

Emotional Demands and Entrepreneurial Burnout: The Role of Autonomy and Job Satisfaction

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Abstract

Entrepreneurship is widely recognized as a highly stressful business activity, and a number of entrepreneurship scholars have investigated factors affecting entrepreneurial burnout. Using the conservation of resources (COR) theory, this study examines the role of specific entrepreneurial characteristics such as job resources (autonomy and job satisfaction) and emotional demands in entrepreneurial burnout. We use primary data on 273 French entrepreneurs and regression analysis to demonstrate the relevance of emotional demands and job resources in entrepreneurial burnout, as well as how autonomy and job satisfaction may

leverage the negative effects of emotional demands on entrepreneurial burnout. We develop practical implications and discuss theoretical contributions.

Keywords

Entrepreneurship; Burnout; Conservation of Resources Theory; Job demands, Job resources

JEL classifications: J28; L26; M5-59

1. Introduction

Entrepreneurship places significant occupational demands (Bencsik & Chuluun, 2021; Cubbon et al., 2020) and emotional strains on entrepreneurs (Torrès et al., 2021). Scholars have reported that the negative effects of entrepreneurial burnout are related to loneliness (Morris, Kuratko, Schindehutte & Spivack, 2012; Patzelt & Shepherd, 2011) and work overload (Tetrick, Slack, Da Silva & Sinclair, 2000) as well as risk and uncertainty (Jamal, 2007; Lee et al., 2020; Rauch, Fink & Hatak, 2018). All of these are damaging to the mental and physical health of entrepreneurs. Among work-related stressors, emotional factors have gained specific attention in recent entrepreneurship research on burnout (Lechat & Torrès, 2016; Torrès & Thurik, 2019; Wach Stephan, Weinberger & Wegge, 2020).

While there has been substantial research into emotional demands as important job stressors in the entrepreneurial context, the findings in the extant literature are fragmented. For example, Jamal (1997; 2007) argues that self-employed workers report experiencing more emotional strain and poorer mental health than salaried workers due to their unconventional working hours and high uncertainty, among other issues. At the opposite end of the spectrum, Patzelt & Shepherd (2011) demonstrate that entrepreneurs are likely to show a lower level of

negative emotions as they use appropriate coping strategies to manage work-related stress. Similarly, Tetrick et al. (2000) found that business owners experience higher levels of job satisfaction and are at lower risk of burnout than non-owners.

These fragmented findings make it hard to decide whether entrepreneurs are at high or low risk of burnout. It is possible that the mixed results are due to the existence of unobserved factors in the work-stress relationships (Lee et al., 2020). Indeed, while it is recognized that self-employment generates significant negative emotions (Patzelt & Shepherd, 2011), not all negative emotions translate into burnout. The literature studying the conditions under which negative emotions translate into entrepreneurial burnout is lacking. Obviously, few studies have investigated the specific coping factors that are likely to mitigate the burden of negative emotions on entrepreneurs' mental health. However, failure to clearly understand the relationship between self-employment and stress outcomes compromises effective actions to enhance the resilience of the self-employed (Audretsch & Belitski, 2017; 2021) in the face of high emotional strains.

To reconcile the opposing views found in the literature, we believe that studying the boundary conditions of entrepreneurial burnout is necessary to understand what makes entrepreneurs more or less resilient when facing high emotional strains. We examine how self-employed entrepreneurs attenuate the effects of emotional strains by investing in specific resources that characterize the entrepreneurial activity. To achieve this, we draw upon the conservation of resources (COR) theory of stress response (Hobfoll, 1989), assuming that people experience stress when they believe they lack the resources to deal with difficult events (Lazarus & Folkman, 1984). According to this theoretical framework, the sustainability of entrepreneurial activities requires a balance between specific job demands and job resources in order to secure entrepreneurs' well-being. We argue that entrepreneurs suffer higher (lower) burnout risk depending on the level of autonomy and job satisfaction, considered in the

literature as the most relevant characteristics of the entrepreneurial role (Hundley, 2001). We seek to clarify the moderator effect of key entrepreneurial resources, and to identify coping strategies that entrepreneurs can use to decrease the risk of burnout.

Using a multiple regression analysis with a sample of 273 entrepreneurs in France, our results provide support for the direct effects of emotional demands (positive effects), autonomy and job satisfaction (negative effects) on burnout as proxied by emotional exhaustion (Ashkanasy, 2003; Cropanzano, Rupp & Byrne, 2003; Halbesleben & Bowler, 2007; Seidler et al., 2014; Tuithof et al., 2017; Wright & Bonett, 1997). Our results also highlight the moderator (negative) effect of autonomy, which is a function of the balance between entrepreneurs' power and dependencies. Contrary to our expectations, the moderator effect of job satisfaction on burnout is not supported. In light of the significant direct and moderator effects of autonomy, we establish that maintaining a high level of autonomy could be a coping strategy that helps entrepreneurs overcome emotional strains in the workplace and their effect in the burnout process. While increasing job satisfaction reduces the risk of burnout, it does not interact with emotional demands for this purpose.

This research would help advance the literatures on entrepreneurial emotions and burnout, since scholars investigating entrepreneurial burnout have long been interested in identifying the factors affecting entrepreneurial burnout and comparing stress levels between entrepreneurs and employees (Caiazza, Belitski & Audretsch, 2020; de Mol, Ho & Pollack, 2018; Lechat & Torrès, 2016; Patzelt & Shepherd, 2011) rather than explaining the contingencies shaping the relationship between job strains and entrepreneurial burnout. With emotional strains being omnipresent and inevitable, coping strategies are of paramount importance for entrepreneurs and their businesses.

2. Theoretical framework

Empirical studies have found that entrepreneurs have higher levels of occupational stress and more negative outcomes compared with employees (e.g. Lin, Wu, Chu, Huang & Chen, 2020; Stephan & Roesler, 2010). According to Rauch, Unger and Rosenbush (2007), successful entrepreneurs are those able to cope with high levels of uncertainty, responsibility, complexity, time pressures, and long working hours.

In the following section, we develop our theoretical argumentation of entrepreneurial burnout based on the COR theory framework.

2.1. The Conservation of Resources Theory: A framework for Studying Entrepreneurial Burnout

2.1.1. The Conservation of Resources Theory

The COR theory is a motivational theory that explains much of human behavior based on the evolutionary need to acquire and conserve resources for survival, which is central to human behavioral genetics. The dynamic perspective of the COR theory is mainly related to resource investment as follows: ‘[p]eople must invest resources in order to protect against resource loss, and gain resources’ (Hobfoll, 2001; 349). Accordingly, individuals strive to obtain and maintain the resources they prize or value in terms of resources.

The COR theory has been vital in advancing our understanding of occupational stress and burnout in different organizational contexts (Hobfoll et al., 2018). The primacy of conservation of resources, at the heart of the COR theory, has become an important way of understanding the burnout process (e.g., Brotheridge & Grandey, 2002; Halbesleben et al., 2014) and has led to a growing interest in the field of entrepreneurship (Gorgievski, Bakker & Schaufeli, 2010; Neck et al., 2013). As Lanivich (2015) has pointed out, few people realize how disastrous resource loss can be like entrepreneurs. For these individuals, losing resources could potentially result in bankruptcy or dismemberment. Indeed, contexts of uncertainty and high

risk (Jamal, 2007; Lee et al., 2020; Rauch, Fink & Hatak, 2018) create unique additional draw on resources which entrepreneurs must endure.

While role differences between employment and self-employment are well-established in the literature, there is insufficient theory linking these role differences to the risk of burnout. Previous research into entrepreneurial job stress focused on determinants which are mainly induced by organizational factors (e.g. quantitative workload, job fit and job-personal conflict) (De Mol, Ho & Pollack, 2018; Jamal, 2007; Tetrick et al., 2000) and personal factors (e.g. human and psychological characteristics) (Baron, Franklin & Hmieleski, 2013; Lee et al., 2020). For example, Lee et al. (2020) draws on the human capital theory to examine the influence of tenure and education on job stress. Jamal (2007) investigates the impact of greater independence, longer and nonconventional working hours on the mental health of entrepreneurs. Baron et al. (2013) build their argument around the Attraction-Selection-Attrition (ASA) theory, and contend that persons who are attracted by, selected into, and persist in entrepreneurship may have relatively high stress tolerance levels. Patzelt and Shepherd (2011) use psychological theories to argue that entrepreneurs develop strategies to reduce negative emotions induced by unpleasant and stressful situations.

While this body of research helps to advance our understanding of entrepreneurial burnout, more theoretical underpinnings are needed to disentangle the links between emotional demands and entrepreneurial burnout, i.e. the contingencies explaining the extent to which job strains can translate into burnout. More research is needed to highlight offsetting effects (boundary conditions) of the impact of job strains on entrepreneurial burnout. We argue that negative emotions among the self-employed increase burnout risk contingent on their regulatory coping behaviors which have been shown to increase financial performance and perceived entrepreneurial success (Lavinich, 2015). To this end, the COR theory has been used

as the main theoretical foundation to explain coping behavior, i.e. the process of expending effort to solve problems and reduce stress (Lavinich, 2015).

COR theorists emphasize that job burnout is strongly affected by resource depletion, which refers to a process of resource erosion whereby individuals cannot compensate for losses (Hobfoll & Shirom, 2001). Burnout is most likely to occur in situations where there has been an actual resource loss, a perceived threat of resource loss, a situation in which one's resources were inadequate to meet work demands, or when the anticipated returns on an investment were not obtained (Hobfoll, 1989). The strength of the COR theory in the context of burnout is that it describes coping mechanisms for attenuating some of the negative effects caused by the strain inherent to resource loss (Hobfoll, 1989). Coping captures the “cognitive and behavioral efforts to manage specific external and internal demands that are appraised as taxing or exceeding the resources of a person” (Lazarus & Folkman, 1991; 112). Indeed, according to the COR theory, resources have two effects: a direct impact (reducing burnout) and an indirect impact (a moderation relationship between job demands and burnout).

COR theorists explain that the demanding aspects of work create a constant overtaxing that ultimately leads to exhaustion, and the lack of resources reduces effectiveness in facing job demands (Schaufeli & Bakker, 2004; Demerouti et al., 2001). The highest risk of burnout occurs when people face a high level of demands, or when they have insufficient resources (Bakker, Demerouti & Euwema, 2005).

2.1.2. Entrepreneurial Burnout

Burnout is experienced as physical, emotional, and mental exhaustion caused by long-term emotional demands (Palmer et al., 2021), and is a syndrome which occurs when an individual is overcome with stress (Kailer et al., 2019; Shepherd et al., 2010). Burnout was originally conceptualized as a three-dimensional concept consisting of emotional exhaustion,

depersonalization, and a reduced sense of self-accomplishment (Maslach & Jackson, 1981). Emotional exhaustion occurs when an individual feels emotionally drained, and is associated with physical and/or psychological fatigue (Wright & Cropanzano, 1998). Depersonalization refers to a defensive mechanism whereby individuals distance themselves from situations when their emotional exhaustion is too high (Maslach, Schaufeli & Leiter, 2001). Reduced self-accomplishment leads individuals to consider themselves as less competent, and are discouraged by tasks they used to be able to perform but which now seem insurmountable.

A number of empirical and conceptual studies highlighted the emotional exhaustion dimension as central to the experience of burnout, and consequently a primary dimension of the burnout process (Cropanzano et al., 2003; Halbesleben & Bowler, 2007; Seidler et al., 2014; Tuithof et al., 2017; Wright & Bonett, 1997). Empirical findings suggest that compared to the other burnout dimensions, emotional exhaustion exhibits the most consistency in its relationships with other outcomes (Halbesleben & Bowler, 2007; Lechat & Torrès, 2016; Wright & Bonett, 1997).

As a professional activity, entrepreneurship is defined by unique job characteristics which make the entrepreneurial job particularly emotionally draining. Tasks and responsibilities that are specifically for self-employed individuals include exploring business opportunities, acquiring different types of resources, managing employees, and making quick decisions in highly-uncertain situations (Patzelt & Shepherd, 2011) which may result in negative emotions. For example, being responsible for both a business and its employees can be perceived as a burden and causes high levels of stress and frustration (Boyd & Gumpert, 1983). Risks and uncertainty about the future of the business can cause fear and anxiety related to the entrepreneur's own personal future (Boyd & Gumpert, 1983; Jamal, 2007; Lee et al., 2020). Furthermore, long working hours can lead to feelings of loneliness and social isolation amongst the self-employed (Morris et al., 2012). Finally, entrepreneurs are reported to sleep

less (Guiliani & Torrès, 2018) and have less time to spend on leisure activities (van der Zwan & Hessels, 2019). These work characteristics induce negative emotions, since individuals experience them as overwhelming and threatening.

How can entrepreneurs be successful despite experiencing excessive emotional strains at work? Theoretical assumptions from the COR theory support the need for a balance between resources and demands (e.g. Bakker et al., 2005; Xanthopoulou et al., 2007). Job demands and resources are flexible pools of variables specific to the occupational context. While meaningful variations in levels of certain specific job demands and resources can be found in different occupational groups, other job demands and resources are unique.

2.2. Entrepreneurial Job Demands: Emotional Demands

Job demands are defined as “those physical, social, or organizational aspects of the job that require sustained physical or mental effort” (Demerouti et al., 2001; 501). Job demands are most predictive of feelings of exhaustion, and are positively associated with depression and poor physical health (Bakker & Demerouti, 2014).

Emotional demands are considered to be qualitative aspects of occupational demands (Schaufeli & Bakker, 2004) with burnout as a key outcome (Bakker et al., 2005; Lechat & Torrès, 2016; van de Ven, van den Tooren & Vlerick, 2013). Each work context is rich with emotions that are social experiences which influence worker behavior (Baron, 2008). Emotional demands can be defined as work aspects requiring sustained emotional effort (Morris & Feldman, 1996), such as complaints, impoliteness, and intimidation (Bakker et al., 2005). In certain occupations, especially those involving significant interpersonal contact (e.g., teachers, nurses, doctors, waitresses), emotional demands are extremely important (Bakker & Demerouti, 2007). Significant contact with customers is recognized as stressful (for example dealing with disproportionate customer expectations, customer verbal aggression, and disliked customers).

At exceptional risk are professionals who are accountable to the demands of both clients and organizations (Babakus et al., 1999; Lewin & Sager, 2007; van Gelderen, 2016). Entrepreneurs are part of this professional category. The entrepreneurial literature has thus emphasized that affective factors in the form of negative emotions are an important aspect of entrepreneurial burnout (Cardon, Foo, Shepherd & Wiklund, 2012; Doern & Goss 2013; Goss, 2008).

Indeed, entrepreneurial activity is particularly charged with affective events that are rich in terms of emotions. Lechat and Torrès (2016) explored 30 emotionally-draining negative events that are applicable to business owners and entrepreneurs. They include: bankruptcy, workload and competitive pressure, resignation of an employee, and so on. These episodes will have an impact on the equilibrium of both the owner and their company (Baumeister et al., 2001), meaning entrepreneurs' well-being is likely to suffer. Emotional demands typically arise from entrepreneurs' interactions with the actors that are important to achieving business goals (e.g., employees, customers, banks). For example, entrepreneurs report that disagreements and conflicts with others (e.g., due to late payments) are a major source of stress (Lechat & Torrès, 2017; Wach et al., 2020). The challenge is that entrepreneurs dealing with these situations must maintain civil interactions with their stakeholders, rather than expressing their dissatisfaction. In this case, interpersonal interactions are considered to be emotionally draining (Uy, Foo & Aguinis, 2010).

Emotional demands are found to vary not only between entrepreneurs but also from one day to the next (van Gelderen, 2016), and have been linked positively to job-related entrepreneurial stress (Dijkhuizen et al., 2016). Excessive emotional demands diminish entrepreneurs' energy, and takes away the attention and effort they need to efficiently run their business. We hypothesize:

H1: Emotional demands are positively associated with entrepreneurial burnout

2.3. Entrepreneurial job resources

Resources are “defined as those objects, personal characteristics, conditions or energies that are valued by the individual or that serve as a means for attainment of these objects, personal characteristics, conditions, or energies” (Hobfoll, 1989; 516). Researchers have suggested that entrepreneurs can vary in their ability to cope with resource loss, or potential resource loss (i.e., risk) (Baron, Hmieleski & Henry, 2012; Uy, Foo & Song, 2012). In this section, we focus on two resources that we believe are of particular relevance to entrepreneurial burnout: autonomy and job satisfaction. These resources are likely to represent two different coping strategies. Indeed, Patzelt and Shepherd (2011) argue that the self-employed balance the negative emotions associated with self-employment using two distinct coping behaviors: problem-focused and emotions-focused coping. Problem-focused coping refers to dealing with sources of negative emotions (for example, making a plan of action). Achieving and maintaining autonomy is part of this category, since entrepreneurs dealing with negative emotions can balance their autonomy with the demands imposed on them by internal and external stakeholders. Meanwhile, emotion-focused coping involves regulating the experience of negative emotions by, for example, engaging in distractive activities. Job satisfaction, as a positive emotional state (Locke, 1976), belongs to this category of coping strategy since entrepreneurs have to derive job satisfaction from their core job characteristics (Alstete, 2008; Schjoedt, 2009).

2.3.1. Autonomy

Viewed as both a source of motivation and as an aspect of well-being, autonomy is a key research area for the entrepreneurial field (Ryff, 2019) and probably the most important characteristic distinguishing self-employment from employment (Benz & Frey, 2008; Patzelt

& Shepherd, 2011; van Gelderen & Jansen, 2006). Autonomy is a primary need for a large majority of entrepreneurs, and is instrumental for their accomplishment (Alstete, 2008; Carter et al., 2003; Dawson, Henle & Latrielle, 2009; Feldman & Bolino, 2000; van Gelderen, 2016; Wilson, Marlino & Kickul, 2004). This entrepreneurial job characteristic reflects “the extent to which a job allows freedom, independence, and discretion to schedule work, make decisions, and choose the methods used to perform tasks” (Morgeson & Humphrey, 2006; 1323).

Autonomy has generally been considered as a fixed trait of entrepreneurs' work (Benz et al., 2004; Hundley, 2001; Lange, 2012; Millán, Millán & Caçador-Rodrigues, 2020; Schjoedt, 2009). However, van Gelderen's (2016) study argues that autonomy cannot be guaranteed, and that business owners/founders face the challenge of attaining and maintaining a high level of autonomy. Indeed, while entrepreneurs can control their autonomy within the organization compared to employees, their autonomy is more challenged vis-à-vis the outside world. Many autonomy-related tensions involve stakeholders outside the organization, such as customers, competitors, suppliers, and investors. Most often, the entrepreneur has to make difficult choices between autonomy and stakeholder demands.

In this regard, van Gelderen (2016) argues that the amount of autonomy experienced by entrepreneurs tends to be a function of the balance between power (the capacity to do something), which enhances autonomy, and dependencies (the state of relying on someone else), which is likely to reduce autonomy. As explained earlier, entrepreneurs have to deal with partners, customers, suppliers, competitors, etc. on a continuous basis. When interests are competing, the ‘other’ is seen as autonomy-reducing. When interests are aligned, the ‘other’ can be seen as autonomy-enhancing. In the latter case, autonomy helps entrepreneurs cope with the demands imposed on them by the business environment (Millán et al., 2020). Autonomy has also been shown to reduce burnout through the promotion of opportunities for personal growth and development, especially workplace learning (Ruyseveldt, Verboon & Smulders,

2011). Research on corporate entrepreneurship (e.g. Shimizu, 2012) has revealed that encouraging autonomous behaviors helps managers overcome the risk-averseness problem and unleash entrepreneurial ideas. In this perspective, autonomy is seen as the experience of decisional freedom and responsibilities that entrepreneurs have at work and that vary over time.

Consequently, autonomy can be considered as a critical resource that entrepreneurs are likely to use in order to protect themselves from burnout and reduce the effect of emotional demands. We hypothesize:

H2a: Autonomy is negatively associated with entrepreneurial burnout

H2b: Autonomy buffers the negative effect of emotional demands on entrepreneurial burnout

2.3.2. Job satisfaction

Job satisfaction has been defined as “a person’s overall evaluation of his/her job as favorable or unfavorable. It reflects an attitude toward one’s job and hence includes affect, cognitions, and behavioral tendencies” (Meier & Spector, 2015; 1). It is also considered to be a positive emotional state, and has been recognized as one way to measure happiness at work (Locke, 1976). Job satisfaction is thus a combination of feelings and beliefs in relation to one’s work (Akehurst, Comeche & Galindo, 2009).

Job characteristics have been recognized as predictive of the level of job satisfaction, with entrepreneurs reporting higher job satisfaction in their careers than employees (Alstete, 2008; Bradley & Roberts, 2004; Hundley, 2001; Schjoedt, 2009; Tetrick et al., 2000). Job satisfaction has been associated with diverse behaviors and attitudes, with implications for personal well-being and job performance in entrepreneurship research (Ben Tahar, 2018; Millán et al., 2013; Wright et al., 2007). This body of research suggests that satisfied entrepreneurs who have good mental health are more likely to have the resources necessary to foster and facilitate increased levels of personal and organizational performance.

As Ben Tahar (2018) points out, job satisfaction can act at two different levels: by directly affecting the well-being of entrepreneurs, but also indirectly by inhibiting the effect of other negative organizational and personal factors. Indeed, as a ‘pleasurable or positive emotional state resulting from the appraisal of one’s job or job experiences’ (Locke, 1976; 1300), job satisfaction serves to buffer the harmful effects of stress (Fredrickson, 2001). This job resource functions as an efficient antidote for the enduring effects of negative emotions created by stress. The moderator effect of job satisfaction is supported by the ‘undoing hypothesis’ (Fredrickson & Levenson, 1998) developed by positive psychology scholars assuming that positive emotions might correct (or undo) the effect of negative emotions. The ‘undoing hypothesis’ asserts that people might be able to improve their psychological well-being by cultivating experiences of positive emotions at opportune moments to cope with negative emotions (Fredrickson, 2001). In the same line of thought, Aspinwall et al. (2001) describe how positive affect serves as a resource for people coping with adversity. We therefore hypothesize:

H3a: Job satisfaction is negatively associated with entrepreneurial burnout

H3b: Job satisfaction buffers the negative effect of emotional demands on entrepreneurial burnout

Figure 1 depicts our conceptual model.

-----Insert Figure 1 about here-----

3. Method

3.1. Data and sample

To collect data, we approached representatives of three business clubs during the *Observatoire Amarok* conferences (<http://www.observatoire-amarok.net/sites/wordpress>),

which were organized to discuss entrepreneurs' physical and mental health. The *Observatoire Amarok* has a long tradition of conducting surveys on entrepreneurs' mental and physical health which have been used in academic entrepreneurship research (e.g., Bernoster, Mukerjee & Thurik, 2020; Lechat & Torrès, 2017; Leung, Mukerjee & Thurik, 2020; Torrès & Thurik, 2019), and are also used to advise public bodies about entrepreneurial health. Data collected through the *Observatoire Amarok* has also been used to organize webinars with the objective of raising awareness about mental health risks.

The mission of the contacted business clubs is to support their members (entrepreneurs) and help to prevent burnout. The collaboration of the clubs allowed us to collect data from entrepreneurs using an online survey. Two of the clubs were local, from the Occitanie region: the Entreprise Union 66 (*l'Union Pour l'Entreprise 66*) (15% of respondents) and the CCREM (Club pour la Croissance et la Réussite des Entreprises de Méditerranée) (17% of respondents), while the APM (Association Progrès du Management) has a national scope (68% of respondents).

Approximately 40% of the participants completed the full questionnaire. No random sampling approach was used. The sample consists of 273 French SME business owners, with 218 males (79.9%) and 55 females (20.1%). They are all the owners and key decision-makers of their businesses, matching the European definition of SME ($n < 250$ employees; $\leq 50\text{m €}$ turnover or $\leq 43\text{m €}$ balance sheet total). Our respondents are evenly distributed in terms of their business size: small business (10–49 employees) (versus) medium-sized business (50–249 employees). The distribution of the participants in relation to seniority is also balanced, with 54.8% of the respondents having more than 10 years of startup experience, and 45.2% having less than 10 years.

3.2. Variables

Dependent variable

Entrepreneurial burnout is proxied by its core dimension: emotional exhaustion (Cropanzano, Rupp & Byrne, 2003; Halbesleben & Bowler, 2007; Seidler et al., 2014; Tuithof et al., 2017; Wright & Bonett, 1997). We used the items suggested in the Oldenburg Burnout Inventory (OLBI: Demerouti et al., 2010) measured with a 5-point Likert scale ranging from ‘strongly disagree’ to ‘strongly agree’. A higher score on this scale indicates a higher degree of emotional exhaustion. The emotional exhaustion construct includes seven items (see Appendix A). We used 3 reversed items: “*I can tolerate the pressure of my work very well*”; “*After working, I have enough energy for my leisure activities*”, and “*I can usually manage my workload well*”. The item ‘*After my work, I usually feel worn out and weary*’ showed a weak factor loading and was not included in our analysis.

Explanatory variables.

The variables used in our model were measured using psychometric scales from previous studies. We used the available French version scales for the ‘autonomy’ and ‘emotional demands’ variables. For job satisfaction and emotional exhaustion, the scales were translated into French by professional translators using the forward-backward translation process.

The measurements are associated with a 5-point Likert scale ranging from ‘strongly disagree’ to ‘strongly agree’. A high score on this scale indicates high levels of autonomy and job satisfaction. All items’ measures are presented in Appendix A.

Emotional demands. We used Dupret’s et al. (2012) French version of the Copenhagen Psychosocial Questionnaire (COPSOQ: Kristensen et al., 2005). ‘Emotional demands’ refers to a three-item measure. Examples of items include ‘*Does your work put you in emotionally-disturbing situations?*’ and ‘*Is your work emotionally demanding?*’ (see Appendix A).

Job satisfaction. We used the subscale of job satisfaction from the Michigan Organizational Assessment Questionnaire (MOAQ: Cammann et al., 1979). Examples of items include ‘*Overall, I am satisfied with my work*’ and ‘*In general, I don't like my work*’ (r: reversed item) (see Appendix A).

Autonomy. Autonomy is a subscale of the Job Content Questionnaire comprised of three items. We used the French version provided by Niedhammer et al. (2006). The following statements are two items suggested for autonomy: ‘*In my job, I have very little freedom to decide how I do my job*’ and ‘*I have the opportunity to influence the course of my work*’ (see Appendix A). The item (*My work often allows me to make decisions on my own*) showed a weak factor loading and was excluded from the analysis.

We started by calculating a Cronbach’s alpha for all measurements. We performed exploratory factor analysis on all data, and grouped our construct items represented in Appendix A. All loadings (less than 0.60) were eliminated. The remaining items for each construct display acceptable reliability (Cronbach $\alpha > 0.7$) and composite validity (CR > 0.7) indicators (see table in Appendix A). In a second step, the convergent (AVE: average variance extracted) and discriminant validity (MSV: maximum share variance; ASV: average shared variance) were assessed. All constructs reported AVE > 0.5 . In addition, for all the studied constructs, MSV $<$ AVE and ASV $<$ AVE, confirming convergent and discriminant validity of the constructs.

Control variables

We controlled for the characteristics of both businesses and entrepreneurs which have been used in previous research on entrepreneurial well-being (Kibler et al., 2019; Uy, Foo & Song, 2013). They are (1) gender, (2) firm size (number of employees), (3) financial situation (using profits as a proxy) and (4) seniority (number of years running startups).

Past studies suggested that gender differences in the influence of work characteristics on entrepreneurial psychological well-being (e.g., Kibler et al., 2019; Pugliesi, 1995; Uy et al., 2013). Firm size, measured by number of employees, refers to the amount of risk and responsibility. Smaller ventures face higher failure rates than older, more established firms (Stinchcombe, 1965), which could likely account for some variance in entrepreneurial burnout (Uh et al., 2013). In this research, the firm size variable equals 1 (0 employees); 2 (1 to 9 employees); 3 (10 to 49); or 4 (50 to 249).

Next, Lechat and Torrès (2017) showed that the firm's financial situation is an entrepreneurial stress factor which is positively associated with uncertainty and pressure. Following Lechat and Torrès (2017), we use an auto-evaluation of profits. The answers range from 'strongly in deficit' to 'highly profitable'. Concerning 'seniority', previous empirical results tend to support that seniority increases the risk of resource loss (Chayu & Kreitler, 2011). This variable equals 1 (less than one year); 2 (1 to 5 years); 3 (6 to 10 years); 4 (11 to 15 years); or 5 (more than 15 years).

Table 1 shows the descriptive statistics for the sample. The mean score for emotional exhaustion is 2.82 on the 5-point scale, suggesting that on average entrepreneurs report moderate levels of emotional exhaustion. Paradoxically, the mean score for emotional demands was 3.48 on the 5-point scale. Entrepreneurs also seem to be highly satisfied with their jobs and have high levels of autonomy, with respective mean scores of 4.39 and 4.09 on a 5-point scale. As depicted in Table 1, all the correlations between the independent variables (emotional demands, job satisfaction, autonomy) and the dependent variable (emotional exhaustion) are significant. One of the most interesting findings is that emotional exhaustion is positively and highly associated with emotional demands, while it is negatively associated with job satisfaction and autonomy.

-----Insert Table 1 about here-----

4. Results

Entrepreneurial burnout is estimated using a multivariate regression model (Wooldridge, 2009). The model allows for jointly estimating the role of various factors of entrepreneurial burnout. The following econometric model is estimated to test H1-H3:

$$y_i = \beta_0 + \beta_1 x_{it-1} + \beta_2 m_{it-1} + u_{it} \quad (1)$$

Where y_i is the entrepreneurial exhaustion of individual i at time t . Additionally, x_i is a vector of explanatory variables (emotional demands, job satisfaction, autonomy) of an individual i . All entrepreneur-level variables are for one year, as we observed them for the previous year lagged; m_{it-1} is a vector of other control variables at the individual level, such as firm size. All coefficients of the regression estimation are reported in Table 2.

-----Insert Table 2 about here-----

Our model estimation is presented in Table 2. It consists of six specifications, and uses sensitivity analysis by adding additional controls (specification 2-4, Table 2) and interaction analysis (specifications 5-6, Table 2).

Our H1 is fully supported (specification 4, Table 2), as we find that an increase in emotional demands by one standard deviation increases the emotional exhaustion of entrepreneurs ($\beta = 0.455$; $p \leq 0.001$). Our H2a is supported, as “Autonomy” is negatively associated with entrepreneurs’ emotional exhaustion ($\beta = -0.122$; $p \leq 0.05$) (specification 4, Table 2). This means that greater autonomy helps entrepreneurs to prevent emotional exhaustion. Our H3a predicting that job satisfaction is negatively associated with

entrepreneurial burnout is supported ($\beta = -0.317$; $p \leq 0.001$). This demonstrates that entrepreneurs who are in general satisfied with what they do are less likely to suffer emotional exhaustion.

Moving to the interaction analysis, we do not support H3b which states that job satisfaction buffers the negative effects of emotional demands on entrepreneurial burnout (spec. 5, Table 2). Emotional demands increase entrepreneurs' emotional exhaustion and job satisfaction reduces entrepreneurs' emotional exhaustion, with both direct effects being significant. Finally, our H2b which stated that autonomy buffers the negative effects of emotional demands on entrepreneurial burnout is supported (specification 6, Table 2) ($\beta = -0.125$; $p \leq 0.05$). Other effects related to our control variables demonstrate that male entrepreneurs are more likely to be emotionally exhausted (Audretsch, Belitski & Brush, 2020; Belitski & Desai, 2021). Seniority and business profits were not found to be associated with entrepreneurial burnout.

Our findings support the argument that emotional strains are relevant to entrepreneurial job demands and have a harmful impact on entrepreneurs' emotional exhaustion. However, the interaction effects of emotional demands and job satisfaction were not significant, demonstrating that this resource does not play a significant role in reducing the negative effect of emotional demands on entrepreneurs' emotional exhaustion. This result is intriguing, since it confirms the need to find the 'right associations' between job demands and job resources when studying coping strategies, as described by the COR theory. In this perspective, our research confirms that job satisfaction associated with emotional demands does not prevent entrepreneurial burnout (Torrès et al., 2021). Other job demands could be examined in relation to job satisfaction in order to highlight the potential impact of job satisfaction as an entrepreneurial coping resource.

We argue that autonomy is a resource that we can associate with emotional strains to

better understand entrepreneurial coping strategies. This finding confirms that high levels of entrepreneurial autonomy allow entrepreneurs to cope with uncertain and risky occupational situations.

4. Discussion

Autonomy and job satisfaction of entrepreneurs decrease the likelihood of emotional exhaustion, and there reduce the risk of entrepreneurial burnout. Building on the COR theory, this study discussed critical entrepreneur-specific characteristics that enable entrepreneurs to better cope with negative emotions.

The entrepreneurship literature clearly states that autonomy and job satisfaction are two distinguishing characteristics of entrepreneurs compared to non-entrepreneurs (Dormann & Zapf, 2001; Hundley, 2001; Lange, 2012; Schjoedt, 2009; van Gelderen, 2016; van Gelderen & Jansen, 2006). We assessed the potential of these two characteristics as key coping strategies, and set boundary conditions for the impact of emotional strains on entrepreneurial burnout. Our results clearly suggest that empowerment via autonomy is likely to be the most influential resource for protecting entrepreneurs from the detrimental effects of excessive emotional job demands. In doing so, our study expands on Patzelt and Shepherd (2011) regarding the role of autonomy as a coping tool that helps self-employed individuals to effectively regulate work-related negative emotions. We extend this finding by showing that autonomy also prevents the outcomes of negative emotions in terms of emotional exhaustion. The direct and moderator effects of autonomy found in this research suggest that autonomy as an entrepreneurial resource demonstrates its full potential specifically in entrepreneurial contexts characterized by high emotional strains.

The absence of empirical evidence regarding job satisfaction in leveraging the impact of negative emotions can be discussed in light of Patzelt and Shepherd's (2011) coping

approaches. Indeed, the authors found that both problem-focused and emotion-focused coping strategies can protect entrepreneurs from experiencing negative emotions. We demonstrate that only “autonomy” (problem-focused coping) is efficient in offsetting the effects of negative emotions on entrepreneurial burnout. This contributes to the previous literature (e.g. Patzelt & Shepherd, 2011) by providing evidence that problem-focused coping (i.e. autonomy) is a more efficient way to decrease entrepreneurial burnout risk induced by emotional demands. This finding can be explained by arguments in the psychology literature. According to this literature, individuals’ perceived controllability of stressful situations significantly predicts coping. Individuals engage in problem-based coping to deal with controllable problems, and will take direct action to alter a situation in order to reduce the quantity of experienced stress. When a situation is perceived as less controllable, they tend to engage in emotion-based coping strategies in order to reframe the problem in a way that no longer evokes a negative emotional response or elicits stress (Mattlin, Wethington & Kessler 1990). The perception of control over adversity (considered as an aspect of perseverance) is higher among entrepreneurs compared to non-entrepreneurs (Markman, Baron, & Balkin, 2005), which could explain the relevance of problem-focused coping strategies to reduce entrepreneurial burnout. It is therefore important to notice that both problem- and emotion-focused coping strategies have been found to decrease negative emotions experienced in entrepreneurial jobs (Patzlet & Shepherd, 2011). However, according to our research, only problem-focused coping is likely to prevent negative emotions from translating into emotional exhaustion. We can interpret the lower efficiency of emotion-focused coping strategies in our findings as follows: entrepreneurs use emotional coping (i.e. job satisfaction) to protect themselves from negative emotions. In particularly high-demanding contexts (e.g. health crisis), problem-focused coping is a more appropriate strategy to avoid emotional exhaustion (Folkman & Lazarus, 1980).

This study argues that entrepreneurs experience less emotional exhaustion depending on their initial level of positive emotion (i.e. job satisfaction) first. Their problem-focused coping behaviors (i.e. higher autonomy), which allow them to buffer the strain of emotional demands at work, are secondary. We discuss the implications of these results for the COR theory literature and for research on entrepreneurial burnout.

Theoretical contributions and practical implications

The main contribution of this study is to help advance knowledge on entrepreneurial burnout by elucidating the process of emotional exhaustion and the nature of entrepreneurs' coping resources, taking into account the realities of their multidimensional professional context. We highlight autonomy as a crucial resource supporting entrepreneurs to cope with negative emotions from work. Previous research on this topic focuses on employee well-being and translates their reasoning to entrepreneurial settings (de Mol et al., 2018). For this reason, specific resources for self-employed people that prevent burnout are underdeveloped (Chabaud & Torrès, 2013). Our research thus contributes to filling the gap in relation to the lack of appropriate theoretical frameworks, empirical models and measurement tools developed and validated in the context of entrepreneurial burnout (de Mol et al., 2018; Lechat & Torrès, 2016). Accordingly, our research would help future scholars to produce coherent and cumulative findings to further our understanding of entrepreneurial burnout.

This research also contributes to the theoretical COR framework, which places the notion of 'resource loss' at the heart of individual and organizational behavior and investigates the relationship between people and the resources in their environment (Hobfoll, 2011). We help advance knowledge in this field by suggesting a coping strategy (attaining and maintaining autonomy) that is likely to help entrepreneurs deal with excessive emotional job strains. While the COR theory has been extensively used in occupational burnout research; entrepreneurial

burnout became a topic of interest only recently, with Lanivich's (2015) article being the first to integrate the use of COR theory into the entrepreneurial context.

This research has a number of implications for practice. The moderator effect of autonomy found in this study suggests that emotionally-drained entrepreneurs must make an effort to attain and maintain autonomy over time. The main challenge for entrepreneurs is negotiating autonomy vis-à-vis their business environment. Entrepreneurs have to very carefully consider which of their partners are the most important to their business. Autonomy is considered to be threatened when partners have demands that conflict with the entrepreneur's beliefs and norms, or when they manage to renegotiate terms and conditions. Building self-confidence and relational competencies are important ways to ensure partners accept the entrepreneur's rules of the game.

Policy-makers who are concerned with the growth of entrepreneurial firms and the well-being of their owners should build accessible programs that give entrepreneurs the skills and tools needed to increase their ability to make efficient decisions while increasing their autonomy. For example, efficient programs should give entrepreneurs insights into negotiation tactics, particularly regarding ways small firms can deal with big partners. Supporting programs must also help entrepreneurs understand how they can develop their competencies and build self-confidence in order to increase their autonomy vis-à-vis their partners and ultimately enhance their well-being.

Limitations and future research perspectives

One limitation of this study is that data collection was limited to entrepreneurs who were members of business clubs. While business clubs are a considerable source of contacts in different regions and industries in France, including entrepreneurs who were not members of clubs would give us further insights regarding entrepreneurial burnout. Indeed, the mission of

business clubs is to help entrepreneurs grow their businesses, so we can expect club membership to influence the resources that entrepreneurs use in their work, especially those that help them cope with work stress. A second limitation is the country-specific focus on France. A comparative analysis with another (other) country (ies) would show if the studied stress factors and coping strategies are of comparable importance in different conditions/cultures. A third limitation would be the absence of industry data as a control variable, as the firm's activity sector may generate higher (lower) levels of emotional exhaustion and potentially influence entrepreneurial burnout risk.

Further examinations of both entrepreneurial resource identification and interaction validation are necessary to enhance our understanding of the occupational impact on entrepreneurial health. Accordingly, future research should investigate the interactions between job satisfaction and other entrepreneurial job demands in order to better understand the role of job satisfaction as an emotion-focused coping strategy for entrepreneurs. Future research could also investigate the impact of the nature and different levels of autonomy in relation to different types of stakeholders, in order to help entrepreneurs adapt their coping strategies to the stakeholder group. This aspect has been overlooked by the entrepreneurship literature (van Gelderen, 2016).

Conclusion

By focusing on the mechanisms of resource loss and gain in the burnout process, the COR theory has superior explanatory power for this study. Indeed, depletion of resources is exacerbated for entrepreneurs. This is particularly the case for startup ventures, which must deal with huge demands on a daily basis with very few resources (Lewin & Sager, 2007). We contend that both job satisfaction and autonomy have been shown as important entrepreneurial

characteristics in previous studies, and argue that autonomy is potentially a key valuable resource for self-employed people as it can help them cope with high emotional strains at work.

This study attempts to position entrepreneurial burnout more prominently in entrepreneurship research, answering the call of researchers to go beyond applying models developed for employees (de Mol et al., 2018; Lechat & Torrès, 2016; Stephan, 2018).

Finally, recent trends present additional risks for entrepreneurs since their businesses are often at risk in the face of social and economic crises. Our study provides clear guidelines to entrepreneurs on how to enhance entrepreneurial resilience and reduce the emotional tension experienced by entrepreneurs in order to alleviate emotional exhaustion. This finding can be directly implemented by policies aiming at entrepreneurial growth and support during the COVID-19 crisis (Belitski et al., 2021), including public support schemes (Khlystova, Kalyuzhnova, & Belitski, 2022). We contend that public support schemes play a crucial role all over the world. One might also say that employees' jobs will become increasingly entrepreneurial in the future. Researching the health consequences of entrepreneurial jobs along with potential moderators (such as autonomy) can inform us on how we need to design such jobs and how we can assist people to reap the benefits of these jobs so that they feel positively challenged rather than overwhelmed.

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Figure 1. Conceptual model

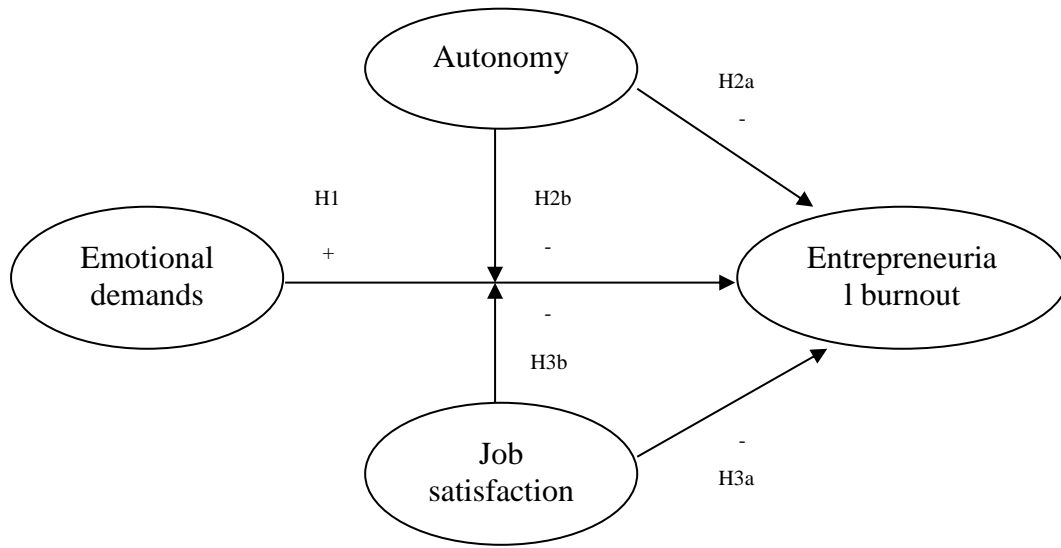


Table 1. Descriptive statistics and correlations

Variables	Mean	S.D.	1	2	3	4	5	6	7
1. Emotional exhaustion	2.821	0.789	1						
2. Emotional demands	3.481	0.754	0.559**	1					
3. Job satisfaction	4.392	0.594	-0.521**	-0.209**	1				
4. Autonomy	4.092	0.792	-0.360**	-0.207**	0.318**	1			
5. Gender	1.201	0.402	0.193**	0.252**	0.020	-0.104	1		
6. Firm size	3.081	0.873	-0.078	-0.083	-0.036	0.191**	-0.195**	1	
7. Profits	3.541	0.903	-0.144*	-0.172**	0.123*	0.167*	0.012	0.040	1
8. Seniority	3.681	1.200	0.095	0.025	-0.094	-0.083	-0.033	0.198**	0.026

Note: * significant at 5% significance level.

Table 2. Regression results for entrepreneurial burnout

Specification	(1)	(2)	(3)	(4)	(5)	(6)
Emotional demands (H1)	0.518*** (0.069)	0.503*** (0.061)	0.489*** (0.059)	0.455*** (0.038)	0.450*** (0.041)	0.428*** (0.048)
Autonomy (H2a)		-0.101*** (.033)	-0.111*** (.035)	-.122*** (.040)	-.129*** (.048)	-.132*** (.047)
Job satisfaction (H3a)		-.303*** (.099)	-.316*** (.093)	-.317*** (.090)	-.349*** (.070)	-.387*** (.062)
Gender			0.099** (0.045)	0.086** (0.041)	0.086** (0.039)	0.075* (0.039)
Firm size			-0.025 (0.022)	-0.027 (0.034)	-0.029 (0.040)	-0.029 (0.044)
Profits			-0.102 (0.099)	-0.102 (0.089)	-0.099 (0.064)	-0.065 (0.054)
Seniority			0.040 (0.025)	0.044 (0.026)	0.045 (0.029)	0.047 (0.030)
Emotional demands * Job satisfaction (H3b)				0.144 (0.097)		0.104 (0.089)
Emotional demands *Autonomy (H2b)					-0.142** (0.050)	-0.125** (0.057)
R square	0.399	0.415	0.452	0.498	0.510	0.532
F statistics	34.40	37.40	38.90	39.33	44.70	45.70
RMSE	0.555	0.513	0.501	0.512	0.499	0.428

Note: * significant at 5% significance level.

Appendix A. Scales' items and measurement validity and reliability

Measures	Items	Loadings	α	CR	AVE	MSV	ASV
Emotional demands (COPSOQ: Kristensen et al., 2005)	1. Does your work put you in emotionally disturbing situations?	0.787	0.763	0.760	0.569	0.564	0.288
	2. Do you have to relate to other people's personal problems as part of your work?	0.870					
	3. Is your work emotionally demanding?	0.820					
Autonomy (JCQ: Niedhammer et al., 2006)	1. My work often allows me to make decisions on my own.	0.616	0.706	0.732	0.502	0.282	0.219
	2. In my job, I have very little freedom to decide how I do my work. ^r	0.837					
	3. I have the opportunity to influence the course of my work.	0.837					
Job satisfaction (MOAQ: Camman et al., 1979)	1. Overall, I am satisfied with my work.	0.848	0.843	0.922	0.650	0.334	0.221
	2. In general, I don't like my work. ^r	0.881					
	3. In general, I like to work at my company.	0.893					
Emotional exhaustion (OLBI: Demerouti et al., 2010)	1. There are days when I feel tired before I arrive at work.	0.684	0.823	0.808	0.548	0.524	0.393
	2. After work, I tend to need more time to relax and feel better than in the past.	0.806					
	3. I can tolerate the pressure of my work very well. ^r	0.741					
	4. During my work, I often feel emotionally drained.	0.800					
	5. After working, I have enough energy for my leisure activities. ^r	0.704					
	6. After my work, I usually feel worn out and weary.	0.448					
	7. I am usually able to manage my workload well. ^r	0.637					

^r: reversed item

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