greater AWB) depending on their prudence.

Figure 1 about here

The paper makes several contributions. First, despite its potential, the role of grit in work settings has been understudied (Jordan, Wihler, Hochwarter, & Ferris, 2019), and empirical research about grit in leaders is still scarce. We show that grit in leaders is worth exploring and provide a balanced perspective regarding the merits and potential downsides of grit in leaders. Second, by demonstrating that grit's influence on leaders' WFC and AWB is moderated by leaders' prudence (a fundamental resource also underrepresented in empirical research about leadership; McGrath, 2021), we empirically support the notion that the study of grit may advance by considering its boundary conditions (Credé, Tynan, & Harms, 2017). Finally, by treating grit as perseverance of efforts (Credé et al., 2017) and controlling for conscientiousness (several researchers have suggested that grit may be redundant with, or a facet of, that individual characteristic; see, e.g., Credé et al., 2017), the paper brings more clarity to a field characterized by some controversy regarding the conceptualization of grit.

## **Theory and Hypotheses**

The main tenet of COR theory is that people are driven to acquire and protect resources valued for goal attainment, and that the use or loss of resources without replacement results in stress and reduced well-being. Resources, defined as anything perceived by individuals that help them to attain their goals (Halbesleben, Neveu, Paustian-Underdahl, & Westman, 2014), include objects (e.g., personal vehicles for transportation), sources of “energy” (e.g., time), conditions (e.g., social support), and personal characteristics (e.g., self-esteem; grit). Resources such as grit may be valued for their facilitation of goal attainment, which typically results in rewards of additional resources (Hobfoll, 2002; Ilies, Ju, Liu, & Goh, 2020). However, grit is also in a subset of resources that depletes other resources (e.g., time) through its expenditure. We thus argue that the tenacious pursuit of goals inherent to grit limits the gritty individual’s capacity to change course when necessary, unless regulated by prudence. Before elaborating about such an interaction between grit and prudence, it is necessary to address the construct validity of grit.

### *Grit*

Grit, originally defined as “perseverance and passion for long-term goals” (Duckworth, Peterson, Matthews, & Kelly, 2007, p. 1087), has been operationalized as a second-order construct comprised of perseverance and consistency of interests (i.e., passion for long-term goals). Research has demonstrated that, operationalized in that way, grit predicts high achievement and several important outcomes (e.g., Dugan, Hochstein, Rouziou, & Britton, 2019; Mueller, Wolfe, & Syed, 2017; Southwick et al., 2019), including how gritty leaders positively influence team members (e.g., Schimschal & Lomas, 2019; Rego et al., 2021). However, the empirical pattern is inconsistent across studies, and the construct validity of grit has been questioned in several ways. First, scholars have argued that measures of grit do a poor job of capturing the passion dimension of the construct, as traditionally considered (Jordan,

Ferris et al., 2019). Second, the meta-analysis of Credé et al. (2017) concluded that the evidence does not support the consideration of grit as a higher-order construct characterized by two lower-order facets. Accordingly, Credé (2018) defended that there is no empirical support for considering grit as the combination of the two facets, and Credé et al. (2017) recommended that grit researchers should focus on perseverance as the most promising avenue for future research (see also Rego et al., 2022).

Third, several researchers have suggested that grit may be redundant with, or a facet of, conscientiousness (Credé et al., 2017; Ponnock et al., 2020; Schmidt, Nagy, Fleckenstein, Möller, & Retelsdorf, 2019). However, Rego et al. (2021) presented theoretical and empirical evidence suggesting that redundancy between the two constructs, as emerging in some studies, may be partially explained by common method bias. Both these authors and Credé et al. (2017) suggested that grit has incremental predictive validity when controlling for conscientiousness. Further, theoretical reasoning supports the consideration of grit and conscientiousness as distinct constructs. First, the dependability or inhibitive facets of conscientiousness are only weakly present in grit, if at all (Schmidt et al., 2019). Second, unlike conscientiousness, grit does not include aspects such as orderliness and tidiness (Duckworth et al., 2007; Reed et al., 2013). Therefore, while sharing similarities with some components of conscientiousness, grit captures something that is unique and distinguishable from current conceptualizations of conscientiousness. Moreover, most criticisms directed at grit are based on studies carried out in non-work domains (Credé et al., 2012; Ponnock et al., 2020). Abandoning the construct of grit in management research because of an empirical pattern found in non-work contexts would be inappropriate as well as harmful to broadening collective knowledge on how this valuable resource operates at work.

We advocate that to bring more clarity to the field, researchers continue to explore the role played by grit (after controlling for conscientiousness, as we do in Study 2) and its

boundary conditions (e.g., prudence) in the work context, especially in the understudied domain of leadership. In this paper we treat prudence as a separate, self-regulatory resource that should enhance the positive outcomes of grit and buffer its potentially negative consequences. Considering that the arguments above are supported by several researchers (e.g., Credé et al., 2017; Rego et al., 2022), we also conceptualize grit as perseverance of efforts (i.e., as Grit-PE, the expression we use hereinafter)<sup>1</sup>. Next, we explore why Grit-PE predicts AWB via WFC, and then discuss how prudence operates as a boundary condition.

### *Grit-PE and AWB*

Psychological well-being at work comprises affective, behavioral, and cognitive components, such as positive and negative emotions, positive self-regard, competence, integrative functioning, and autonomy (Russell & Daniels, 2018; Warr, 2003). In this research we focus on the affective component (i.e., AWB). AWB at work, referring to individuals' emotional experiences regarding events in workplaces, has been considered the most important component of psychological well-being. AWB is associated with important workplace constructs, such as satisfaction, burnout, and performance (e.g., Ilies, Aw, & Pluut, 2015; Rego & Cunha, 2008; Russell & Daniels, 2018). AWB “enables organizations to capitalize on their human capital” and is “in the best interests of employees and employers” (Ilies et al., 2015, p. 828).

Numerous studies have demonstrated that grittier people typically experience greater AWB (Disabato, Goodman, & Kashdan, 2019; Jiang et al., 2020; Jin & Kim, 2017). A possible explanation for this is that Grit-PE enables the fulfillment of autonomy, competence, and relatedness needs (Jiang et al., 2020; Jin & Kim, 2017). However, the studies just cited were not carried out in the work context, which means we know little about how Grit-PE applied

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<sup>1</sup> The “Grit-PE” expression, instead of “perseverance” or “perseverance of efforts,” was adopted by Rego et al. (2022), after Credé et al. (2017) suggested that researchers of grit should focus only on PE.

toward work goals affects personal well-being. The idiosyncratic demands of leadership further complicate the relationship between Grit-PE in leaders and their AWB. Leaders are often agenda-driven, subjected to strong time pressures, and confronted with a great number of tasks and responsibilities (Debus, Fritz, & Philipp, 2019; Porter & Nohria, 2018), and they have to be highly involved in their roles to be effective. When pursued with Grit-PE, these role demands may deplete resources such as time and energy (Hobfoll et al., 2018), potentially yielding negative consequences for leaders' WFC and, as a result, their AWB.

### *The Mediating Role of WFC*

Work-family conflict is “a form of interrole conflict in which the role pressures from the work and family domains are mutually incompatible in some respect. That is, participation in the work (family) role is made more difficult by virtue of participation in the family (work) role” (Greenhaus & Beutell, 1985, p. 77). Two types of conflict may be considered (Netemeyer, Boles, & McMurrin, 1996): (1) work interfering with family life (work-to-family conflict, WFC) and (2) family life interfering with work (family-to-work conflict, FWC). We focus on WFC for three interrelated reasons. First, work has a more negative impact on family life than family life has on work (Frone, 2003). This is especially valid for leaders, considering the demands of their work role (Debus et al., 2019; Porter & Nohria, 2018). Second, WFC vs. FWC has stronger relationships with emotional experiences (Speights, Bochantin, & Cowan, 2020) and well-being (e.g., Amstad, Meier, Fasel, Elfering, & Semmer, 2011; Frone, 2003). Third, Grit-PE is domain-specific (Cormier, Dunn, & Dunn, 2019), and our study focuses on how Grit-PE *at work* interferes with the family domain. To discuss how such interference operates conditionally, it is necessary to understand first that Grit-PE, while being a characteristic with resource qualities, has the potential to both *reduce* and *increase* WFC.

Considering that gritty individuals are self-efficacious and persevering in threatening contexts, Grit-PE has been positioned as a quality that is capable of reducing employees'



vulnerability to contextual stressors (Jordan, Ferris, et al., 2019) and to negative emotional experiences caused by performance failures (Motro et al., 2021). Therefore, Grit-PE operates as a “resistance resource” that reduces “threat vulnerability” (Jordan, Wihler, et al., 2019, p. 65), thereby contributing to lower WFC. A complementary explanation for how Grit-PE may reduce WFC is consistent with the job demands–resources (JD-R) model (Bakker & Demerouti, 2007; Ilies et al., 2015): gritty leaders interpret demands at work more as challenges than as hindrances, thus being more engaged at work (Crawford, LePine, & Rich, 2010). Consequently, gritty and engaged leaders develop resources that are useful in pursuing both work and family goals (Ilies et al., 2020), thus experiencing lower WFC.

From the arguments above, one could derive that Grit-PE is a useful resource for handling demands at work, preventing the depletion of resources, and facilitating the leader’s pursuit of goals in both the work and family domains, even in the face of disappointment and failures (Crawford et al., 2010; Ilies et al., 2020; Motro et al., 2021). However, the case for the opposite effect is also strong. According to COR theory, as individuals acquire resources, they invest to obtain additional resources. Because they tend to invest in ways that maximize their returns and that most fit with the specific resource invested, workplace resources acquired through Grit-PE are more likely reinvested at work. From a scarcity paradigm perspective (Greenhaus & Beutell, 1985), by reinvesting resources at work, gritty leaders may find themselves with fewer resources to spend in the pursuit of family goals, thus experiencing greater WFC and strain (Ilies et al., 2015). Additionally, gritty leaders are more involved in their role, as such an involvement allows persevering toward work goals. High levels of involvement in the work role make it more difficult to engage in family activities (Andreassen, Hetland, & Pallesen, 2013). Role theory, resource drain theory, and compensation theory all suggest that role involvement may lead to WFC (Michel, Kotrba, Mitchelson, Clark, & Baltes, 2011).

The involvement of gritty leaders in their work role is even more problematic in terms of WFC, because of the demands of leadership (Debus et al., 2019; Porter & Nohria, 2018). According to both the JD-R and the COR approaches, excessive demands drain leaders' psychological resources, leaving them fatigued and diminishing their AWB (Debus et al., 2019; Dierdorff & Ellington, 2008; Illies et al. 2015). Further, while the many hours of sustained, deliberate practice that lead gritty individuals to succeed in school, arts, and sports are compatible with a structured and predictable (although intense) agenda, the multiple unexpected contingencies faced by a leader working with many stakeholders require the leader to fit his/her heavy workload into a highly unpredictable agenda that requires responding reactively to events as they unfold, ultimately reducing the capacity to meet family obligations. It is here that prudence may work as a self-regulatory resource that mitigates possible excesses and enhances the positive potential of Grit-PE.

#### *Prudence as a Moderator*

Self-regulation, defined as “the dynamic process of determining a desired end state and taking action to move toward it while monitoring progress along the way”, is crucial for human well-functioning, in that it facilitates pursuing personal goals successfully (Inzlicht et al., 2021, p. 320). As a meta-resource, prudence facilitates self-regulation (Hirschi, Shockley, & Zacher, 2019). Prudent leaders “show a farsighted and deliberative concern for the consequences of their actions and decisions, successfully resist impulses and other choices that satisfy shorter term goals at the expense of longer-term ones, have a flexible and moderate approach to life, and strive for balance among their goals and ends” (Peterson & Seligman, 2004, p. 478). Therefore, prudence should enable gritty leaders to cope better with the multiple demands they face (Baltes, Zhdanova, & Clark, 2011). Gritty leaders regulate their persevering efforts in ways that maximize outcomes *if* they are prudent (Halbesleben, Harvey, & Bolino, 2009).

To substantiate our argument, we draw from the dual-systems models of self-regulation (Hofmann, Friese, & Strack, 2009). While there are “many flavors to these models” (Inzlicht et al., 2021, p. 324), they all consider that human behavior is regulated by two distinct systems. System I (“fast”) is known as impulsive system, reflexive system, hot system, or the *doer*. System II (“slow”) is known as deliberate system, cold system, reflective system, or the *planner* (Amarnani, Lajom, Restubog, & Capezio, 2020; Inzlicht et al., 2021). Human behavior is jointly produced by these two systems. We posit that if the *reflective, planner* system is not activated, the tenacious pursuit of work goals may result in inappropriate persistence and overcommitment, thus sapping resources required for well-being and a failure to recognize or act on the need to replenish those resources through, e.g., spending quality time with loved ones.

To avoid the potential downsides of tenacious goal pursuit, leaders must rely on the *deliberative, reflective* system. Prudence is a cognitive meta-resource that informs such a deliberation, shaping the resource allocation stimulated by Grit-PE in several ways (Amarnani et al., 2020; Halbesleben et al., 2009): (1) optimizing how gritty leaders allocate their resources efficiently in the pursuit of their goals; (2) adopting a proactive coping approach that allows gritty leaders to prepare for anticipated resource investment; and (3) enabling gritty leaders in activities that allow detaching psychologically from work during nonwork time (e.g., interacting with friends and loved ones; Sonnentag & Fritz, 2015), and thus replenishing and restoring lost resources (Illies et al., 2015). Specifically, prudence helps gritty leaders to invest and recuperate resources more efficiently at several levels of the self-regulation process.

First, prudent gritty leaders demonstrate deeper judgement regarding the consequences of their perseverance at work for their family role and goals, including a greater willingness to listen to and take advice from family members (Hirschi et al., 2019). Second, based on judgments made from careful consideration, prudent gritty leaders act with wisdom to achieve

balance between work goals and family responsibilities (Dahm, Glomb, Manchester, & Leroy, 2015). Differently, when poorly regulated, Grit-PE is potentially damaging. Specifically, gritty individuals *may behave impulsively* in pursuing work goals *if, or when,* they are not *reflectively* self-regulated by their prudence. Their perseverance may lead them to overinvest resources at work that, from the scarcity paradigm perspective (Greenhaus & Beutell, 1985), have a negative impact on family goals. We thus consider that an imprudent gritty leader is more likely to fall into the traps of overcommitted efforts at work that lead to WFC. First, such a leader is more likely to cling to inappropriate persistence (Howard & Crayne, 2019), spending time and other resources in the relentless pursuit of work goals despite the risks of loss and failure (Lucas et al., 2015). Second, weak prudence causes that gritty leader to either underestimate the consequences of his/her grit at work for his/her family goals or be less able to resist the impulses nurtured by a gritty approach (Dahm et al., 2015; Inzlicht et al., 2021) that negatively affect his/her family goals. Third, an imprudent gritty leader is less willing to carry out help-seeking behaviors (Credé et al., 2017) that would help him/her to soften the burden of the relentless goal pursuit. Therefore, an imprudent gritty leader is more likely to spend time and resources in dealing with unwise – although preventable – decisions and actions, with consequences for WFC. Refraining from following those tendencies and preventing the respective negative consequences requires prudence. Hence:

**Hypothesis 1:** The relationship between Grit-PE in leaders and their WFC depends on their prudence, in that the relationship (H1a) is positive if leaders are imprudent, and (H1b) is negative if leaders are prudent.

#### *WFC and AWB*

From a COR perspective, the stressful and challenging nature of WFC should reduce AWB, as resources such as time and energy need to be expended to amend relationships and achieve better balance between the two roles. WFC also makes recovering from intense workloads

more difficult, as resources are not as readily restored through satisfying time with family, which can lead to psychological distress (Bakker, Demerouti, Oerlemans, & Sonnentag, 2013; Illies et al., 2015). The perception of work as a threat that impairs family life causes a feeling of resource loss. Such a perception may also give rise to a sense that gaining key resources necessary to perform the family role is not viable. One possible consequence of those perceptions is a lower AWB. The empirical literature supports this reasoning, suggesting that WFC is positively related to several detractors of AWB (e.g., Amstad et al., 2011; Fiksenbaum, 2014). Further, negative relationships have been detected between WFC and multiple positive indicators of AWB (see, e.g., Amstad et al., 2011; Illies et al., 2015). Hence:

**Hypothesis 2:** WFC for leaders is negatively related to their AWB.

Considering that grittier leaders are more or less likely to experience WFC depending on their prudence (H1), and that WFC is negatively related to AWB (H2), we hypothesize:

**Hypothesis 3:** There is a moderated indirect relationship (via WFC) between Grit-PE in leaders and their AWB, in that the relationship (H3a) is positive for prudent leaders, and (H3b) negative for imprudent leaders.

We test the hypothesized model through two empirical studies, which differ in two main ways: (1) Study 2 uses validated measures of prudence, WFC and AWB; (2) Study 2 controls for conscientiousness, while Study 1 does not.

## **Study 1 Method**

### *Sample and Procedures*

The sample comprises 139 middle and top managers (37.4% females<sup>2</sup>;  $M_{age}$ : 39.91, SD: 6.53) who participated in a leadership development program carried out in a European business school and who had been rated by at least three subordinates ( $n = 657$ ; mean = 4.73 per leader).

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<sup>2</sup> This percentage is consistent with Eurostat, data for 2020, Portugal (<https://ec.europa.eu/eurostat/web/products-eurostat-news/-/edn-20210305-2>): 36% of managers are women.

These managers worked for 104 organizations operating in Portugal, in sectors such as banking, healthcare, energy, packaging, molds, and agri-food. They performed roles such as production manager, CEO, financial manager, HR manager, and commercial manager. Part of the program was a 360° survey (reviewed and approved by the ethics board of the institution of the first author) in which the focal variables of this study were included. The program started with a preliminary short session in which only operational guidelines were provided (no explanation was given about the meaning and importance of the variables included in the survey) and the data collection process was explained to the participants. The participants were encouraged to include as many raters as possible (since they knew them well) and instructed to consider raters who would be able to respond frankly – and not just those who would describe them in a positive light. Participants were also told that the exercise had only leader-development purposes, and that participation was voluntary. They were sent a link conducting them to the online survey only after having sent us a document containing their email address, as well as the emails of the raters who had agreed to participate. Data were collected through a secure online platform. In the first part of the survey, raters were informed that participation was voluntary, that their answers were anonymous, and that the rated leader had no way of knowing the individual observer ratings. To ensure anonymity, they were also informed that in the individual report the leader would receive after finishing the exercise, the column including the scores from the subordinates would appear empty if fewer than three subordinates had participated.

The items used to measure the variables included in the survey came from two sources: adaptation from the literature, and new items designed for the leadership development program. The scales were developed through an iterative process involving seven scholars from the OB field and executives participating in two MBA programs. The goal was to develop scales that

were valid, but also parsimonious enough not to burden the raters and thereby reduce their participation rate (see Cortina et al., 2020).

To minimize the risks of common method variance, different sources were used to measure different variables. AWB, as a subjective experience, was reported by the leaders themselves. WFC was also measured by the leaders because they directly experience the tension between their work and family (i.e., non-work) roles<sup>3</sup>. While subordinates may observe the amount of time their leader spends at work, they do not have an accurate perception about the consequences of such a workload for the leader's non-work life. Similarly, the spouse/partner may not have an accurate perception about the circumstances at work experienced by the leader. A leader who experiences high WFC may even feel guilty and hide that feeling from the family. Moreover, several authors have argued that WFC is a subjective experience (e.g., Van Steenbergen, & Ellemers, 2009; Vercruyssen, Roose, & Van de Putte, 2011) affected not only by the time spent at work but also by the psychological and emotional resources and strengths people have<sup>4</sup>.

Grit-PE and prudence were measured with data from subordinates, who reported how their leaders operated at work. For each leader, the subordinates were randomly split into two subsamples (#1, #2), one being used to measure Grit-PE (#1), the other to measure prudence (#2). Measuring Grit-PE and prudence in leaders through others' ratings makes sense because self-assessments are affected by several errors and biases (e.g., avoiding observing or recalling information disconfirming desired self-perceptions). Credé et al. (2017) observed that

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<sup>3</sup> All participants were told that if they had no family responsibilities, they should refer to their personal, i.e., non-work life. Also note that while leaders were not asked about their family responsibilities, the records in the Business School in which the leadership development program was held show that almost all leaders have family responsibilities.

<sup>4</sup> That such a subjective experience is not captured by observers is shown by our data. The correlation between WFC as measured by the leader him/herself and (a) by the subordinates (.39,  $p < .001$ ) and (b) by family members plus non-work friends (.28,  $p < .001$ ) are modest-moderate. In addition, self-reported WFC (3.52) is significantly higher than WFC as reported by subordinates (2.93;  $t = 8.51$ ,  $p < .001$ ) and as reported by family members plus non-work friends (3.07,  $t = 5.58$ ,  $p < .001$ ). These findings suggest that observers are not able to accurately assess others' experience that involves a conflict/balance between the two contexts.

individuals are generally not aware of their true level of grit. Self-reported prudence is also susceptible to several biases (e.g., imprudent leaders may be so blind to their imprudence that they describe themselves as being prudent). As determined by Connelly and Hülsheger (2012, p. 603), observers versus self-raters “have clearer lenses for viewing target’s personality traits” (see also the meta-analysis of Connelly & Ones, 2010).

### *Measures*

All items were assessed on a six-point scale, with measures adapted from the literature after having been translated (English→Portuguese) and back-translated. Grit-PE, as well as consistency of interests (for control), were measured through the Short Grit Scale (Grit-S; Duckworth & Quinn, 2009). Considering that Grit-PE is domain-specific (Cormier et al., 2019), subordinates were asked to focus on how their leaders behave at work. Four items measured Grit-PE (sample item: “My supervisor finishes whatever he/she begins”;  $\alpha = .75$ , aggregated data from subordinates), and four items measured consistency of interests (sample item, reverse coded: “My supervisor often sets a goal but later chooses to pursue a different one”;  $\alpha = .84$ ; overall grit, as measured with the eight items:  $\alpha = .86$ ). Prudence ( $\alpha = .80$ ) was also measured through four items: two adapted from Riggio et al. (2010; e.g., “My supervisor analyzes a problem from all angles and reaches the best decision for all parties involved”), and the other two adapted from Ashton and Lee (2009).

WFC ( $\alpha = .64$ ;  $.80$  if the last item is removed; to keep content validity, the three items were retained for analysis) was measured through three items. Two items were adapted from Netemeyer et al. (1996; sample item: “The amount of time I spend at work makes it difficult to fulfil my family responsibilities”). The third item (“I can easily balance my work and my family life”; reverse-coded) had been written specifically for the 360° feedback tool. AWB ( $\alpha = .62$ ) was measured by asking the leaders to report the extent to which they had experienced joy, contentment, and happiness at work over the last two months. Although the reliability of



these two variables is lower than the standard (yet arbitrary) cut-off value of .70, it is important to note that Cronbach's Alpha tends to be lower with fewer items in the scale and the inclusion of reverse-coded items. The general advice when considering cut-off values for Alpha is that "one size does not fit all", and that there is no evidence that the .70 standard is better than a slightly lower value (Cho & Kim, 2015, p. 218; Henson, 2001). Further, we chose to not delete items to increase Alpha as this practice weakens the content and predictive validity of the respective measure (Cho & Kim, 2015).

Beyond consistency of interests, other variables were included for control. Age of the leader was included as a proxy for life stage, as it is associated with how leaders are vested in their jobs and families and thus with their experiences of WFC (Schooreel & Verbruggen, 2016). Leader gender was included because social role theory suggests that men and women are socialized to comply with prescribed gender roles, and the internalization of those roles' norms may affect work and family priorities as well as WFC and its consequences (Livingston & Judge, 2008; Zhao, Zhang, & Foley, 2019). Leader education was included because the well-educated tend to occupy jobs that lead them to experience more work-family role blurring activities (Schieman & Glavin, 2011). Leader's self-reported optimism (measured through two items from Luthans, Youssef-Morgan, & Avolio, 2015;  $\alpha = .74$ ; sample item: "I'm optimistic about what will happen to me in the future as it pertains to work") was included because it aids the process of stress resistance (Hobfoll et al., 2018) and may help leaders avoid conflicting work and family demands (see Allen et al., 2012).

#### *Aggregating Data*

Before aggregating data (collected from subordinates) to calculate leader's Grit-PE, consistency of interests, overall grit, and prudence, we calculated ICC(1), ICC(2) and within-group interrater agreement (i.e.,  $r_{wg}$ ). ICC(1) is .21 for Grit-PE (medium-large effect; LeBreton & Senter, 2008), .18 for consistency of interests (medium), .23 for overall grit (medium-large),

and .15 for prudence (medium). ICC(2) are .56, .51, .58, and .44, respectively for Grit-PE, consistency of interests, overall grit, and prudence.  $r_{wg}$  values (uniform distribution) are .90, .76, .88, and .84, also respectively, revealing strong interrater agreement (LeBreton & Senter, 2008). Although the ICC(2) are below the recommended cut-off, this value does not prevent aggregation if aggregation is theoretically justified and  $r_{wg}$  is high.

### *Measurement Model*

First, we tested whether it makes sense to consider grit as a second-order construct built upon the components of perseverance and consistency of interests, or whether treating grit as Grit-PE and controlling for consistency of interests makes more sense. Confirmatory factor analysis (CFA; maximum likelihood estimation method, adopted throughout the paper) indicates that RMSEA of the second-order factor is modest (.10;  $\chi^2_{[18]} = 43.17$ ). The fit indices of the single-factor model, with the items measuring both perseverance and consistency of interests merged, are poor (e.g., RMSEA, .14;  $\chi^2_{[20]} = 75.43$ ). Moreover, while the interaction between Grit-PE and prudence (effect = -1.28, SE = .31,  $p < 0.001$ ; LLCI = -1.89, ULCI = -.66) predicts 10% of unique variance of WFC, the interaction between overall grit and prudence (effect = -.75, SE = .23,  $p < 0.01$ ; LLCI = -1.22, ULCI = -.29) predicts 6%. When Grit-PE and consistency of interests are included separately, the overall  $R^2$  in predicting WFC is .22 versus .19 when overall grit is included. This evidence suggests that several conditions to consider grit as a higher-order construct built upon the two components are not observed in these data (Credé, 2018), and operationalizing grit as Grit-PE makes the most sense.

CFA was also conducted to assess the discriminant validity among the four constructs of our hypothesized model plus consistency of interests and optimism. The six-factor structure fits the data well ( $\chi^2_{[155]} = 198.09$ ; RMSEA = .05; GFI = .85; CFI and IFI = .95) and better than the following models: (1) WFC and AWB merged ( $\Delta\chi^2_{[5]} = 41.03$ ,  $p < .001$ ; RMSEA = .06; GFI = .85; CFI and IFI = .91); (2) self-reported WFC, AWB, and optimism merged ( $\Delta\chi^2_{[9]} =$

68.87,  $p < .001$ ; RMSEA = .07; GFI = .84; CFI and IFI = .88); (3) Grit-PE and consistency of interests merged ( $\Delta\chi^2_{[5]} = 38.07$ ,  $p < .001$ ; RMSEA = .06; GFI = .85; CFI and IFI = .91); (4) Grit-PE, consistency of interests, and prudence merged ( $\Delta\chi^2_{[9]} = 139.72$ ,  $p < .001$ ; RMSEA = .09; GFI = .79; CFI and IFI = .80); and (5) all variables merged ( $\Delta\chi^2_{[15]} = 400.48$ ,  $p < .001$ ; RMSEA = .14; GFI = .65; CFI and IFI = .51).

### Study 1 Findings

Grit-PE and consistency of interests correlate positively (Table 1). While the second correlates modestly with prudence, the first does not. Optimism correlates negatively with WFC and positively with AWB, a finding that may be explained, at least partially, by the same-source data. WFC correlates negatively with AWB. We tested our hypotheses with and without including the controls, the empirical pattern being similar in the two conditions (see Table 3, 1<sup>st</sup> row). To conserve space, we present the main findings with controls included.

Table 1 about here

We used a bias-corrected bootstrap analysis (5000 samples) to first test the conditional effect of Grit-PE on WFC (left part of Table 2). While neither Grit-PE nor prudence predict WFC, the interaction between Grit-PE and prudence does ( $B = -1.29$ ,  $SE = .31$ ,  $p < 0.01$ ; LLCI = -1.95, ULCI = -.73; adjusted  $R^2$  change: .11). The conditional effects are (PROCESS macro; 5000 samples; model #1; Hayes, 2018): (a) effect = .58,  $SE = .24$ ,  $p < .05$ ; LLCI = .11, ULCI = 1.06 (*low prudence*); (b) effect = -.13,  $SE = .19$ ,  $p = .48$ ; LLCI = -.50, ULCI = .23 (*medium*); and (c) effect = -.78,  $SE = .25$ ,  $p < .01$ ; LLCI = -1.28, ULCI = -.27 (*high*). Therefore, while grittier leaders experience greater WFC if they are not prudent, they experience lower WFC if they are prudent. Figure 2a depicts graphically the effect of Grit-PE on WFC for three levels of prudence: there is a negative (positive) relationship between Grit-PE and WFC for prudent (imprudent) leaders. H1 is thus supported. Table 2 (right part) also shows that WFC predicts unique variance of AWB (adjusted  $R^2$  change: .04). Table 3 (1<sup>st</sup> row) reports the direct and

conditional indirect effects of Grit-PE on AWB through WFC (PROCESS macro; model #7): while the direct effect is not significant, the indirect effect is. Therefore, H2 and H3 are supported.

Table 2 and Table 3 about here

### **Study 1 Recap and Study 2 Introduction**

In Study 1 we found support for a moderated, indirect effect between leader grit and affective well-being. Gritty leaders experience *lower* AWB through higher levels of WFC if they are *imprudent*, and they experience *greater* AWB through lower levels of WFC when they are *prudent*. While the findings are encouraging and support our hypotheses, Study 1 suffers from a number of limitations. Specifically, the adapted measures we used for prudence, WFC, and AWB do not have established validity, and the reliabilities for WFC and AWB are slightly below the standard threshold. Moreover, we did not measure or control for conscientiousness, which is becoming increasingly important in grit research as some scholars have suggested that grit may be redundant with, or a facet, of conscientiousness. Therefore, we carried out a second study with more established and validated measures for prudence, WFC, and AWB, and added conscientiousness for control. Other variables related to the family domain were also included as controls because they affect the tension-balance between work and non-work domains. These methodological improvements included in a new study bring more robustness to our research and strengthen its contributions.

### **Study 2 Method**

#### *Sample and Procedures*

We contacted 347 middle and top managers from our professional contacts and asked them if they were willing to participate in the study by answering an online survey and inviting all their subordinates to answer an anonymous online survey too. The message addressed to both the managers and their subordinates didn't contain any information about the topic researched.

They were only told that the research aimed at studying “how leaders behave in organizations”. Among the 171 who agreed to participate, 80 and at least 2 of their subordinates answered the respective surveys. The final sample thus comprises 80 managers (31.2% females, a figure similar to the overall situation in Portugal: see footnote #3;  $M_{age}$ : 44.51, SD: 8.20) and 309 subordinates (average: 3.86 per leader, SD = 1.81: 53.5% males;  $M_{age}$ : 39.87, SD: 9.49). These managers worked for 63 organizations operating in Portugal in sectors such as energy, retail, financial services, pharmaceuticals, agri-food, banking, and insurance. They performed roles such as production manager, CEO, COO, financial manager, and commercial manager.

Following the rationale of Study 1, leaders reported their WFC<sup>5</sup> and their AWB at work over the last two months. They also reported their optimism (for control). Subordinates reported the leader’s Grit-PE and prudence (see rationale from Study 1), as well as the leader’s consistency of interests and conscientiousness (for control). To minimize the risks of common method variance, the sample of subordinates of each leader was randomly split into two subsamples. Data from the subsample #1 (SS1) were used to measure Grit-PE and consistency of interests, and data from SS2 were used to measure conscientiousness and prudence.

### *Measures*

All items (translated from English → Portuguese, and then back-translated) were assessed on a six-point scale. Grit-PE ( $\alpha = .90$ , aggregated data from subordinates) and consistency of interests (for control;  $\alpha = .89$ ) were measured through the Grit-S (same procedures adopted for Study 1;  $\alpha$  for overall grit = .91). Prudence ( $\alpha = .75$ ) was measured through the four items included in the HEXACO inventory (Lee & Ashton, 2004<sup>6</sup>; sample item: “He/she doesn’t allow his/her impulses to govern his/her behavior”). WFC ( $\alpha = .87$ ) was measured through five items from Netemeyer et al. (1996; sample item: “Things I want to do at home do not get done

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<sup>5</sup> Participants were told that if they had no family responsibilities, they should refer to their non-work life when asked about work-family conflict/balance. Only five participants reported living alone.

<sup>6</sup> <http://people.ucalgary.ca/~kibeom/downloading.html>

because of the demands my job puts on me”). AWB ( $\alpha = .87$ ) was measured through ten items as suggested by Russell & Daniels (2018), with leaders reporting the extent to which they had felt happy, annoyed, active, etc. at work over the last two months. Optimism ( $\alpha = .71$ , for control) was measured with the two items used in Study 1.

In addition to the controls mentioned for Study 1 (i.e., consistency of interests, optimism, age, gender, and education), other variables were included. Conscientiousness was included because, as stated above, Grit-PE is considered by some to be redundant with, or a facet of, conscientiousness. This variable ( $\alpha = .95$ ) was measured through 12 items from the NEO-PI-R<sup>7</sup> (Costa & McCrae, 1992), assessing competence, order, dutifulness, achievement striving, self-discipline, and deliberation (sample item: “The leader is a very methodical person”). Family situation (living alone vs. with family) and having/not having children at home (both reported by the leader) were included because these characteristics affect the tension-balance between work and non-work domains (e.g., Netemeyer et al., 1996; Schooreel & Verbruggen, 2016). Leader tenure (reported by the leader) in the role was included because this variable is associated with how leaders are vested in their jobs and thus with their experiences of WFC (Schooreel & Verbruggen, 2016). The dyadic (i.e., leader-subordinate) tenure, as reported by the latter, was included because it may affect or reflect the leader-follower relationship, and therefore, how the subordinate relates with or perceives the leader.

### *Aggregating Data*

Before aggregating data (collected from subordinates) to calculate leader’s Grit-PE, consistency of interests, overall grit, prudence, and conscientiousness, we calculated ICC(1), ICC(2) and within-group interrater agreement (i.e.,  $r_{wg}$ ). ICC(1) is .26 for Grit-PE, .30 for consistency of interests, .32 for overall grit, .34 for prudence, and .42 for conscientiousness, all

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<sup>7</sup> Items from the HEXACO inventory to measure this variable were not used because some of them do not make sense when addressed to managers/executives (e.g., “He/she cleans his/her office or home quite frequently”).

these values representing large effects (LeBreton & Senter, 2008). ICC(2) are .58, .62, .64, .67, and .74, respectively for Grit-PE, consistency of interests, overall grit, prudence, and conscientiousness.  $r_{wg}$  values (uniform distribution) are .85, .79, .86, .83, and .89, also respectively, revealing strong interrater agreement (LeBreton & Senter, 2008). Although the ICC(2) for Grit-PE is somewhat below the recommended cut-off, this value does not prevent aggregation if aggregation is theoretically justified and  $r_{wg}$  is high.

### *Measurement model*

We first tested whether Grit-PE and consistency of interests represent grit as a second-order construct. CFA suggests that the second-order factor model fits the data well ( $\chi^2_{[18]} = 16.80$ ; RMSEA: .01). However, the single-factor model, with the items measuring perseverance and consistency of interests merged, does not fit the data satisfactorily (e.g., RMSEA, .15;  $\chi^2_{[20]} = 60.00$ ). Moreover, while the interaction between Grit-PE and prudence (effect = -.72, SE = .16,  $p < 0.001$ ; LLCI = -1.04, ULCI = -.40) predicts 20% of unique variance of WFC, the interaction between overall grit and prudence (effect = -.47, SE = .17,  $p < 0.01$ ; LLCI = -.81, ULCI = -.14) predicts 10%. When Grit-PE and consistency of interests are included separately, the overall  $R^2$  in predicting WFC is .33 vs. .22 when overall grit is included. Therefore, several conditions to consider grit as a higher-order construct emerging from the two components are not observed (Credé, 2018), and our decision to treat grit as Grit-PE is supported.

We conducted CFA to assess the discriminant validity among the four key constructs of our hypothesized model plus consistency of interests, optimism, and conscientiousness. Considering the sample size, three parcels (random parceling) for conscientiousness and three for AWB were considered in order to increase the item-subject ratio (Little et al., 2013). The seven-factor structure fits the data satisfactorily ( $\chi^2_{[254]} = 372.54$ ; RMSEA = .08; GFI = .77; CFI and IFI = .91) and better than the following models: (1) Grit-PE and consistency of interests merged ( $\Delta\chi^2_{[6]} = 48.29$ ,  $p < .001$ ; RMSEA = .09; GFI = .74; CFI and IFI = .88); (2)

WFC and AWB merged ( $\Delta\chi^2_{[6]} = 124.10, p < .001$ ; RMSEA = .11; GFI = .69; CFI = .82; IFI = .83); (3) self-reported data WFC, AWB, and optimism merged ( $\Delta\chi^2_{[11]} = 156.30, p < .001$ ; RMSEA = .11; GFI = .66; CFI = .80; IFI = .81); (4) Grit-PE and conscientiousness merged ( $\Delta\chi^2_{[6]} = 83.46, p < .001$ ; RMSEA = .10; GFI = .70; CFI = .85; IFI = .86); (5) Grit-PE and prudence merged ( $\Delta\chi^2_{[6]} = 85.00, p < .001$ ; RMSEA = .10; GFI = .69; CFI = .85; IFI = .86); (6), conscientiousness and prudence merged ( $\Delta\chi^2_{[6]} = 32.25, p < .001$ ; RMSEA = .08; GFI = .75; CFI = .89; and IFI = .90); (7) Grit-PE, consistency of interests, prudence, and conscientiousness merged ( $\Delta\chi^2_{[15]} = 221.83, p < .001$ ; RMSEA = .12; GFI = .62; CFI and IFI = .76); and (8) all variables merged ( $\Delta\chi^2_{[21]} = 591.73, p < .001$ ; RMSEA = .18; GFI = .46; CFI = .48; IFI = .49).

## Study 2 Findings

Conscientiousness, Grit-PE, consistency of interests, and prudence intercorrelate positively (Table 4). WFC correlates negatively (and optimism positively) with AWB. We tested our hypotheses with and without the controls, the empirical pattern being similar in the two conditions (Table 3, 2<sup>nd</sup> row). We adopt the more conservative approach and present the main findings with controls included.

Table 4 about here

We used a bias-corrected bootstrap analysis (5000 samples) to first test the conditional effect of Grit-PE on WFC. While neither Grit-PE nor prudence predict WFC, the interaction between Grit-PE and prudence does (effect = -.67, SE = .18,  $p < 0.001$ ; LLCI = -1.02, ULCI = -.31; adjusted R<sup>2</sup> change: .21). The conditional effects are: (a) effect = .56, SE = .22,  $p < .05$ ; LLCI = .13, ULCI = 1.00 (*low prudence*); (b) effect = -.07, SE = .20,  $p = .69$ ; LLCI = -.46, ULCI = .32 (*medium*); and (c) effect = -.51, SE = .23,  $p < .05$ ; LLCI = -.97, ULCI = -.04 (*high*). Therefore, while grittier leaders experience greater WFC if they are not prudent, they experience lower WFC if they are prudent. Figure 2b depicts graphically such a moderating



effect: there is a negative (positive) relationship between Grit-PE and WFC for prudent (imprudent) leaders. H1 is thus supported.

Figures 2a and 2b about here

We also assessed the conditional indirect model with a bias-corrected bootstrap analysis (model #7). The interaction between Grit-PE and prudence is significantly related to WFC, and WFC is negatively related to AWB (Table 5). Table 3 (2<sup>nd</sup> row) reports the direct and conditional indirect effects of Grit-PE on AWB through WFC (model #7): while the direct effect is not significant, the indirect effect is. Thus, gritty leaders experience *lower* AWB through higher levels of WFC if they are *imprudent*, and they experience *greater* AWB through lower levels of WFC when they are *prudent*. Therefore, H2 and H3 are supported.

Table 5 about here

## **Study 2 Discussion**

The findings of Study 2 are consistent with those of Study 1: gritty leaders experience greater (lower) AWB via lower (greater) WFC when they are prudent (imprudent). The empirical pattern found in Study 1 is robust when using validated measures, controlling for conscientiousness, and controlling for other work and non-work variables that may impact the key variables, as seen in Study 2. As with Study 1, the cross-sectional nature of the method design is an important limitation, in that it does not support causality. However, the procedures adopted to deal with the risks of common method bias, as well as the consistency between the findings of the two studies, make the validity of the empirical evidence plausible.

## **Overall discussion**

Contrary to what is often defended by both scholars and practitioners, our research supports the notion that the outcomes of Grit-PE are not always beneficial: the effect of Grit-PE in leaders on their AWB via WFC depends on their prudence. Gritty and imprudent leaders experience greater WFC and, therefore, lower AWB. A deficit in prudence may orient gritty

leaders to make unwise choices that result in overcommitting energy and resources at work, thus jeopardizing their family goals. Differently, gritty *and* prudent leaders experience greater AWB via lower WFC. For these leaders, Grit-PE operates as an individual resource capable of not only reducing their vulnerability to contextual stressors, but also of orchestrating resource gains that may make them more able to effectively handle work and family demands and goals.

Therefore, our findings both corroborate and diverge from the literature suggesting that Grit-PE relates positively with subjective well-being (e.g., Jiang et al., 2020): the outcome depends on their prudence. This empirical pattern is consistent with the dual-system models of self-regulation: the focused perseverance of gritty leaders can become the *reflexive* response even when inappropriate, and to the leaders' own detriment. Prudence activates the *reflective* system, allowing Grit-PE to yield positive outcomes of reduced WFC and increased AWB. Our findings also agree with those of researchers who have argued that to advance the study of Grit-PE in workplaces, it is necessary to consider its boundary conditions. Prudence is one of those conditions. Future studies may test if the pattern found here is replicated with non-leaders.

Our research thus suggests that prudence, an important self-regulatory resource underrepresented in empirical research about leadership (McGrath, 2021), helps gritty leaders experience greater AWB via lower WFC. Because prudent leaders have a farsighted and deliberative orientation toward the consequences of their behaviors, it is possible that they are more aware of the potential negative consequences of their demanding work-role for their family domain. If they are gritty enough, their prudence may mitigate the potential dark side of grit and reinforce its bright side. However, the way prudence operates in interaction with Grit-PE also provides insights about its paradoxical nature (Ardelt, Achenbaum, & Oh, 2013): while prudence helps gritty leaders experience greater AWB via lower WFC, prudent leaders who are not gritty experience high levels of WFC (Figures 2a and 2b). It is thus possible that prudent leaders who are not gritty experience a kind of powerlessness to deal effectively with

the demands of their leadership role. Such leaders are likely to see demands at work more as hindrances than as challenges (Crawford et al., 2010), thus interpreting the context as unsupportive and experiencing greater WFC (Fiksenbaum, 2014). By anticipating potential negative consequences of their demanding job for pursuing their family goals and feeling unable to protect valuable resources such as time to pursue family goals, those leaders may develop a stronger sense of WFC. Having a self-regulatory resource like prudence may be psychologically draining (Hofmann et al., 2009) if such a resource is not included among a host of resources in which Grit-PE is also present (Hobfoll et al., 2018). At least regarding its impact on WFC, prudence is more of a meta-resource that enables leaders to allocate Grit-PE more effectively than a resource that directly helps leaders to find work-family balance. In short, workplace leaders' optimal functioning requires a dual stance: agentic/reflexive (i.e., *doer*) and self-regulatory/reflective (i.e., *planner*).

A final issue worth mentioning is that while grit has been conceptualized as a second-order factor construct composed of two components, there are reasons to consider that grit must be conceptualized as Grit-PE. Our findings are mixed: while Study 2 suggests that the second-order factor model fits the data well, Study 1 does not. However, in the two studies, the fit of the single-factor model is poor. Moreover, considering Grit-PE (while controlling for consistency of interests) instead of overall grit obtains more predictive value for WFC. Therefore, our findings are partially consistent with research (e.g., Credé et al., 2017; Rego et al., 2022) that has advocated for conceptualizing grit as Grit-PE. Future studies may continue to explore the issue and test if, for example, it makes sense to consider grit as a second-order factor model after validating a better measure of passion (i.e., consistency of interests), as the current one does not fully capture that component (Jordan, Ferris, et al., 2019).

### **Limitations and Future Studies**

While the findings of the two studies support the hypothesized model, our research suffers from several limitations. First, the study uses convenience samples, with small to moderate sample sizes, and an uncontrolled selection process of subordinates/raters. Moreover, while the two samples include managers characterized by high diversity (in terms of, e.g., age, sectors, and roles), and some data suggest they represent the “average leader” in Portugal (e.g., the percentage of females is consistent with the one found in the country as a whole), one cannot fully discard a possible sampling bias. Future studies may therefore adopt a more robust procedure to select the participants. Second, the method does not support causality, and other causalities may operate (e.g., high WFC drains resources that lead to weaker self-regulation). Future studies may adopt longitudinal or diary designs that allow measuring within-person variations in WFC (French & Allen, 2020), assessing how important “scarce” resources (for preventing WFC and developing AWB) are built or depleted over time, and making causality more plausible. Such a method also would allow measuring leader prudence (which may be more “internal” and less visible to subordinates), WFC, and AWB through self-reported data collected at different moments.

Third, the model includes a single mediator and a single moderator, and future studies may consider a more complex model. For example, it is possible that the relationship between Grit-PE and WFC is mediated by engagement at work (Halbesleben et al., 2009), selection, optimization, and compensation (SOC) behavioral stress-coping strategies (Baltes et al., 2011), and the number of work hours. It is also possible that work centrality and family centrality (Min, Matthews, Wayne, Parsons, & Barnes-Farrell, 2021), supervisor, co-workers and organizational support, and leader values operate as moderators (e.g., a gritty leader who values work more than family may not experience WFC, while a gritty leader whose family is especially important to him/her may develop a greater sense of WFC).

Fourth, our research was carried out in a single national culture and future studies could be carried out in other cultures that place different weights on the importance of work and family. In cultures where family is regarded with especially elevated importance, work may be interpreted as a pathway to nourish the family well-being and status (Zhao et al., 2019). For example, Chinese workers tend to be more tolerant of WFC than Western counterparts (Jin, Ford, & Chen, 2013), and therefore less likely to view WFC as a threat to their well-being. Our study does not address how the high family collectivism of Portuguese culture (Jesuino, 2002) may have affected the findings supporting the hypothesized model of our research. However, the negative effect of having children at home on WFC (Table 5; the effect is also negative, although not significant, for living with family) is worth mentioning. It is possible that a more family collectivist identity associated with Portuguese culture leads to idiosyncratic ways of experiencing and addressing the tension/balance between the family and the work domains. Finally, future studies may include the three components of WFC (time-based, behavior-based, strain-based; Carlson, Kacmar, & Williams, 2000), and a multidimensional measure of prudence.

## **Conclusion**

While grit has been extolled by several scholars as a crucial resource for leaders' effectiveness and career advancement, critical scholars have questioned the validity of the construct and its potential to predict individuals' success. Other scholars point to the inconsistent findings about grit outcomes and recommend considering boundary conditions. In this paper we defend that it is premature to consider grit as dispensable, and that grit at work deserves to be explored, including in leaders. However, we adopt a balanced approach and suggest that grit is not a risk-free concept: gritty leaders, if they are imprudent, may experience greater WFC and, as a consequence, lower well-being. Only when grit is regulated through prudence will it result in leaders' optimal functioning and the recuperation of resources to continue persistence toward

work and family goals. When selecting leaders, organizations may consider not only the gritty stance of the candidates, but also their prudence. Leader development programs may also pay attention to these two resources – the agentic resource that makes the leader a *reflexive doer*, and the self-regulatory resource that makes him/her a *reflective planner*.

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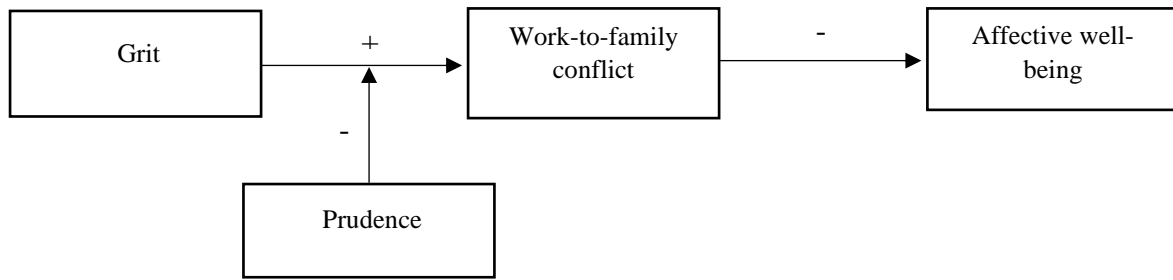
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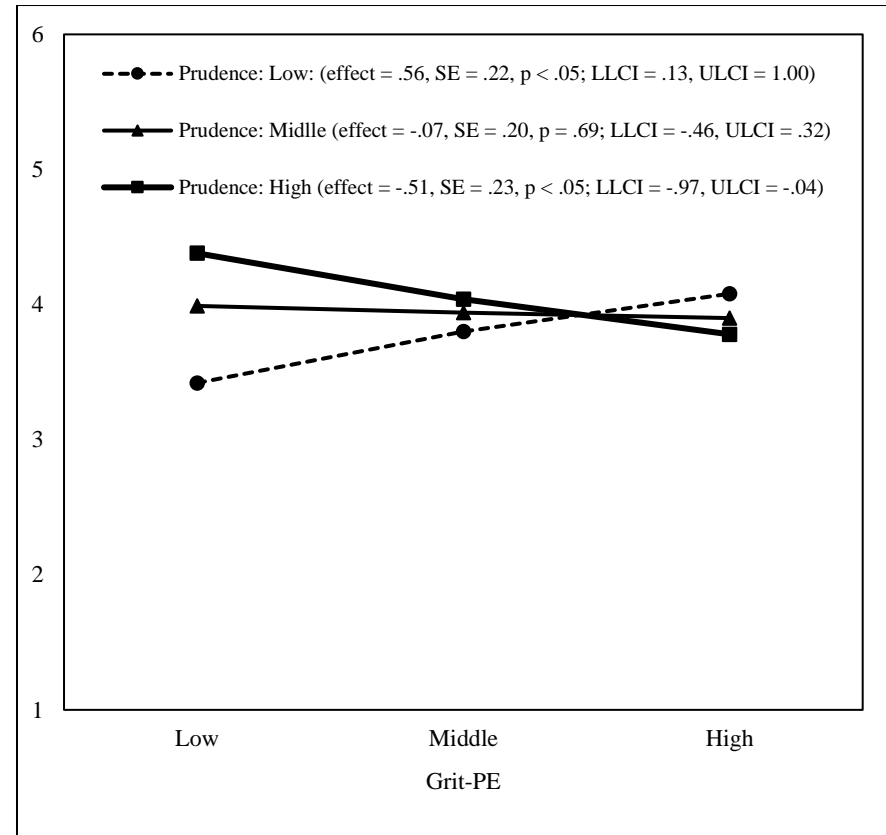
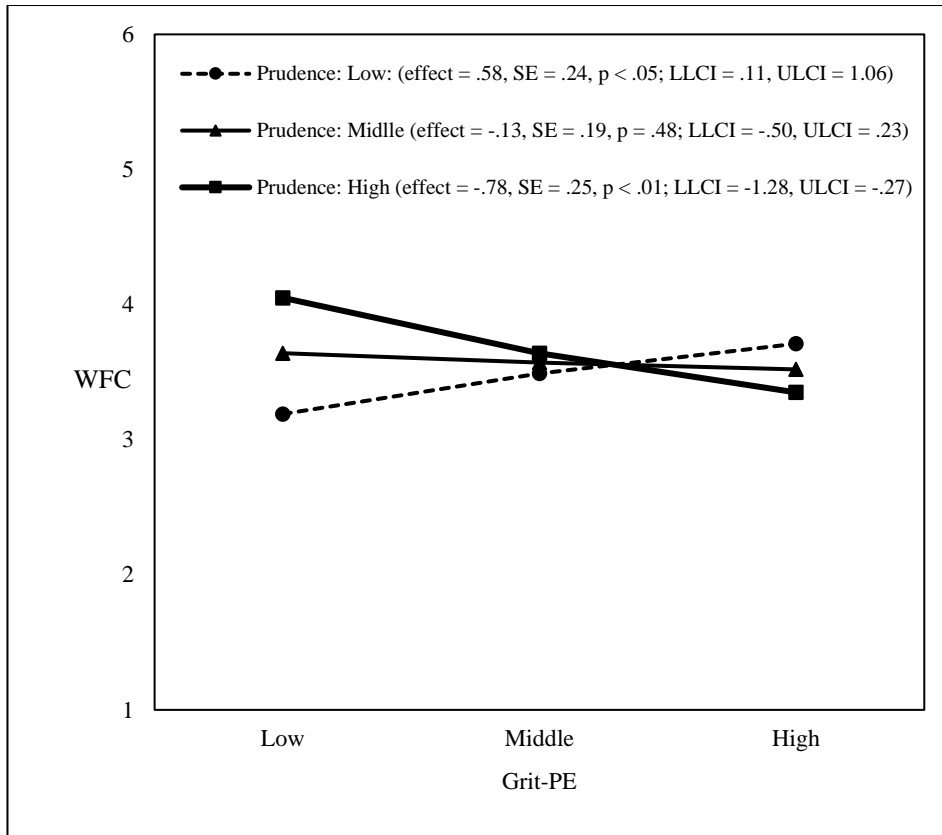
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**Figure 1.** Hypothesized model



**Figures 2a (left: Study 1) and 2b (Study 2).** Prudence moderating the relationship between grit and WFC

*Notes:* values from the PROCESS macro; the three levels of prudence are low (mean – 1 SD), mean, and high (mean + 1SD)

**Table 1.** Means, standard deviations, and correlations (Study 1)

Variables	Mean	SD	1	2	3	4	5	6	7	8	9	10
1. Age	39.91	6.53	-									
2. Gender (0: female; 1: male)	-	-	-.09	-								
3. Not graduated (0: no; 1: yes) (a)	-	-	.04	-.09	-							
4. Graduated (0: no; 1: yes) (a)	-	-	.18*	.13	-.28***	-						
5. Master's degree (0: no; 1: yes) (a)	-	-	-.24**	.01	-.11	-.81***	-					
6. Optimism	4.61	.74	.02	.07	.02	.07	-.11	-				
7. Consistency of interests (data from subordinates, subsample #1, SS1)	4.33	.73	-.02	-.04	-.13	.01	.04	.07	-			
8. Grit-PE (SS1)	5.33	.47	.03	.02	.03	.10	-.11	.13	.65***	-		
9. Prudence (SS2)	4.96	.54	.06	-.02	-.01	.11	-.14	-.05	.23**	.14	-	
10. WFC	3.52	.82	.09	.13	-.16	.09	-.02	-.26**	-.09	-.10	.11	-
11. AWB	4.61	.63	-.05	-.18*	.06	-.07	.01	.53***	.12	.07	-.03	-.41***

Notes:  $N = 139$ ; (a) Four educational levels: not graduated (3.6%), graduated (67.6%), Master's degree (24.5%), and PhD (4.3%).

\* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$

**Table 2.** Bootstrap regression analysis (5000 samples; Study 1)

Variables	Outcome: WFC						Outcome: AWB					
	B	SE	[LLCI, ULCI] (a)	B	SE	[LLCI, ULCI]	B	SE	[LLCI, ULCI]	B	SE	[LLCI, ULCI]
Age	.01	.01	[-.01, .03]	.01	.01	[-.01, .03]	-.01	.01	[-.02, .01]	.00	.01	[-.02, .01]
Gender (0: female; 1: male)	.24	.15	[-.05, .54]	.22	.14	[-.06, .50]	-.27**	.10	[-.46, -.08]	-.23*	.09	[-.41, -.05]
Not graduated (0: no; 1: yes) (b)	-.68	.54	[-1.84, .28]	-.89	.45	[-1.83, -.08]	.17	.32	[-.45, .81]	.01	.31	[-.59, .63]
Graduated (0: no; 1: yes) (b)	-.02	.25	[-.52, .47]	-.15	.22	[-.57, .29]	-.02	.23	[-.48, .44]	-.04	.23	[-.51, .42]
Master's degree (0: no; 1: yes) (b)	-.06	.27	[-.59, .47]	-.15	.23	[-.59, .31]	.05	.24	[-.45, .52]	.02	.24	[-.48, .49]
Optimism	-.28**	.09	[-.46, -.10]	-.29**	.09	[-.47, -.11]	.47***	.07	[.35, .60]	.41***	.06	[.30, .54]
Consistency of interests (subordinates, subsample #1, SS1)	-.10	.12	[-.34, .14]	-.08	.13	[-.33, .17]	.10	.09	[-.08, .28]	.08	.09	[-.09, .26]
Grit (SS1) - centered	-.05	.18	[-.40, .29]	-.09	.18	[-.45, .25]	-.08	.12	[-.32, .17]	-.09	.12	[-.32, .14]
Prudence (SS2) - centered	-.18	.13	[-.07, .44]	.19	.12	[-.04, .44]	-.02	.10	[-.22, .16]	.02	.09	[-.18, .20]
Grit (SS1) x prudence (SS2)	-	-	-	-1.29***	.31	[-1.95, -.73]	.32	.24	[-.15, .79]	.08	.24	[-.39, .57]
WFC	-	-	-	-	-	-	-	-	-	-.19**	.06	[-.31, -.06]
F	2.36*			4.13**			7.17***			7.83***		
R <sup>2</sup>	.14			.24			.35			.40		
R <sup>2</sup> change (c)	-			.10			-			.05		
Adjusted R <sup>2</sup>	.08			.19			.31			.35		
Adjusted R <sup>2</sup> change (c)	-			.11						.04		

Notes:  $N = 139$ ; (a) Bias corrected 95% CI; (b) Four educational levels: not graduated (3.6%), graduated (67.6%), Master's degree (24.5%), and

PhD (4.3%); (c) after entering the interaction term to predict WFC; after entering WFC to predict AWB

\* $p < .05$ . \*\* $p < .01$ . \*\*\* $p < .001$

**Table 3.** Direct and conditional indirect effects of grit on AWB through WFC (5000 samples; 1<sup>st</sup> row: Study 1; 2<sup>nd</sup> row: Study 2)

	B	SE	[Bias corrected 95% CI]
	With / without controls	With / without controls	With / without controls
Low prudence	-.11 / -.13	.06 / .07	[-.24, -.02] / [-.29, -.02]
	-.17 / -.04	.08 / .07	[-.32, -.001] / [-.19, .10]
Middle prudence	.03 / .09	.04 / .05	[-.04, .11] / [.01, .19]
	.02 / .10	.06 / .06	[-.08, .18] / [-.01, .24]
High prudence	.15 / .29	.07 / .09	[.04, .32] / [.13, .50]
	.15 / .19	.09 / .09	[.01, .37] / [.04, .39]
Direct effect	-.10 / .04	.13 / .11	[-.34, .15] / [-.17, .25]
	.13 / .13	.15 / .13	[-.18, .44] / [-.12, .38]
Index of moderated mediation	.25 / .40	.10 / .13	[.08, .48] / [.19, .69]
	.20 / .15	.08 / .07	[.05, .36] / [.03, .30]

*Note:*  $N = 139$  (Study 1) and  $80$  (Study 2)

**Table 4.** Means, standard deviations, and correlations (Study 2)

Variables	Mean	SD	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1. Age	44.51	8.20	-													
2. Gender (0: female; 1: male)	-	-	-.11	-												
3. Not graduated (0: no; 1: yes) (a)	2.48	.57	.09	-.01	-											
4. Graduated (0: no; 1: yes) (a)	-	-	.19	-.10	-.18	-										
5. Leader tenure in the role	9.55	7.68	.61***	.00	.05	.17	-									
6. Dyadic tenure	5.44	.95	.24*	-.09	.02	.17	.41***	-								
7. Family present (b)	-	-	.11	.16	.05	-.08	.09	-.10	-							
8. Children at home (0: no, 1: yes)	-	-	.25*	.19	.09	-.05	.14	.08	.56***	-						
9. Optimism	4.53	.84	-.14	.26*	-.28*	-.09	.15	.03	.04	-.07	-					
10. Conscientiousness (data from subordinates, subsample #2, SS2)	4.92	.79	.06	-.05	.06	.19	-.13	-.07	.16	.02	-.01	-				
11. Consistency of interests (SS1)	4.66	.88	-.07	-.06	.08	.04	-.25*	-.02	.02	-.12	.07	.60***	-			
12. Grit-PE (SS1)	5.16	.61	-.07	-.03	.13	.10	-.16	-.02	.30**	.07	.10	.55***	.58***	-		
13. Prudence (SS2)	4.67	.90	.15	-.14	.02	.14	-.15	-.07	.24*	.13	-.14	.82***	.48***	.45***	-	
14. WFC	3.75	.89	-.05	-.10	-.29*	.23*	-.16	-.09	-.12	-.16	-.16	-.11	-.10	-.08	.02	-
15. AWB	3.99	.73	-.04	-.22	-.13	-.05	.07	.02	.03	.04	.55**	.01	.15	-.14	-.13	-.39***

Notes:  $N = 80$ ; (a) Three educational levels: not graduated (3.8%), graduated (45.0%), and Master's degree (51.2%); (b) 0: living alone, 1: living

with family

\* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$

**Table 5.** Bootstrap regression analysis (5000 samples; Study 2)

Variables	Outcome: WFC			Outcome: AWB								
	B	SE	[LLCI, ULCI] (a)	B	SE	[LLCI, ULCI]	B	SE	[LLCI, ULCI]	B	SE	[LLCI, ULCI]
Age	.00	.02	[-.03, .04]	.00	.02	[-.03, .03]	.01	.01	[-.02, .04]	.01	.02	[-.02, .04]
Gender (0: female; 1: male)	.01	.25	[-.55, .44]	-.03	.22	[-.54, .33]	.11	.18	[-.25, .48]	.10	.17	[-.27, .43]
Not graduated (0: no; 1: yes) (b)	-1.19*	.63	[-2.30, .32]	-1.22*	.53	[-2.21, .01]	-.07	.27	[-.64, .45]	-.37	.30	[-.98, .25]
Graduated (0: no; 1: yes) (b)	.40	.21	[-.05, .78]	.29	.19	[-.10, .62]	.04	.16	[-.24, .38]	.11	.15	[-.17, .43]
Leader tenure in the role	-.02	.02	[-.05, .03]	-.01	.02	[-.04, .04]	-.01	.02	[-.04, .02]	-.01	.02	[-.04, .02]
Dyadic tenure	-.06	.11	[-.32, .11]	-.07	.10	[-.29, .11]	-.01	.07	[-.16, .13]	-.03	.08	[-.19, .11]
Family present (c)	-.12	.75	[-1.33, 1.59]	-.28	.51	[-1.02, .95]	-.10	.46	[-1.13, .74]	-.17	.44	[-1.04, .71]
Children at home (0: no, 1: yes)	-.33	.44	[-1.29, .41]	-.62*	.33	[-1.34, -.03]	.35	.31	[-.26, .98]	.20	.29	[-.40, .77]
Optimism	-.17	.16	[-.46, .15]	-.13	.14	[-.39, .15]	.42***	.12	[.16, .64]	.39***	.12	[.12, .61]
Conscientiousness (subordinates, subsample #2, SS2)	-.46	.25	[-.88, .11]	-.72**	.23	[-1.10, -.19]	.21	.20	[-.24, .58]	.03	.22	[-.44, .44]
Consistency of interests (SS1)	-.07	.17	[-.42, .26]	.03	.14	[-.25, .31]	.08	.14	[-.20, .36]	.09	.15	[-.20, .37]
Grit-PE (SS1) – centered	.10	.24	[-.40, .57]	.05	.20	[-.39, .42]	.11	.17	[-.24, .44]	.13	.17	[-.23, .44]
Prudence (SS2) - centered	.30	.23	[-.22, .67]	.21	.20	[-.25, .54]	-.19	.15	[-.42, .17]	-.13	.15	[-.39, .19]
Grit-PE (SS1) x prudence (SS2)	-	-	-	-.67***	.18	[-1.02, -.31]	.28*	.14	[-.06, .52]	.12	.15	[-.23, .38]
WFC	-	-	-	-	-	-	-	-	-	-.24*	.11	[-.46, -.03]
F	1.77			3.59**			3.16***			3.56***		
R <sup>2</sup>	.26			.44			.41			.46		
R <sup>2</sup> change (d)	-			.18			-			.05		
Adjusted R <sup>2</sup>	.11			.32			.28			.33		
Adjusted R <sup>2</sup> change (d)	-			.21			-			.05		

Notes:  $N = 80$ ; (a) Bias corrected 95% CI; (b) Three educational levels: not graduated (3.8%), graduated (45.0%), and Master's degree (51.2%);

(c) 0: living alone, 1: living with family; (d) after entering the interaction term to predict WFC; after entering WFC to predict AWB

\* $p < .05$ . \*\* $p < .01$ . \*\*\* $p < .001$