



# Emotional demands and entrepreneurial burnout: the role of autonomy and job satisfaction

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Accepted: 3 October 2022 / Published online: 21 October 2022

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**Abstract** Entrepreneurs can exhibit the entrepreneurial burnout syndrome, which retards entrepreneur and firm performance. Building upon insights from the conservation of resources theory of stress response and psychology theory, this study examined the role of entrepreneur emotional demands as well as job autonomy and satisfaction resources with regard to entrepreneurial burnout. Multivariate regression analysis relating to 273 entrepreneurs in France revealed that emotional demands were positively associated with entrepreneurial burnout, while job autonomy and satisfaction were negatively associated with entrepreneurial burnout. Job autonomy buffered the negative effect of emotional demands on entrepreneurial burnout. However, job satisfaction did not buffer the negative effect of emotional demands on entrepreneurial burnout. Implications are discussed.

**Plain English Summary** Leveraging Autonomy as a Stress-Coping Resource for Entrepreneurial Well-Being.

External environmental disruptive events have promoted an urgent need for a better understanding of the factors associated with entrepreneurial burnout. We explored whether entrepreneur autonomy is a liability or a coping strategy. Insights from the conservation of resources and psychology theories were used to explore burnout reported by entrepreneurs in France. Entrepreneur emotional demands (i.e., strains) increased the risk of burnout. This risk was reduced when entrepreneurs had autonomy and job satisfaction resources. While the autonomy resource enabled the buffering of emotional strains that increase burnout, this was not the case with regard to the job satisfaction resource. Entrepreneurs need to obtain and

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maintain autonomy over time, which enables them to recuperate from emotional strains. Practitioners can play a role in encouraging entrepreneurs to be aware of the need to accumulate autonomy and job satisfaction resources, and the need to invest in coping strategies to reduce the risk of burnout.

**Keywords** Entrepreneurial burnout · Conservation of resources theory of stress response · Emotional demands · Job resources

**JEL Classification** J28 · L26 · M5-59

## 1 Introduction

Entrepreneurs create, discover, and exploit business opportunities, and this can be emotionally and resource demanding, particularly in highly uncertain contexts (Torrès et al., 2022; Williamson, Gish & Stephan, 2021; Slavec Gomeze & Stritar, 2021). Further, entrepreneurs seeking to address internal and external resource barriers to firm survival and development may perceive the fortunes of their businesses rest upon their shoulders. Over time, entrepreneurs may view these responsibilities as a personal burden (Bencsik & Chuluun, 2021; Cubbon et al., 2020). Entrepreneurs can report high emotional demands (i.e., entrepreneurial burnout) because of one or more of the following issues: stress and frustration (Boyd & Gumpert, 1983; Shepherd et al., 2010; Lechat & Torrès, 2017; Wach et al., 2020); uncertainty and risk relating to business survival and development (Jamal, 2007; Lee et al., 2020; Rauch et al., 2018; Torrès et al., 2021); fear and anxiety (Boyd & Gumpert, 1983; Jamal, 2007; Lee et al., 2020); high workload (Lechat & Torrès, 2016); limited leisure time (van der Zwan & Hessels, 2019); and/or loneliness (Morris et al., 2012; Patzelt & Shepherd, 2011). Inevitably, entrepreneurs with negative emotions report the entrepreneurial burnout syndrome (Lechat & Torrès, 2016; Palmer et al., 2021; Torrès & Thurik, 2019; Wach et al., 2020). Supporting this view, evidence suggests that entrepreneurs reporting lower levels of negative emotions are less likely to experience entrepreneurial burnout (Patzelt & Shepherd, 2011).

While there has been growing research into emotional demands as important job stressors in the entrepreneurial context, debate surrounds the

factors associated with entrepreneurial burnout (Lee et al., 2020; Gonçalves & Martins, 2021; Stephan, Rauch & Hatak, 2022). For example, Jamal (1997, 2007) detected that the self-employed reported higher levels of emotional strain and poorer mental health compared to salaried employees. This is because the self-employed face unconventional working hours and higher uncertainty. Conversely, Patzelt and Shepherd (2011) noted that entrepreneurs reported lower levels of negative emotional strain because of their willingness and ability to regulate their emotions. Baron et al. (2013) detected that entrepreneurs citing higher levels of psychological capital (i.e., self-efficacy, optimism, hope, and resilience) reported low levels of stress. Further, Tetrick et al. (2000) found that entrepreneurs reported higher levels of job satisfaction compared with employees.

Diversity in prior study findings makes it hard to decide whether entrepreneurs are at higher or lower risk of burnout (Palmer et al., 2021). The mixed results from prior studies, in part, may be due to unobserved factors relating to work-stress relationships (Lee et al., 2020). Indeed, while it is recognized that self-employment can generate significant negative emotions (Patzelt & Shepherd, 2011; Williamson et al., 2022), not all negative emotions translate into burnout. The inability to understand the relationship between self-employment and stress outcomes compromises effective actions to enhance the resilience of the self-employed (Audretsch & Belitski, 2017, 2021) that face emotional strains. Theory is required to provide insights surrounding the link between entrepreneur emotional demands and entrepreneurial burnout.

To reconcile the opposing views highlighted above, there is the need to consider the boundary conditions of entrepreneurial burnout (i.e., the contingencies explaining the extent to which entrepreneur emotional demands translate into entrepreneurial burnout). This study builds upon insights relating to the conservation of resources theory of stress response (Hobfoll, 1989). The assumption is that individuals with limited resource pools face difficulties dealing with events, and this can lead to stress (Lazarus & Folkman, 1984). Entrepreneur autonomy and job satisfaction are entrepreneurial resources (Hundley, 2001; Williamson et al., 2021), and the accumulation of these resources enables entrepreneurs to engage in

coping strategies that reduce the risk of entrepreneurial burnout.

We make a theoretical contribution to the entrepreneurial burnout literature by integrating insights from the conservation of resources theory of stress response and entrepreneurship psychology perspectives. Notably, we appreciate the links between entrepreneurs' emotional demands, job autonomy, and satisfaction resources with regard to the risk of entrepreneurial burnout.

Multivariate regression analysis was conducted with reference to 273 entrepreneurs in France. Results support the direct positive effect of emotional demands, and the negative effects of job autonomy and job satisfaction in relation to entrepreneurial burnout. In addition, results support the negative moderator effect of job autonomy (i.e., function of the balance between entrepreneurs' power and dependencies) with regard to burnout. Contrary to expectation, results do not support the moderator effect of job satisfaction in relation to burnout. We conclude that maintaining a high level of autonomy is a coping strategy that enables entrepreneurs to overcome emotional strains in the workplace, and this reduces the risk of burnout.

The article is structured as follows. In the next section, we discuss the conservation of resources theory of stress response and entrepreneurial burnout. Hypotheses are then derived. This is followed by a discussion of the methodology. Results from the multivariate regression analyses are then reported. This is followed by a discussion. Implications are then highlighted. Finally, conclusions are presented.

## 2 Conservation of resources theory of stress response and entrepreneurial burnout

### 2.1 Conservation of resources theory

Conservation of resources theory of stress response is a motivational theory relating the evolutionary need of people to acquire and utilize resources for survival. 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). The dynamic conservation of resources theory focuses on the importance of resource investment.

Hobfoll (2001; 349) asserted that "[p]eople must invest resources in order to protect against resource loss, and gain resources" (Hobfoll, 2001; 349). Accordingly, individuals need to strive to obtain and maintain resources they require. The primacy of conservation of resources can be viewed as being crucial to understand the burnout process (Brotheridge & Grandey, 2002; Halbesleben et al., 2014) with reference to the entrepreneurial context (Gorjovski et al., 2010).

Conservation of resources theorists conceptualize burnout in relation to the process of resource erosion, whereby individuals cannot compensate for resource losses (Hobfoll & Shirom, 2001). The demanding aspects of work can create a constant overtaxing, which leads to exhaustion (Demerouti et al., 2001; Schaufeli & Bakker, 2004). 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 resources were inadequate to meet work demands, and/or when the anticipated returns relating to resource investment were not obtained (Hobfoll, 1989). The strength of this theory in the context of entrepreneurial burnout is that it considers coping mechanisms to address the negative effects of strain (Hobfoll, 1989). Lazarus and Folkman (1991; 112) suggest that 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." Consequently, if entrepreneurs accumulate resources, this can have a direct impact reducing entrepreneurial burnout, and an indirect impact with a moderation relationship between job demands and entrepreneurial burnout.

We focus on the entrepreneur autonomy and job satisfaction resources (Dormann & Zapf, 2001; Hundley, 2001; Lange, 2012; Schjoedt, 2009; van Gelderen, 2016; van Gelderen & Jansen, 2006). These resources relate to two different coping strategies. Indeed, Patzelt and Shepherd (2011) argue that the self-employed balance the negative emotions associated with self-employment with regard to problem-focused coping or emotions-focused coping. Problem-focused coping refers to dealing with sources of negative emotions (e.g., making a plan of action). Achieving and maintaining autonomy is part of this coping strategy. Entrepreneurs dealing with negative emotions can balance their autonomy with the demands imposed on them by internal and external

stakeholders. However, emotions-focused coping involves regulating the experience of negative emotions by, for example, engaging in distractive activities. Job satisfaction (i.e., positive emotional state) (Locke, 1976) is an emotions-coping strategy where entrepreneurs derive job satisfaction from their core job characteristics (Alstete, 2008; Schjoedt, 2009).

## 2.2 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 that occurs when an individual is overcome with stress (Shepherd et al., 2010). It has been conceptualized with regard to 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 et al., 2001). Reduced self-accomplishment refers to an individual's perception of reduced competency to undertake an activity. For example, an activity previously easily performed is now perceived to be insurmountable.

Several conceptual and empirical studies have highlighted that emotional exhaustion dimension is central to the experience of burnout. Consequently, it is 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). Studies 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, entrepreneurial behavior is defined by unique job characteristics, and entrepreneurial activity can be emotionally draining (Stephan et al., 2022; Williamson et al., 2021). Entrepreneur activities relate to creating and discovering business opportunities, acquiring and managing resources, and making quick decisions in highly uncertain situations (Patzelt & Shepherd, 2011). These activities can lead to entrepreneurs reporting negative emotions. For

example, entrepreneurs can perceive being responsible for the business and its employees as a burden, and this can generate high levels of stress and frustration (Boyd & Gumpert, 1983). Risks and uncertainty about the future of the business can generate fear and anxiety related to the entrepreneur's own personal future (Boyd & Gumpert, 1983; Jamal, 2007; Lee et al., 2020). Long working hours can lead to entrepreneurs reporting sleep issues (Guiliani & Torrès, 2018; Wolfe & Patel, 2020), and less time to pursue leisure activities (van der Zwan & Hessels, 2019). This can lead to entrepreneurs reporting loneliness and social isolation (Morris et al., 2012). If entrepreneurs perceive their working conditions to be overwhelming and threatening, this can lead to them reporting negative emotions.

Theoretical assumptions from the conservation of resources theory of stress response highlight the need to consider the balance between resources and demands (Bakker et al., 2005; Xanthopoulou et al., 2007). Job demands and resources are flexible pools of variables relating to the occupational context. Specifically, job demands are "those physical, social, or organizational aspects of the job that require sustained physical or mental effort" (Demerouti et al., 2001; 501). People reporting high job demands can cite exhaustion, depression, and/or poor physical health (Bakker & Demerouti, 2014).

## 3 Hypotheses

### 3.1 Emotional demands

The highest risk of burnout occurs when individuals face high levels of emotional demands and/or when they have insufficient resources (Bakker et al., 2005). Emotional demands are qualitative aspects of occupational demands (Schaufeli & Bakker, 2004), and burnout being an 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 that influence worker behavior (Baron, 2008), such as complaints, impoliteness, and intimidation (Bakker et al., 2005). In some occupations, especially those involving significant interpersonal contact, emotional demands are extremely important (Bakker & Demerouti, 2007). Contact with customers (i.e., dealing with

disproportionate customer expectations, customer verbal aggression, and disliked customers) can generate stress. High levels of stress are reported by professionals who are accountable to the demands of both clients and organizations (Lewin & Sager, 2007; van Gelderen, 2016). Entrepreneurs are members of this professional category. Entrepreneurship studies have emphasized that affective factors in the form of negative emotions are an important aspect of entrepreneurial burnout (Cardon et al., 2012; Doern & Goss 2013; Goss, 2008).

Entrepreneurial activity relates to affective events that are rich in terms of emotions (Lerman, Munyon & Carr, 2020). Lechat and Torrès (2016) explored 30 emotionally draining negative events (i.e., bankruptcy, workload and competitive pressure, resignation of an employee, etc.). Negative events can have a detrimental impact on entrepreneur well-being (Baumeister et al., 2001). Emotional demands typically arise from entrepreneurs' interactions with the actors that are important to achieving business goals (i.e., financiers). Disagreements with external resource providers can generate stress for entrepreneurs (Lechat & Torrès, 2017; Wach et al., 2020). Consequently, some entrepreneur interpersonal interactions can be emotionally draining (Uy et al., 2010). Emotional demands vary between entrepreneurs, and from one day to the next (van Gelderen, 2016). These emotional demands can generate stress (Dijkhuizen et al., 2016). Excessive emotional demands diminish entrepreneurs' energy, and take away the attention and effort required to ensure firm development. This discussion suggests the following hypothesis (see Fig. 1):

H1: Emotional demands are positively associated with entrepreneurial burnout.

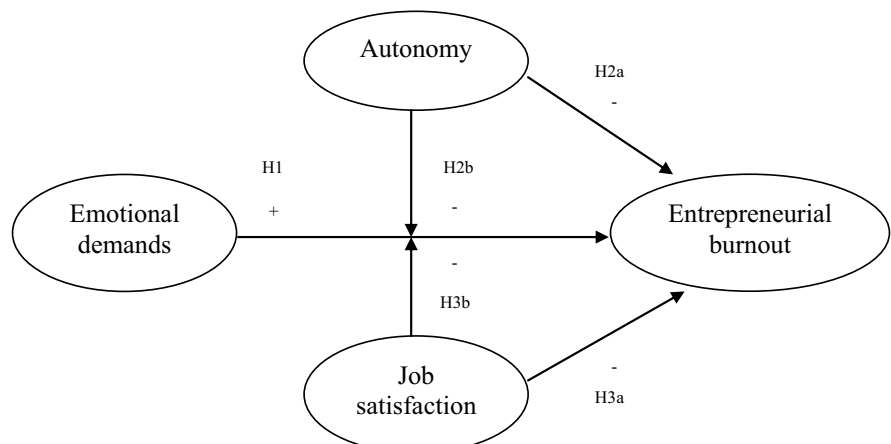
### 3.2 Job resources

#### 3.2.1 Autonomy

Viewed as both a source of motivation and an aspect of well-being (Ryff, 2019), autonomy can differentiate entrepreneurs from employees (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; van Gelderen, 2016). It relates to “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 is widely viewed as fixed trait (Benz & Frey, 2004; Hundley, 2001; Lange, 2012; Millán et al., 2020; Schjoedt, 2009). However, van Gelderen (2016) has asserted that autonomy is not guaranteed, and entrepreneurs need to address 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 can be challenged. Many autonomy-related tensions involve stakeholders outside the organization, such as financiers, suppliers, customers, and competitors. Entrepreneurs may have to choose between autonomy and stakeholder demands.

van Gelderen (2016) asserted that the amount of autonomy reported by entrepreneurs tends to be a

**Fig. 1** Conceptual model



function of the balance between power (i.e., capacity to do something), which enhances autonomy, and dependencies (i.e., state of relying on someone else), which is likely to reduce autonomy. 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 to cope with the demands imposed on them by the external 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 (Ruyssveldt et al., 2011). With reference to the corporate entrepreneurship context (Shimizu, 2012), encouraging autonomous behavior enables managers to overcome risk-averseness, and unleash entrepreneurial ideas. Notably, autonomy is generally recognized for the positive influence it has on well-being (Shir et al., 2019; Williamson et al., 2021). Consequently, autonomy is a critical resource that entrepreneurs are likely to use to reduce the effect of emotional demands, and protect themselves from entrepreneurial burnout. This discussion suggests the following hypotheses (see Fig. 1):

H2a: Autonomy is negatively associated with entrepreneurial burnout.

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

### 3.2.2 Job satisfaction

Job characteristics influence an individual’s job satisfaction, with entrepreneurs reporting higher job satisfaction than employees (Alstete, 2008; Bradley & Roberts, 2004; Hundley, 2001; Schjoedt, 2009; Tetrick et al., 2000). 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). Further, job satisfaction relates to a combination of feelings and beliefs in relation to one’s work (Akehurst et al., 2009). Job satisfaction has been found to be associated with diverse behaviors and attitudes, with implications for personal well-being and job performance (Ben Tahar, 2018; Millán et al., 2013; Wright et al., 2007).

Ben Tahar (2018) has asserted that 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 personal and organizational factors. Indeed, psychology theorists argue that, 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 function acts 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) highlighted how positive affect serves as a resource for individuals coping with adversity. This discussion suggests the following hypotheses (see Fig. 1):

H3a: Job satisfaction is negatively associated with entrepreneurial burnout.

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

## 4 Method

### 4.1 Data collection

The *Observatoire Amarok* conference (<http://www.observatoire-amarok.net/sites/wordpress>) in France discusses entrepreneur physical and mental health, and seeks to reduce entrepreneurial burnout. A representative from three business clubs who attended the conference administered the questionnaire to their entrepreneur members. This approach to collect data via the Observatoire Amarok has been widely used (Bernoster et al., 2020; Lechat & Torrès, 2017; Leung et al., 2020; Torrès & Thurik, 2019). Purposive rather than stratified random sampling was conducted. An online structured survey was conducted with *Entreprise Union 66 (l’Union Pour l’Entreprise 66)* entrepreneurs, and *CCREM (Club pour la Croissance et la Réussite des Entreprises de Méditerranée)*



entrepreneurs. All surveyed entrepreneurs were located on the Occitanie region. In addition, the survey was sent to the APM (Association Progrès du Management) that represents entrepreneurs throughout France. Forty percent of entrepreneurs drawn from the three lists answered all the questions on the questionnaire. A consistent key informant approach was used. Respondents to the survey were owners and key decision-makers in their small- and medium-sized enterprises (SMEs) with regard to the European definition of an SME (i.e., less than 250 employees, less than or equal to €50 million turnover, and less than or equal to €43 million balance sheet). Information was obtained from 273 entrepreneurs, of which 55 were females (20%) and 218 were males (80%).

## 4.2 Variables

### 4.2.1 Dependent variable

*Entrepreneurial burnout* is proxied by its core dimension relating to emotional exhaustion (Cropanzano et al., 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 (Demerouti et al., 2010) measured with reference to a 5-point Likert scale ranging from “strongly disagree” (scored “1”) to “strongly agree” (scored “5”). The entrepreneurial burnout construct relates to seven items (Table 3 in the Appendix): “There are days when I feel tired before I arrive at work,” “After work, I tend to need more time to relax and feel better,” “After my work, I usually feel worn out and weary,” and “During my work, I often feel emotionally drained.” Responses to the following three items were reversed scored: “I can tolerate the pressure of my work very well,” “After working, I have enough energy for my leisure activities,” and “I am usually able to manage my workload well.” An exploratory factor analysis was conducted. Responses to the question “After my work, I usually feel worn out and weary” was associated with a weak factor loading. Answers to this question were not used to compute the emotional exhaustion construct. A high score indicates a high level of entrepreneurial burnout.

### 4.2.2 Independent variables

The independent variables relate to psychometric scales utilized in previous studies. We used the available

French version scales relating to the emotional demands and autonomy-independent variables. With regard to the job satisfaction independent variable, the scale was translated into French by professional translators using the forward–backward translation process.

**Emotional demands** We used Dupret et al.’s (2012) French version of the Copenhagen Psychosocial Questionnaire (Kristensen et al., 2005). Emotional demands relate to the following three items: “Does your work put you in emotionally-disturbing situations?,” “Do you have to relate to other people’s personal problems as part of your work?,” and “Is your work emotionally demanding?” (Table 3 in the Appendix). Each item was measured on a scale “strongly disagree” (scored 1) to “strongly agree” (scored 5). A high score indicates a high level of emotional demands.

**Autonomy** Autonomy relates to subscale of the Job Content Questionnaire comprising three items. We used the French version provided by Niedhammer et al. (2006). Respondents were presented with the following three items: “My work often allows me to make decisions on my own,” “In my job, I have very little freedom to decide how I do my work,” and “I have the opportunity to influence the course of my work” (Table 3 in the Appendix). The items relate to a 5-point Likert scale ranging from “strongly disagree” (scored 1) to “strongly agree” (scored 5). The “My work often allows me to make decisions on my own” item was associated with a weak factor loading, and this item was excluded from the analysis. A high score indicates a high level of autonomy.

**Job satisfaction** We used the subscale of job satisfaction from the Michigan Organizational Assessment Questionnaire (Cammann et al., 1979). Job satisfaction relates to the following three items: “Overall, I am satisfied with my work,” “In general, I don’t like my work” (reversed scored), and “In general, I like to work at my company” (Table 3 in the Appendix). The items relate to a 5-point Likert scale ranging from “strongly disagree” (scored 1) to “strongly agree” (scored 5). A high score indicates a high level of job satisfaction.

### 4.2.3 Control variables

Studies suggest that men are more prone to risk of burnout than women (Audretsch et al., 2020;

Belitski & Desai, 2021), and seniority increases the risk of resource loss (Chayu & Kreitler, 2011). Two entrepreneur profile variables were operationalized as control variables. Entrepreneur gender (male = 1; female = 0) (male) (Kibler et al., 2019; Pugliesi, 1995), and number of years running a start-up (less than 1 year = 1; 1 to 5 years = 2; 6 to 10 years = 3; 11 to 15 years = 4; and more than 15 years = 5) (seniority) (Uy et al., 2013).

Studies suggest that smaller firms report higher closure rates (Stinchcombe, 1965), and less profitable firms face pressures that can generate entrepreneurial stress (Lechat & Torrès, 2017). Two firm profiles' variables were operationalized as control variables. Firm size (0 employees = 1; 1 to 9 employees = 2; 10 to 49 employees = 3; and 50 to 249 employees = 4) (firm size), and profitability (scored from 1 = "strongly in deficit" to 5 = "highly profitable") (profits).

#### 4.2.4 Validity and common method

Content validity was considered. The structured questionnaire focused on questions found to be valid in previous studies relating to emotional exhaustion (i.e., entrepreneurial burnout), emotional demands, job autonomy, and job satisfaction. Common method bias was minimized through protection of respondent anonymity; reducing statement ambiguity by pre-testing in previous studies; a short, structured questionnaire that would encourage accurate responses; and statements relating to the dependent variable were not located close to the independent variables. An exploratory factor analysis was conducted relating to all the collected data (Table 3 in the Appendix). All loadings (less than 0.60) were eliminated. The constructs displayed acceptable reliability (Cronbach

$\alpha > 0.7$ ) and composite validity ( $CR > 0.7$ ). During the second step, we calculated the convergent validity (i.e., average variance extracted (AVE)) and discriminant validity (i.e., maximum share variance (MSV)). All constructs reported  $AVE > 0.5$ . Further, all the constructs had  $MSV < AVE$  and  $ASV < AVE$ , which confirmed the convergent and discriminant validity of the constructs. The analysis, therefore, does not suffer from validity concerns. Descriptive statistics and a correlation matrix are reported in Table 1.

## 5 Results

Entrepreneurial burnout was 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 was estimated to test the hypotheses:

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

where  $y_i$  is the entrepreneurial burnout of individual  $i$  at time  $t$ . Further,  $x_i$  is a vector of explanatory variables (i.e., emotional demands, autonomy, and job satisfaction) of an individual  $i$ . All entrepreneur-level variables are for 1 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.

The model estimation is presented in Table 2. It consists of six specifications, and uses sensitivity analysis by adding additional control variables (specifications 2 to 4 in Table 2) and interaction analysis (specifications 5 to 6).

**Table 1** Descriptive statistics and correlations

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

\*Significant at the 5% significance level.



An increase in emotional demands by one standard deviation increased the burnout of entrepreneurs ( $\beta = 0.455$ ;  $p \leq 0.001$ ) (specification 4). H1 was supported.

Job autonomy was negatively associated with burnout ( $\beta = -0.122$ ;  $p \leq 0.01$ ) (specification 4). Higher job autonomy enabled entrepreneurs to reduce burnout. Hypothesis H2a was supported. With reference to the interaction analysis, job autonomy buffered the negative effects of emotional demands relating to burnout ( $\beta = -0.125$ ;  $p \leq 0.05$ ) (specification 6). Hypothesis H2b was supported.

Job satisfaction was negatively associated with burnout ( $\beta = -0.317$ ;  $p \leq 0.001$ ). Entrepreneurs who were satisfied with their jobs reported lower levels of burnout. Hypothesis H3a was supported. With reference to the interaction analysis, job satisfaction did not buffer the negative effects of emotional demands on burnout (specification 5). Hypothesis H3b was not supported.

Other effects related to the control variables. Male entrepreneurs reported higher levels of burnout (Audretsch et al., 2020; Belitski & Desai, 2021). The seniority, firm size, and profits control variables were not significantly associated with burnout.

## 6 Discussion

### 6.1 Key findings

The COVID-19 pandemic and potential for further external environmental disruptive events have promoted an urgent need for a better understanding of the factors associated with entrepreneurial burnout (Torrès et al., 2022), and the coping strategies employed by entrepreneurs. Entrepreneur well-being is of critical relevance at the individual as well as the regional and national levels. Consequently, entrepreneur well-being is now attracting growing attention, which will ensure a more informed understanding of the entrepreneurial context (Stephan, 2018; Torrès & Thurik, 2019). However, knowledge relating to entrepreneurial burnout is underdeveloped. Prior studies have not detected clear or consistent links between entrepreneur profiles and well-being. Several entrepreneurial burnout studies have drawn upon insights from employee well-being studies. The latter insights may not be appropriate to the entrepreneur well-being context (de Mol et al., 2018). Currently, there is scant empirical evidence relating to how entrepreneurs cope with negative emotions relating to their entrepreneurial context, and what resources they can acquire to reduce

**Table 2** Entrepreneur resources associated with entrepreneurial burnout: regression analysis

Variables	Model 1	Model 2	Model 3	Model 4	Model 5	Model 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*** (0.033)	-0.111*** (0.035)	-0.122*** (0.040)	-0.129*** (0.048)	-0.132*** (0.047)
Job satisfaction (H3a)		-0.303*** (0.099)	-0.316*** (0.093)	-0.317*** (0.090)	-0.349*** (0.070)	-0.387*** (0.062)
Male			0.099** (0.045)	0.086** (0.041)	0.086** (0.039)	0.075* (0.039)
Seniority			0.040 (0.025)	0.044 (0.026)	0.045 (0.029)	0.047 (0.030)
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)
Emotional demands *Autonomy (H2b)					-0.142** (0.050)	-0.125** (0.057)
Emotional demands $\times$ job satisfaction (H3b)				0.144 (0.097)		0.104 (0.089)
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
Root mean squared error	0.555	0.513	0.501	0.512	0.499	0.428

\*Significant at the 5% significance level.

the risk of entrepreneurial burnout. We sought to explore this gap in the knowledge base. Scholars have called for studies guided by theory (de Mol et al., 2018; Lechat & Torrès, 2016; Torrès & Thurik, 2019). We responded to this call by building upon insights from the conservation of resources theory of stress response and psychology theory. The role of entrepreneurs' emotional demands, as well as job autonomy and satisfaction resources, was theorized with regard to the risk of entrepreneurial burnout. Further, the long-term effects of emotional demands on burnout were considered. We set boundary conditions relating to the assumed implicit direct impact of emotional demands relating to the entrepreneurial context. Setting boundary conditions through moderator effects is required to clarify the mixed results in previous studies (Baron et al., 2013; Jamal, 1997, 2007; Patzelt & Shepherd, 2011; Tetrick et al., 2000; Williamson et al., 2022). In doing so, our study considered emotional demands outcomes into the perspective by shedding light on the coping resources that are available to entrepreneurs.

Our findings align with some of those highlighted in previous studies that have focused on the determinants of negative emotions relating to the entrepreneurial context (Lechat & Torrès, 2017; Patzelt & Shepherd, 2011; Williamson et al., 2022). We took a step further and shifted our attention from antecedents to outcomes, hence emphasizing the long-term effects of entrepreneurial emotions on mental health. The multivariate regression analysis detected that emotional demands was positively associated with entrepreneurial burnout. As expected, job autonomy buffered the negative effect of emotional demands on burnout. The job satisfaction was also negatively associated with burnout. Despite the potential of the job satisfaction resource to reduce the level of burnout, the job satisfaction resource did not buffer the negative effect of emotional demands on burnout.

The buffering effect of autonomy, in this research, questions recent studies emphasizing the downside of entrepreneurial autonomy (e.g., Williamson et al., 2021). Authors argue that autonomy (an engaging aspect of entrepreneurship) makes entrepreneurs potentially more prone to burnout by preventing them from distancing themselves from work. We argue that autonomy should be investigated at different levels for a more accurate understanding of its effects on entrepreneurial burnout. For instance, autonomy vis-à-vis customers and other business stakeholders should be considered further in future research. At this level, autonomy refers to a reduced dependence vis-à-vis external partners due

to aligned interests (van Gelderen, 2012), which is likely to help entrepreneurs to cope with the demands imposed by their engaging work.

## 6.2 Implications for theory

We contribute to theoretical discussion by highlighting the importance of entrepreneur resources in relation to entrepreneurial burnout. This study builds upon insights from the conservation of resources theory of stress response, which places the notion of resource accumulation and "resource loss" at the heart of understanding individual behavior (Hobfoll, 2011). We contribute to moving forward the conversation relating to relevance of specific entrepreneur resources (Cardon et al., 2012; Doern & Goss 2013, van Gelderen, 2016; Goss, 2008). Our discussion highlighted that entrepreneur emotional demands as well as job autonomy and satisfaction resources need to be theoretically considered. Presented results suggest that entrepreneur empowerment via autonomy was the most influential resource for protecting entrepreneurs from the detrimental effects of excessive emotional job demands, thus, creating a balance between job resources and job demands, a key assumption of the conservation of resources theory. Consequently, future theoretical discussion needs to appreciate that autonomy is a salutogenic rather than a pathogenic factor of business ownership (Torrès & Thurik, 2019). Salutogenic factors are stimuli from the external environment that entrepreneurs perceive in a positive and constructive manner, which, in turn, enhance entrepreneur physical and mental well-being.

Psychology of entrepreneurship scholars explore the new firm creation process, and the well-being of entrepreneurs (Gorgievski & Stephan, 2016). We contribute to this perspective by highlighting the need for the latter scholars to appreciate insights from the conservation of resources theory of stress response, to ensure a more informed appreciation of entrepreneur well-being. Further, we contribute by suggesting new directions in eudaimonic well-being research (Ryff, 2019) with regard to the entrepreneurial context.

## 6.3 Implications for practice

This research has several implications for practice. The findings suggest that emotionally drained

entrepreneurs must make an effort to attain and maintain autonomy over time, which enables them to recuperate from stress. The main challenge for entrepreneurs is negotiating autonomy vis-à-vis their business environment. Autonomy can be threatened when stakeholders have demands that conflict with the entrepreneur's beliefs and norms, or when they renegotiate terms and conditions. Developing emotional intelligence could potentially influence how successful entrepreneurs are in obtaining resources, or coping without them. This is because emotional intelligence enables them to understand their own and other individual's emotions. Previous studies demonstrate that emotional intelligence allows individuals to have a more positive negotiating experience, and makes them more likely to be leaders (Wolff et al., 2002). Successful negotiations can increase an entrepreneur's autonomy vis-à-vis their stakeholders, and reduce the burden of emotional strains they experience.

In addition, entrepreneur social competences (i.e., ability to use social skills to facilitate better interaction with actors) could play a critical role in increasing entrepreneur autonomy vis-à-vis external partners. For example, investments in networking to maintain existing ties, and identify new ties, lead to the accumulation of new information and knowledge, which is required to reduce the risk of entrepreneurial burnout, and address resource barriers to firm development (Stam et al., 2014). Investment in networking has the potential to increase an entrepreneur's perceived autonomy and decrease dependence on existing stakeholders.

There is a case for policy-makers to directly (and indirectly) support enterprise development, training, and networking initiatives that encourage entrepreneurs to be aware of the need to accumulate new resources, and the array of coping and negotiation strategies that could be employed to reduce the risk of entrepreneurial burnout. Initiatives need to be contextualized to entrepreneur, industrial, and locational contexts. Investment in these initiatives could ensure firm development that stimulates wealth creation and job generation as well as societal benefits (Belitski et al., 2021; Khlystova et al., 2022; Westhead et al., 2005).

#### 6.4 Limitations and directions for future research

In line with other studies, this study is associated with limitations that open opportunities for further research

that replicate and/or extend the analysis we conducted. Our study gathered information provided by representatives from three business clubs attending AMAROK conference focusing upon entrepreneurial burnout. Future studies need to gather information from large representative samples of entrepreneurs. While this study focused upon valid and reliable constructs, there is the need to consider the external validity of presented findings in other locational contexts. Case studies with entrepreneurs reporting entrepreneurial burnout may provide fresh insights relating to the resources and coping strategies used. Information from other stakeholders seeking to reduce the problem of entrepreneurial burnout would provide additional insights. Overall, the results and shortcomings of this study call for more in-depth exploration of entrepreneurs' autonomy perceptions, and different levels of autonomy. Studies could explore how entrepreneurs can realize and actively create their autonomy vis-à-vis the outside world, and through self-regulation. In addition, studies could explore the links between different levels of autonomy and their impacts on entrepreneurial burnout. We recognize that the dark side of autonomy (i.e., over-commitment to work and breaking down work-life boundaries) might be apparent in the absence of emotionally demanding work situations, while the positive side could be apparent in highly stressful contexts. Accordingly, the degree of autonomy could be leveraged with reference to an entrepreneur's emotional state. Future studies need to consider entrepreneur emotions and autonomy simultaneously to ensure a more in-depth understanding of the role of the autonomy resource. This knowledge will draw attention to the actions that entrepreneurs can undertake to overcome the liability of the high latitude of control over their firms. Longitudinal studies will generate understanding surrounding the role of entrepreneur autonomy and job satisfaction resources over time with reference to reducing the risk of entrepreneurial burnout. Studies need to consider locational and industrial contexts as determinants of entrepreneurial burnout risk. Multidisciplinary approaches are warranted to provide more fine-grained understanding of entrepreneurial burnout. We encourage scholars to consider and explore the coping strategies that entrepreneurs can employ relating to their context.

#### 6.5 Conclusion

Presented evidence contributes to the emerging entrepreneurial burnout debate, and highlights the need to

consider entrepreneur resources and coping strategies appropriate for current and future disruptive external environmental conditions. This study has highlighted the need for scholars to consider the resources entrepreneurs require to reduce the risk of entrepreneurial burnout, which can retard firm survival and development. In addition, it has highlighted the need to appreciate that the insights from employee studies cannot be unequivocally transferred to the entrepreneur context. Notably, this study has revealed that the accumulation of specific entrepreneur resources reduced the risk of burnout. On the downside, the emotional demands resource was positively associated with burnout, while on the upside, the job autonomy and job satisfaction resources were negatively associated with burnout. Job

autonomy buffered the negative effect of emotional demands on burnout. However, job satisfaction did not buffer the negative effect of emotional demands on burnout. The coping strategies highlighted are appropriate with regard to the COVID-19 crisis, and future disruptive external environmental events, which require entrepreneurs to pursue reliance behavior. Assuming an interventionist stance, to ensure entrepreneur well-being and the contributions of firms to job generation and wealth creation, there is a potential case for policy-makers and practitioners to draw attention to entrepreneurs that they need to accumulate the resources and the coping strategies discussed above, which are appropriate with reference to disruptive and non-disruptive external environmental contexts.

## Appendix

**Table 3** Scales' items and measurement validity and reliability

Measures	Items	Loadings	$\alpha$	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. <sup>f</sup>	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. <sup>f</sup>	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	0.806					
	3. I can tolerate the pressure of my work very well. <sup>f</sup>	0.741					
	4. During my work, I often feel emotionally drained	0.800					
	5. After working, I have enough energy for my leisure activities. <sup>f</sup>	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. <sup>f</sup>	0.637					

<sup>f</sup>Reversed item.

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