



# RICH with well-being: An entrepreneurial mindset for thriving in early-stage entrepreneurship

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## ABSTRACT

Entrepreneurs enjoy high well-being, yet they report factors that typically reduce well-being. We examined well-being of early-stage entrepreneurs across two studies. Using self-determination theory (SDT), we theorize that entrepreneurs' autonomy, job security, and resource-induced coping heuristic (RICH) have direct and interacting effects that shape their environment toward enhancing well-being. Results largely support our hypotheses. Interaction effects highlight that entrepreneurial well-being environments are conditional on the interplay of SDT-related factors. Three-way interactions showed the RICH buffered negative effects of low autonomy and job security on job satisfaction and financial well-being.

## 1. Introduction

Individuals are drawn to entrepreneurship by the allure of extrinsic and intrinsic rewards, security (for self and family), and autonomy (Bjørnskov & Foss, 2020; Kuratko, Hornsby, & Naffziger, 1997). Stemming from basic psychological needs (Maslow, 1968), these goals represent determinants of satisfaction and well-being in the context of entrepreneurship. Much of the extant entrepreneurship literature consider these factors in some form, with most of the literature focusing on extrinsic rewards (i.e., financial performance). Recently, scholars have recognized the importance of considering the factors of entrepreneurs' well-being (Bennett, Lanivich, Akbulut, & Gharagozloo, 2017; Stephan, 2018; Ryff, 2019), and investigations of the nuanced relationships concerning well-being as an outcome in the entrepreneurial context are producing important contributions to the field (e.g., Abreu, Oner, Brouwer, & van Leeuwen, 2018; Bjørnskov & Foss, 2020; Shir, Nikolaev, & Wincen, 2019; Uy, Foo, & Song, 2013). However, theories appropriate for investigating entrepreneur – well-being relationships remain underdeveloped.

Shir et al. (2019) offered self-determination theory (SDT) as a

powerful explanatory tool in the context of entrepreneurs' well-being. We build from their inferences and further elucidate the nuances of how entrepreneurship affects well-being via SDT channels of autonomy, relatedness, and competence. Furthermore, we incorporate alternative indicators and outcomes of well-being to enhance the utility of SDT. One important way we do that is by adopting the resource-induced coping heuristic (RICH; Lanivich, 2015) as a lens for understanding the way early-stage entrepreneurs pursue well-being.

To examine these ideas, we draw from two unique samples of primary data collected from a prescreened panel of entrepreneurs in the United States during 2017. These entrepreneurs were surveyed within the first three years of launching their ventures to better understand the antecedents of entrepreneurial well-being during the formative years of a new venture. In line with ideas from self-determination theory, our samples provided evidence for consistent relationships between autonomy, relatedness (e.g., job security), and competence (e.g., RICH) with well-being. Models of two-way and three-way interactions demonstrate that autonomy, job security, and the RICH can work together, in accordance with SDT assumptions, to enhance well-being in the context of early-stage entrepreneurship beyond additive effects.

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By showing how entrepreneurship motivations and coping mechanisms interact to enhance well-being through the SDT framework, we make several contributions to the field. First, we extend the work of Shir et al. (2019) to increase confidence in the explanatory power of SDT in contexts of entrepreneurship. By doing so, we expand the scope of the theory. Second, we add a functional resource component (RICH) to the mix of explanatory variables capable of affecting positive well-being outcomes in entrepreneurship contexts. This is important because entrepreneurship is a resource-dependent phenomenon rife with uncertainty. Accounting for entrepreneurs' disposition toward resource attainment, protection, and development adds a necessary coping component for determining outcomes in contexts of uncertainty (Laniwich, 2015). Third, extant entrepreneurship research lacks investigation of important, non-financial factors pertaining to positive entrepreneurship outcomes that stem from initial motivations to start a new venture. We investigate well-being as an essential outcome of entrepreneurship, assessing the motivators of autonomy and security as primary goals of starting a business that ultimately contribute to well-being and job satisfaction. In turn, we show that motivators for starting a new venture interact with coping mechanisms to enhance overall well-being by creating an environment where entrepreneurs can thrive. This expands the scope of utility concerning the RICH by showing that a buffer against resource loss, potential or actual, has positive implications for entrepreneurs' well-being.

In the following sections, we provide a brief overview of well-being as it relates to entrepreneurship in our study and lay framework for arguments with SDT as our foundation. Our analyses first confirm the direct relationships between autonomy and job satisfaction and autonomy and financial well-being, followed by the confirmation of the direct relationship between job security and job satisfaction and between job security and financial well-being. We then explore the relationship between the RICH and job satisfaction as well as financial well-being. This is followed by a test of the moderating effect of RICH on all the relationships and an exploration of the three-way interaction between autonomy, job security, and RICH on both job satisfaction and financial well-being. We conclude with a discussion of the results and suggestions for future research.

## 2. Literature review

### 2.1. Entrepreneurial Well-being

Well-being is generally defined as a state of being happy, healthy, and comfortable. As a multifaceted, broad concept with many nuances (Bliese, Edwards, & Sonnentag, 2017), it encompasses both physical and psychological positive states of being. In a recent editorial, Wiklund and his colleagues (Wiklund, Nikolaev, Shir, Foo, & Bradley, 2019, p. 579) defined entrepreneurial well-being as "...the experience of satisfaction, positive affect, infrequent negative affect, and psychological functioning in relation to developing, starting, growing, and running an entrepreneurial venture." Scholars have begun investigating well-being in the specific contexts of entrepreneurship, though most work on entrepreneurial well-being has been conducted in the domains of organizational psychology, economics, and occupational health (Stephan, 2018).

Entrepreneurs experience more flexibility in their working lives and find their jobs more satisfying (Loscocco & Roschelle, 1991). Nikolaev, Shir, and Wiklund (2020) found that people will enter entrepreneurial situations to escape employment situations where low job satisfaction is perceived, arguably chasing satisfaction from entrepreneurship. The link between flexibility and well-being exists because entrepreneurs experience high task autonomy and variety (Hackman & Oldham, 1975), with high levels of autonomy leading to higher feelings of satisfaction (Coad & Binder, 2014; Shir, et al., 2019). However, autonomy for entrepreneurs goes beyond deciding how to complete work tasks. Hundley (2001) suggested that entrepreneurial autonomy includes the ability to better handle threats and opportunities in their

environment, which could enhance well-being. However, high levels of autonomy and control can have a downside as well. Mandel's work (1996) indicated that entrepreneurs may suffer from job insecurity, despite greater feelings of control. Thus, along with long hours, lack of free time, and increased responsibilities, entrepreneurs may experience low levels of well-being, (Sevä & Öun, 2015; Nordenmark, Vinberg, & Strandh, 2012). For the purposes of this study, we focused on two specific aspects of entrepreneurs' overall well-being: job satisfaction and financial well-being.

Job satisfaction is a domain-specific aspect of overall satisfaction that captures contentment or pleasure from work. Within the entrepreneurship literature, findings are mixed regarding the relationship between entrepreneurial activities and job satisfaction. For example, when compared to organizational employees, scholars have found that entrepreneurs have higher job satisfaction (Tetrick, Slack, Silva, Da, & Sinclair, 2000), lower job satisfaction (Buttner, 1992), and no difference between the two groups (Prottas & Thompson, 2006). Financial well-being is a concept that describes "the perception of being able to sustain current and anticipated desired living standard and financial freedom" (Brüggen, Hogreve, Holmlund, Kabadayi, & Löfgren, 2017, p. 229). Financial well-being is captured as a subjective measure because entrepreneurial ventures, as well as entrepreneurs, can vary in form and function. The broad domain of entrepreneurship hampers objective measurement of financial well-being because less meaningful comparisons exist than in other, more homogeneous, careers. Furthermore, recent research has shown that personal characteristics are important when assessing financial well-being because people in similar situations report differences in financial well-being (Joo & Grable, 2004).

### 2.2. Theory development

Carsrud and Bräanback (2011, p. 14) in their review of entrepreneurial motivations, note that "entrepreneurs have the same motivations as anyone for fulfilling their needs and wants in the world, however, they use these motivations in a different manner – they create ventures rather than just work for them." Performance and well-being are affected by the motivation people have for their job activities (Deci, Olafsen, & Ryan, 2017). In turn, entrepreneurs' motivation can be affected through perceptions of autonomy, which can impact overall well-being (Kibler, Wincent, Kautonen, Cacciotti, & Obschonka, 2018). Within the context of entrepreneurship, self-determination plays a large role because entrepreneurial activities provide opportunities for autonomy, relatedness, and competence (Ryff, 2019).

### 2.3. Self-determination theory

Self-determination theory offers a broad framework for understanding the factors that promote human motivation and psychological flourishing (Ryan & Deci, 2017). SDT is a macro theory of intrinsic motivation that is based on the belief that humans are all born with three universal, innate psychological needs of autonomy, relatedness, and competence that, when satisfied, promote autonomous motivation, high quality performance, and ultimately individual well-being (Deci & Ryan 1995; Deci, Olafsen, & Ryan, 2017). When motivated to seek autonomy, individuals take actions to control their life and to act in harmony with their beliefs and goals. When motivated for relatedness, people will interact with and form connections with other people. When motivated to attain competence, individuals seek to increase the mastery of their tasks and environment. There are three essential elements of SDT: (1) humans are inherently proactive when it comes to mastering their drives and emotions, (2) humans have an inherent tendency toward growth and development, and (3) optimal development and actions are inherent in humans, but they do not happen automatically (Ryan & Deci, 2017).

## 2.4. Context of social environments

The context of entrepreneurship satisfies the three factors characterizing social environments explicated in SDT, including support for autonomy, relationality, and competence (Ryan & Deci, 2017). Accordingly, *entrepreneurial environments support autonomy* versus controlled regulations. In the controlled environment of other-owned organizations, individuals with a high need for autonomy may feel coerced by external persons or forces to act in ways that are incongruent with respect to their sense of self. In the entrepreneurial environment, the individual behaves in a manner that is consistent with his/her goals and sense of self. In the entrepreneurial setting, one can decide what, how, and when work will be done (Schjoedt, 2009). Research on entrepreneurial motivation shows that autonomy, not financial gain, is the most often mentioned or most importantly rated motive to start a business (Shane, Locke, & Collins, 2003; Van Gelderen & Jansen, 2006).

Additionally, entrepreneurship is relationally supportive because it is a vehicle of social interaction that can be tailored to enact the level of relatedness an entrepreneur needs to thrive. Relatedness entails feeling connected to and understood by others (Patrick, Canevello, Knee, & Lonsbary, 2007). While the danger exists in the early years of the entrepreneurial process for an entrepreneur to feel lonely or socially isolated (Gumpert & Boyd, 1983), research indicates that because entrepreneurs organize their own structure and time, they can choose to spend time developing social networks and can create environments where they feel connected to others rather than alienated (Baumeister & Leary, 1995; Shepherd & Patelt, 2017).

Entrepreneurship supports competence through effectance (White, 1959). Effectance is the ability of the entrepreneur to realize their goals, by creating a platform from which self-directed goals can be generated and accomplished by the entrepreneur. In the early stages of entrepreneurship, the entrepreneur can control the level of challenge and consistency required for their own well-being – at least to some extent. Van Gelderen and Jansen, 2006 found that many business starters wanted to *do their own thing*. For them, entrepreneurship offers an opportunity to work in accordance with self-directed goals, values, tastes, and beliefs. According to Pierce, Kostova, and Dirks (2001, p. 300), “people use ownership for the purpose of defining themselves, expressing their self-identity to others, and ensuring the continuity of self across time.” In this way, the organization reifies founders’ perceived self-identity, thereby motivating them to continue to work for positive organizational outcomes (Avey, Avolio, Crossley, & Luthans, 2009).

## 2.5. SDT framework

Self-determination theory specifically defines human needs as essential nutrients for growth, integrity, and well-being by detailing three basic psychological needs: autonomy, competence, and relatedness (Deci & Ryan, 2017). As an organismic perspective, SDT assumes humans have evolved to concern themselves with well-being and social development (Ryan & Deci, 2017), and seek to realize capacities for thriving through the three basic needs mentioned above. In this study, we overlay the model of our proposed relationships on the SDT framework to help elucidate the explanatory power of constructs that satisfy entrepreneurs’ sense of self and volition. These relationships are illustrated in Fig. 1.

Autonomy was observed as the level of voluntariness entrepreneurs perceived themselves having over their business actions. We position job security as a feature of relatedness in entrepreneurial contexts because job security for entrepreneurs is dictated by the level of acceptance and social connectedness an entrepreneur receives as stakeholders are affected by their business operations and utilize their products or services while growing accustomed to the presence of the business in society. Competence was fulfilled by the RICH, wherein the perception that the entrepreneur can readily acquire, protect, and develop their resources in such a way to manage the loss of desired resources (e.g., a new client). In the following sections, we argue for the functionality of each variable and interaction with SDT logic that, as they pertain to fulfilling the psychological needs described above, contribute to entrepreneurs’ desire to flourish.

In the entrepreneurial context, autonomy is defined as a business owner/founder having decision rights regarding what work is done, when it is done, and how it is done (van Gelderen, 2016). SDT research consistently finds desired goal outcomes, including well-being, linked to autonomous motivation (Holding, Hope, Verner-Fillion, & Koestner, 2019). For entrepreneurs, autonomy is a motivator for both creating and sustaining business ventures. In this regard, autonomy has been shown to affect entrepreneurial outcomes that contribute to an overall well-being profile (Shir et al., 2019; van Gelderen, 2016). As such, we expect to find direct, positive relationships between autonomy and our measures of well-being.

Hypothesis 1a: Autonomy is positively related to job satisfaction

Hypothesis 1b: Autonomy is positively related to financial well-being

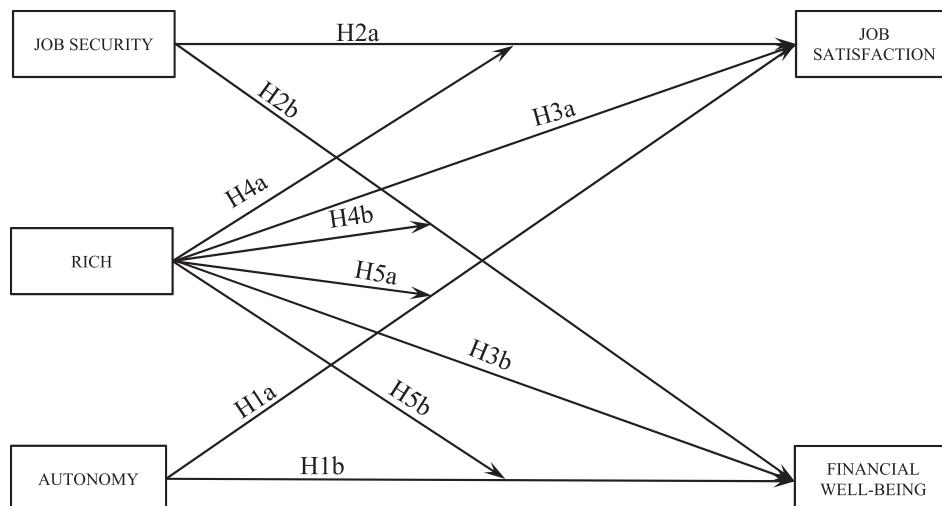


Fig. 1. Model of hypothesized relationships.

## 2.6. Relatedness through job security

Job security was originally defined by Herzberg, Mausner, and Synderman (1959, p. 41) as “those features of the job situation which lead to assurance for continued employment, either within the same company or within the same type of work or profession.” Beyond desires for autonomy, according to SDT (Ryan & Deci, 2017), individuals require relationships within the social structure for which they subscribe. For entrepreneurs, one aspect of relatedness stems from the existence of their venture because it connects them to stakeholders and like-minded others (with respect to the value of the venture) that operate in conceptual proximity (e.g., competitors, customers). In this way, the state of job security adds to the social environment that is conducive to well-being by assuring the entrepreneur, at least in part, that others value their venture efforts at a level that keeps the business in operation – providing job security for the proprietor. For these reasons, we expect that job security has a positive relationship with our well-being factors in the context of entrepreneurship.

- Hypothesis 2a: Job security is positively related to job satisfaction.  
Hypothesis 2b: Job security is positively related to financial well-being.

## 2.7. Competence through the RICH

The RICH is a mechanism by which resources are acquired, protected, and developed primarily through a disposition to avoid negative consequences of resource loss and pursue positive outcomes by heuristically attending to resources and generating an inventory to buffer against resource-based strain (Lanivich, 2011, 2015). According to the conservation of resources (COR) paradigm, losses of social, personal, material, and energy resources are inevitable in a marketplace economy (Hobfoll, Freedy, Lane, & Geller, 1990). Therefore, “people are motivated to create, protect, foster, and nurture their resources... to sustain well-being, and to protect against future resource loss” (Hobfoll, 2009, p. 95). By their nature, RICH entrepreneurs bear an important competency for dealing with stressors of entrepreneurship. RICH entrepreneurs believe they will have access to the necessary resources for overcoming impediments to their goals, especially well-being. Furthermore, their disposition toward resources conservation behaviors (Hobfoll, 2009) helps set the stage for entrepreneurial success, which aids in the continuation and pursuit of goals for well-being. Following previous studies of the RICH as a robust predictor of entrepreneurial outcomes (Lanivich, 2015) and conceptualizing the RICH as a competence that can strengthen settings of well-being (Ryan & Deci, 2017), we expect to find direct positive relationships between the RICH and indicators of well-being.

- Hypothesis 3a: The RICH will be positively related to job satisfaction.  
Hypothesis 3b: The RICH will be positively related to financial well-being.

Through similar reasoning, we expect the RICH also interacts with autonomy and well-being to maintain a situation wherein the entrepreneur has control over their work and self. As an indicator of competence (Ryan & Deci, 2017), the RICH is theoretically predisposed to encourage well-being. In this study, we position our competence metric as central to the function of SDT relationships in the context of entrepreneurship because the mechanisms that construct the context are dependent on the ability of the entrepreneur to keep the venture an ongoing concern. From this perspective, there appears a logical argument for the pursuit of needs-fulfilment-based well-being through autonomy and relatedness to be contingent on the influence of the level of competence of the entrepreneur.

## 2.8. Interaction of SDT components

Positive perceptions of resource attainability, retention, and development add to the accomplishment of business ownership by validating entrepreneurs' ability to have the necessary resources to operate their business in the way they desire and remain an ongoing concern. Described in detail above, job security is felt in entrepreneurial situations because the business is valued by stakeholders that interact with the entrepreneur, through their venture, to form a sense of relatedness to the community (Randolph-Seng, Mitchell, Marin, & Lee, 2015) and, from our perspective, enhance well-being. Marshall, Meek, Swab & Martin (2020) found support for their model which proposed that greater access to resources is associated with higher levels of multiple indicators of well-being, including happiness, life satisfaction, psychological well-being, and persistence. The RICH provides a sense of access to resources that can help maintain the social environment through business operations these relationships need to thrive and generate positive outcomes. Furthermore, the RICH can relieve the negative tension that can attenuate autonomy (Baumeister & Leary, 1995) by creating a sense of well-being generated by the felt competency resource access grants. In this way, we hypothesize that entrepreneurs' competence should interact with autonomy and relatedness because they cannot be pursued without the wherewithal to pursue resources in the context of entrepreneurship.

- Hypothesis 4a: The RICH will moderate the relationship between job security and job satisfaction such that increases in RICH strengthen the job security – job satisfaction relationship.  
Hypothesis 4b: The RICH will moderate the relationship between autonomy and job satisfaction such that increases in RICH strengthen the autonomy – job satisfaction relationship.  
Hypothesis 5a: The RICH will moderate the relationship between job security and financial well-being such that increases in RICH strengthen the job security – financial well-being relationship.  
Hypothesis 5b: The RICH will moderate the relationship between autonomy and financial well-being such that increases in RICH strengthen the job – security – financial well-being – job security relationship.

Self-determination theory posits that the fulfillment of the three basic psychological needs described herein will result in or accompany well-being, or, more specifically, an environment where thriving for life is possible and encouraged (Ryan & Deci, 2000). The psychological needs described by SDT have been extensively researched (Ryan & Deci, 2017), revealing autonomy, relatedness, and competence as essential to human functioning, consistently intercorrelated, and related to many well-being outcomes, such as happiness, life satisfaction, and vitality in many different contexts. Shir et al. (2019) recently postulated of SDT, that autonomy is a mediator of the effects of entrepreneurship on well-being, suggesting that the interplay between the three primary psychological needs is complicated and in need of further investigation within the context of entrepreneurship.

In answering this call, we sought to identify conditions occurring within the SDT framework, specific to entrepreneurship, wherein competency regarding resources creates an environmental boundary that, when activated, enhances the effects of autonomy and relatedness on well-being factors important to entrepreneurs. In this way, we argue that, at least within the confines of early-stage entrepreneurial ventures, resource accumulation, retention, and development are direct contributors of competency leading to the establishment of environments for entrepreneurs' thriving. Also, the resulting resource stockpile is an important condition for the enhancement of the positive effects desired by the fulfillment of psychological needs, autonomy, and relatedness. Without resources, or milieu conducive to positive resource interaction (i.e., non-loss situations), entrepreneurship does not happen. Without resources, autonomy and relatedness never have the chance to thrive



within the context of entrepreneurship. Without resources, in contexts of entrepreneurship, psychological needs may not be met. Therefore, we expect that the RICH, as representative of an intrinsic competency for positive resource interaction, will relate with both autonomy and job security to affect job satisfaction and financial well-being because without the competence to acquire, protect, and develop resources, the situation for autonomy and job security can cease to exist.

Hypothesis 6a: There will be a three-way interaction between job security, autonomy, and the RICH on job satisfaction such that the RICH will buffer the negative effects of low job security and low autonomy.

Hypothesis 6b: There will be a three-way interaction between job security, autonomy, and the RICH on financial well-being such that the RICH will buffer the negative effects of low job security and low autonomy.

## 2.9. Overview of studies

We tested study hypotheses across two different samples of early-stage entrepreneurs. In Study 1, we tested the first three sets of hypotheses that focused on the relationships between founders' job security, the RICH, and founders' autonomy with the outcome variables of interest; namely, founders' job satisfaction and financial well-being. In Study 2, we replicated and extended these findings by examining the moderating effects of the RICH on study outcome variables. We first examined the correlations among study variables to retest the first three sets of hypotheses that we tested in Study 1. We then examined whether the RICH moderates the relationships between the other two independent variables (i.e., founders' job security and financial well-being) and study outcome variables, expecting that the RICH will strengthen these relationships. Finally, we tested a three-way interaction, hypothesizing that the RICH can buffer the impacts of founders' low job security and low autonomy on study outcomes.

## 3. Study 1

### 3.1. Study 1 method

**Sample and procedure.** We utilized Qualtrics Online Sample, an online panel provider, to identify and collect data from individuals who founded a business within three years of the time of data collection (2017) in the United States. Online panels provide greater access to harder-to-reach sample populations (Porter, Outlaw, Gale, and Cho, 2019) and guarantee that the sample meets the desired qualifications. For our samples, we required the online panel provider to prescreen respondents as business founders that had established their new venture within three years from the time of data collection. Our unique sample of venture-founding entrepreneurs early in the establishment of their new business allowed us to capture information from individuals intimate with the entrepreneurial process.

Data were collected in 2017 at two time points separating independent variables (Time 1; job security, autonomy, and RICH) and dependent variables (Time 2; job satisfaction and financial well-being). We utilized several techniques to enhance the trustworthiness of our data. We removed individuals with unrealistic survey response times (DiSimone, Harms, & DiSimone, 2015), failed quality control checks (e.g., “select ‘agree’ to this question”; Meade & Craig, 2012), or incomplete survey items. The final sample consisted of 83 founders who were majority female (75.90%) and white (68.70%) with an average age of 37.60 years ( $SD = 10.30$ ).

**Measures.** Survey items were measured by asking entrepreneurs how much they agreed or disagreed with an item on a 1–7 scale (1 = “strongly disagree” to 7 = “strongly agree”). To assess the *Resource-induced Coping Heuristic* (RICH;  $\alpha = 0.86$ ), we used the 16-item scale from Lanivich (2015). *Job autonomy* ( $\alpha = 0.67$ ) was assessed using three

items adapted from van Yperen and Hagedoorn (2003): “I can vary how much work I do each day”, “I have control over my business”, and “I set my own work pace”. *Job security* was assessed with a reverse-coded item adapted from [Cavanaugh, Boswell, Roehling, & Boudreau, 2000] “I do not feel secure in this job”. *Job satisfaction* was assessed with one item slightly modified from Camman, Fichman, Jenkins, and Klesh (1983) for use in entrepreneurship research (e.g., Georgellis & Yusuf, 2016): “All in all, I am satisfied with my business.” One-item measures were used to present entrepreneurs with a short survey and increase the chance of survey completion. It is important to note that while one-item measures have been criticized, researchers (e.g., Dierdorff & Ellington, 2008) suggest that these concerns have been overstated. Moreover, single-item measures are common in many fields of study and have been published in leading journals, (e.g., Ciuchta, Letwin, Stevenson, McMahon, & Huvaj, 2018). Finally, *financial well-being* ( $\alpha = 0.85$ ) was assessed with four items: “Owning my business gives me financial security”, “Owning my business provides me with a larger personal income”, “Owning my business provides a chance to build great wealth or a very high income”, and “I am building a business that others can inherit”.

### 3.2. Study 1 results

Descriptive statistics and correlations are depicted in Table 1. Hypotheses 1a and 1b were not supported as autonomy was neither significantly correlated with job satisfaction ( $r = 0.05$ ,  $p = 0.64$ ) nor financial well-being ( $r = 0.13$ ,  $p = 0.23$ ). However, Hypotheses 2a and 2b were supported as job security was positively related to both job satisfaction ( $r = 0.31$ ,  $p < 0.01$ ) and financial well-being ( $r = 0.57$ ,  $p < 0.01$ ). Finally, Hypotheses 3a and 3b were both supported as the RICH was positively correlated with job satisfaction ( $r = 0.40$ ,  $p < 0.01$ ) and financial well-being ( $r = 0.31$ ,  $p < 0.01$ ).

These results suggest that while founders' autonomy was not related to their job satisfaction or financial well-being, that both founders' security and the RICH were related to these outcome variables. One limitation of Study 1 was the modest sample size. Therefore, in our follow-up study (Study 2), we collected data from a larger sample of entrepreneurs to reexamine these relationships and to extend our findings.

## 4. Study 2

### 4.1. Study 2 method

**Sample and procedure.** For Study 2, we again used Qualtrics Online Sample to identify and contact entrepreneurs who had started their business in the United States within three years of data collection (2017). We replicated the procedure outlined for Study 1. The sample for Study 2 consisted of 191 entrepreneurs who were, on average, 37 years of age ( $SD = 11.30$ ), majority female (60.70%), and mostly white (52.90%).

**Measures.** The same measures from Study 1 were used in Study 2 for RICH ( $\alpha = 0.90$ ), job satisfaction, financial well-being ( $\alpha = 0.86$ ), and job autonomy ( $\alpha = 0.57$ ). Job security ( $\alpha = 0.70$ ) was measured via two reverse coded items, “I do not feel secure in this job” and “My career or

**Table 1**  
Study 1 Descriptive statistics.

	1	2	3	4	5
1. RICH	–				
2. Job Satisfaction	0.40**	–			
3. Financial Well-Being	0.31**	0.57**	–		
4. Job Security	0.24*	0.31**	0.28**	–	
5. Autonomy	0.24*	0.05	0.13	0.15	–
Mean	5.55	5.34	5.10	5.46	6.01
SD	0.68	1.25	1.24	1.82	0.87

Notes.

\*\*  $p < 0.01$ ; \*  $p < 0.05$ .

business seems stalled” (Cavanaugh et al., 2000).

#### 4.2. Study 2 results

Descriptive statistics and study correlations are displayed in Table 2. Contrary to the results obtained in Study 1, Hypothesis 1a and 1b were supported as autonomy was positively related to job satisfaction ( $r = 0.27, p < 0.01$ ) and financial well-being ( $r = 0.29, p < 0.01$ ). Additionally, Hypotheses 2a and 2b were supported as job security was positively related to both job satisfaction ( $r = 0.56, p < 0.01$ ) and financial well-being ( $r = 0.49, p < 0.01$ ). Similarly, Hypotheses 3a and 3b were supported as the RICH was significantly and positively correlated with both job satisfaction ( $r = 0.39, p < 0.01$ ) and financial well-being ( $r = 0.52, p < 0.01$ ). Therefore, the results obtained in Study 2 were similar, but not identical, to the results obtained in Study 1. The two exceptions were that Hypotheses 1a and 1b were not supported in Study 1 but were supported in Study 2, possibly due to the smaller sample size in Study 1.

To extend our findings from Study 1, we ran a series of moderated regression analyses in Study 2 to examine whether the RICH variable would moderate the relationships between the independent variables (i.e., autonomy and job security) and the dependent variables (i.e., job satisfaction and financial well-being). To test these hypotheses, we placed the corresponding independent variable and the moderator, RICH, into the first step of the regression equation and then inserted the product term of these variables (i.e., the respective independent variable X RICH) into the second step of the regression equation. The results for job satisfaction are depicted in Table 3 and the results for financial well-being are depicted in Table 4.

Hypothesis 4a was supported as RICH moderated the relationship between job security and job satisfaction (Table 3, Model 1;  $\beta = -0.24, p < 0.01$ ). Depicted in Fig. 2, entrepreneurs reported the lowest levels of job satisfaction when they perceived low job security and had low scores on the RICH. However, high scores on the RICH buffered the negative effects of low job security. Despite some experiencing low levels of job security, entrepreneurs with high RICH scores reported higher levels of job satisfaction. Conversely, Hypothesis 4b was not supported as RICH did not moderate the relationship between autonomy and job satisfaction (Table 3, Model 2;  $\beta = -0.01, p = 0.96$ ).

Hypotheses 5a and 5b proposed that job security and autonomy, respectively, would interact with the RICH to affect financial well-being. We tested these hypotheses the same way that we tested Hypotheses 4a and 4b. These results are depicted in Table 4, Models 4 (job security) and 5 (autonomy). Hypothesis 5a was supported as the RICH moderated the relationship between job security and financial well-being ( $\beta = -0.16, p < 0.01$ ). This latter relationship is depicted in Fig. 3 and is similar in form to the relationship depicted in Fig. 1. However, Hypothesis 5b was not supported as RICH did not moderate the autonomy – financial well-being relationship ( $\beta = -0.15, p = 0.23$ ).

Finally, Hypotheses 6a and 6b proposed a three-way interaction between job security, autonomy, the RICH, and each of the dependent variables. To test these hypotheses, we composed two regression equations, one for each dependent variable. In the first step of each regression

**Table 2**  
Study 2 Descriptive statistics.

	1	2	3	4	5
1. RICH	–				
2. Job Satisfaction	0.38**	–			
3. Financial Well-Being	0.52**	0.68**	–		
4. Job Security	0.28**	0.56**	0.49**	–	
5. Autonomy	0.31**	0.27**	0.29**	0.04	–
Mean	5.36	5.18	4.73	4.92	5.81
SD	0.77	1.51	1.44	1.57	0.86

Notes.

\*\*  $p < 0.01$ .

**Table 3**

Moderated regression results: Job satisfaction as the outcome variable.

	Model 1	Model 2	Model 3
Step 1			
Intercept	0.340 (0.620)	0.025 (0.854)	–1.082 (0.736)
Job Security	0.477** (0.058)		0.488** (0.057)
Autonomy		0.301* (0.122)	0.351** (0.104)
RICH	0.465** (0.118)	0.635** (0.136)	0.339** (0.120)
R <sup>2</sup>	0.369	0.170	0.406
Adjusted R <sup>2</sup>	0.363	0.161	0.396
Step 2			
Intercept	–5.886** (1.972)	–0.214 (4.562)	–5.746 (4.050)
Job Security	1.73** (0.382)		1.556** (0.468)
Autonomy		0.342 (0.778)	–0.001 (0.673)
RICH	1.648** (0.375)	0.680 (0.852)	1.499 (0.803)
Job Security X Autonomy			0.048 (0.066)
Job Security X RICH	–0.235** (0.071)		–0.254** (0.073)
Autonomy X RICH		–0.008 (0.143)	0.021 (0.123)
R <sup>2</sup>	0.404	0.170	0.443
Adjusted R <sup>2</sup>	0.395	0.157	0.425
R <sup>2</sup> Change	0.035**	0.000	0.037**
Step 3			
Intercept			31.406* (12.971)
Job Security			–5.658* (2.442)
Autonomy			–6.317** (2.201)
RICH			–5.601* (2.488)
Job Security X Autonomy			1.271** (0.412)
Job Security X RICH			1.110* (0.459)
Autonomy X RICH			1.220** (0.416)
Job Security X Autonomy X RICH			–0.230** (0.076)
R <sup>2</sup>			0.469
Adjusted R <sup>2</sup>			0.449
R <sup>2</sup> Change			0.026**

Notes. \*\*  $p < 0.01$ ; \*  $p < 0.05$ . Unstandardized coefficients are presented with standard errors in parentheses.

equation, we added the two independent variables and the moderator, RICH. In the second step, we added all possible two-way product terms of these variables (i.e., all three two-way interaction terms) and in the third step, we added the three-way interaction term (i.e., product term of all three variables). The results for job satisfaction are shown in Table 3, Model 1 and for financial well-being, in Table 4, Model 6. Hypothesis 5a was supported as the three-way interaction with job satisfaction was significant ( $\beta = -0.23, p < 0.01$ ). This relationship is depicted in Fig. 4. As can be seen, entrepreneurs reported the lowest levels of job satisfaction when they experienced low job security and low autonomy as well as had low scores on the RICH. However, the RICH buffered the negative effects of low autonomy and low job security. Similarly, Hypotheses 5b was supported as the three-way interaction with financial well-being was significant ( $\beta = 0.18, p < 0.01$ ). This relationship is depicted in Fig. 5. The pattern was quite similar to what we observed in Fig. 4. One exception was entrepreneurs clearly enjoyed the highest levels of financial well-being when they had high job security, high autonomy, and high RICH scores.

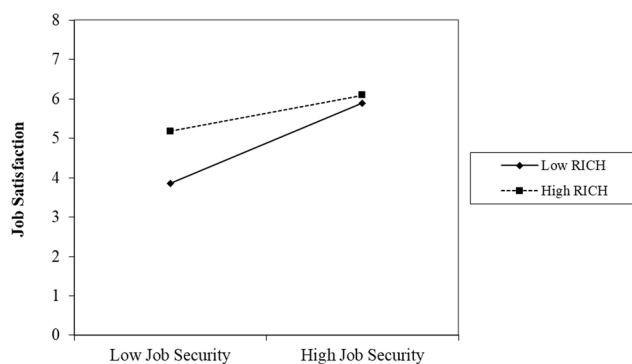
**Table 4**  
Moderated regression results: Financial well-being as the outcome variable.

	Model 4	Model 5	Model 6
<b>Step 1</b>			
Intercept	-1.123 (0.580)	-1.426 (0.755)	-2.215** (0.695)
Job Security	0.339** (0.054)		0.348** (0.054)
Autonomy		0.234* (0.108)	0.270** (0.098)
RICH	0.780** (0.110)	0.894** (0.120)	0.683** (0.114)
R <sup>2</sup>	0.398	0.290	0.421
Adjusted R <sup>2</sup>	0.391	0.283	0.412
<b>Step 2</b>			
Intercept	-5.462** (1.869)	-6.165 (4.022)	-9.743* (3.870)
Job Security	1.212** (0.3620)		0.990* (0.447)
Autonomy		1.046 (0.686)	0.790 (0.643)
RICH	1.604** (0.355)	1.784* (0.751)	2.355** (0.767)
Job Security X Autonomy			0.044 (0.063)
Job Security X RICH	-0.164* (0.067)		-0.170* (0.070)
Autonomy X RICH		-0.151 (0.126)	-0.139 (0.117)
R <sup>2</sup>	0.416	0.296	0.445
Adjusted R <sup>2</sup>	0.407	0.285	0.426
R <sup>2</sup> Change	0.019**	0.005	0.023
<b>Step 3</b>			
Intercept			19.900 (12.488)
Job Security			-4.766* (2.351)
Autonomy			-4.250* (2.119)
RICH			-3.310 (2.395)
Job Security X Autonomy			1.020* (0.396)
Job Security X RICH			0.918* (0.442)
Autonomy X RICH			0.818* (0.401)
Job Security X Autonomy X RICH			-0.183* (0.074)
R <sup>2</sup>			0.463
Adjusted R <sup>2</sup>			0.442
R <sup>2</sup> Change			0.018*

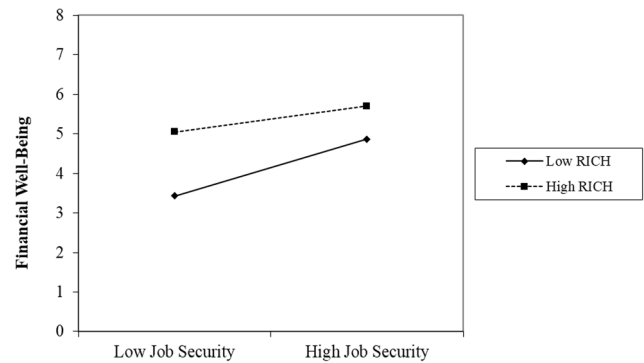
Notes. \*\*p < 0.01; \*p < 0.05. Unstandardized coefficients are presented with standard errors in parentheses.

## 5. Discussion

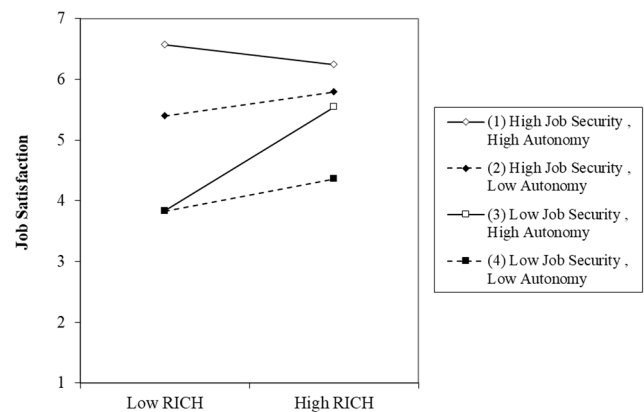
Recognizing that entrepreneurs report higher job satisfaction than organizational employees (Bradley & Roberts, 2004), we focused on why these relationships exist. We found that entrepreneurship is, through the fulfillment of the three basic psychological needs posited in



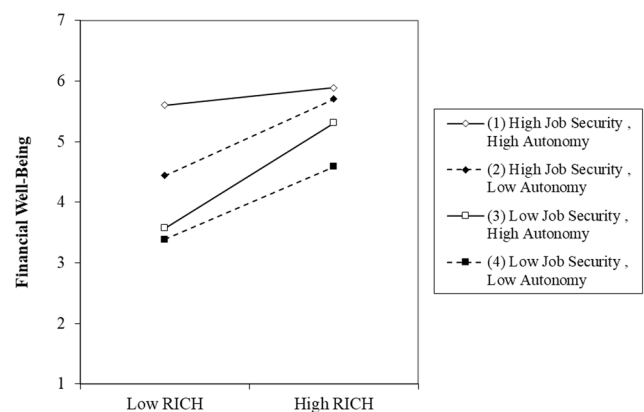
**Fig. 2.** RICH moderating the relationship between job security and job satisfaction.



**Fig. 3.** RICH moderating the relationship between job security and financial well-being.



**Fig. 4.** Three-way interaction between autonomy, job security, and RICH on job satisfaction. Note. For ease of interpretation, the moderator, RICH, is presented on the X axis.



**Fig. 5.** Three-way interaction between autonomy, job security, and RICH on financial well-being. Note. For ease of interpretation, the moderator, RICH, is presented on the X axis.

SDT, a context conducive to enhanced aspects of well-being like job satisfaction and financial well-being. This is especially interesting considering the context of entrepreneurs in their first three years, a critical time period for understanding entrepreneurial satisfaction (Cooper & Artz, 1995). A major contribution of this study is evidence for why new entrepreneurs can have improved well-being despite added potential stressors. This extends recent findings showing that individuals switching from organizational employment to business ownership report higher well-being (Nikolova, 2019).

Also, we demonstrate the RICH to be a salient and meaningful competency important for establishing a context favorable for entrepreneurs' well-being. That is, competency regarding resources is the primary mechanism by which entrepreneurship plays a role in well-being. It is essential because the ability to procure, develop, and protect resources adds a necessary coping mechanism for controlling outcomes in novel, opaque, and uncertain environments (Lanivich, 2015). As such, the RICH is a significant boundary condition of both financial well-being and job satisfaction.

Additionally, our results suggest that autonomy and job security are more likely to enhance job satisfaction and financial well-being when the environmental context includes RICH as a competency. In other words, entrepreneurs' environment for thriving with regard to job satisfaction and financial well-being is affected by the interaction of the three factors proposed in SDT. By exemplifying the moderating effects of the three-way interaction between the RICH, autonomy, and job security on job satisfaction and financial well-being, we show that competence may be the dominant factor in realizing SDT-predicted outcomes for entrepreneurs in early-stage ventures. This is important because well-being is a multi-faceted phenomenon that lacks full understanding in the context of entrepreneurship. Our exploration of the interactions of three primary factors associated with SDT shows that each factor has a complex, interactive relationship with the other facets of entrepreneurial motivation. This is different from Shir et al. (2019) wherein they found autonomy to be an important mediator for the relationship between entrepreneurship and well-being. However, we believe our results are complementary to work recently published regarding the motivations and well-being of entrepreneurs. For example, in alignment with Shir et al. (2019), we show that entrepreneurship itself has properties conducive to the fulfillment of the basic psychological needs posited in SDT, which means that some individuals will be motivated to work at entrepreneurship for the sake of intrinsic sources of well-being (Olafsen, Deci, & Halvari, 2018). In doing so, entrepreneurs may find that working within a context of entrepreneurship can add meaning to their life beyond the apparent economic and financial drivers because the milieu itself, in part, adds to the satisfaction of needs for autonomy, relatedness, and competence.

### 5.1. Practical implications

The findings presented here are important for entrepreneurs in at least three ways. First, our evidence complements the idea that entrepreneurship provides a context conducive to well-being. In other words, entrepreneurs may experience well-being because of their entrepreneurship. Second, our research highlights the effects of job security on entrepreneurs' well-being. Concurrent with previous studies, our results suggest that entrepreneurs should knowingly account for their threshold of job security as a means of predicting well-being during entrepreneurship. Third, we add evidence for the importance of the RICH in the entrepreneurial mindset (Moore, McIntyre & Lanivich, 2020); the resource-induced coping heuristic (Lanivich, 2015) is critical for entrepreneurship. Poised in this study as a competency, entrepreneurs need to be intimately aware of their resources and resource potential.

### 6. Limitations

Our research is not without limitations. First, we used only subjective measures in our study. However, this is the most appropriate manner to understand psychological constructs like individual feelings of autonomy and well-being (Wolf, 1978). Furthermore, this limitation is minimized with findings that subjective and objective measures of well-being are highly correlated (Oswald & Wu, 2010). Second, data were self-reported and therefore common method bias could be a concern. However, common method variance does not often result in the detection of significant moderator effects, as was the case in our study (Siemens, Roth, & Oliveira, 2010). Third, inferences regarding temporal

precedence are limited given the mostly cross-sectional aspects of our research. It is important to note here that recent research argues that critiques of cross-sectional designs have been overstated (e.g., Spector, 2019). Although we utilized a time-lag design to explore some of our variables, further studies should utilize longitudinal designs to assess all predictor and outcome variables to enhance our understanding of these relationships. Third, the small sample size in Study 1 may account for the low reliability observed, as well as lack of support for Hypotheses 1a and 1b, which were supported in Study 2. Relatedly, the sample size used to conduct moderated regression in Study 2 was smaller than is typical. Future research should replicate this study with a larger sample of entrepreneurs.

Additionally, our studies used one-item measures as well as abbreviated scales for some variables. This allowed us to present entrepreneurs with a survey adapted to their busy lifestyle, thereby increasing the chance of participants completing the survey. We acknowledge that shorter scales can affect scale reliability. However, this was balanced with the competing need of securing entrepreneurs' participation. Moreover, it is important to recognize that single-item measures are common in other fields of study and have been published in leading entrepreneurship journals (e.g., Ciuchta et al., 2018; Yamakawa, Peng, & Deeds, 2015).

Lastly, both a strength and limitation of this research is the focus on entrepreneurs who started their business within the three years of our data collection (2017). Although this yielded valuable insights for a population engaged in entrepreneurial activity, the trade-off may be less generalizable results to long-term business owners. However, we believe the meaningfulness of our sample of early-stage entrepreneurs outweighs the limitation of less generalizability.

### 6.1. Future research directions

It is becoming clear that well-being is significant not only for individuals, but for society (Diener & Seligman, 2004) because it is associated with a wide variety of positive outcomes, such as good health and higher work performance (Diener, 2000; Weiss, Bates, & Luciano, 2008). In this way, the compounding evidence, including our findings regarding the importance of the RICH for establishing contexts of well-being, suggest that entrepreneurship and the functions that stem from entrepreneurial actions and processes have deep connections with human desires and motivations that reach beyond sustenance and financial gain. Such aspects of the entrepreneurial context deserve future attention. One of the specific predictions of SDT is that contexts wherein autonomy, competence, and relatedness are supported promote the development of more effective means of realizing well-being. While outside the scope of this investigation, future research should investigate the recursive implications of SDT factors and their ongoing effects on the dynamic processes that affect entrepreneurs and their ventures over time.

Future research should investigate differences in the way the psychological needs of SDT are satisfied by fundamentally-different populations of entrepreneurs. For example, the basic psychological needs fulfillment mechanisms that lead to satisfaction in one group of entrepreneurs may be different for another group (e.g., nationality, religion, gender). Opportunistic entrepreneurs are usually commercially-oriented and working to earn money, power, prestige, and/or status. Necessity entrepreneurs are survival-oriented and seek to avoid failure and destitution (Carsrud & Brännback, 2011). While the needs themselves may not change, the expectation for the level of fulfillment may, and the means for establishing an environment conducive to the level of desired, or known, fulfillment can be different.

### 7. Conclusions

Entrepreneurs' well-being is an essential, non-financial component to positive entrepreneurship outcomes. Motivating factors outlined in



SDT contribute to a milieu conducive to entrepreneurs' well-being; further investigation of interplay of autonomy, security, and competence is needed for a fuller understanding of entrepreneurship. The RICH is a powerful moderator in contexts of uncertainty; more research is needed to define the breadth and depth of effects from resource-induced coping heuristics on entrepreneurial phenomena.

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## References

- Abreu, M., Oner, O., Brouwer, A., & van Leeuwen, E. (2018). Well-being effects of self-employment: A spatial inquiry. *Journal of Business Venturing*, 34, 589–607.
- Avey, J. B., Avolio, B. J., Crossley, C. G., & Luthans, F. (2009). Psychological ownership: Theoretical extensions, measurement and relation to work outcomes. *Journal of Organizational Behavior*, 30, 173–191.
- Baumeister, R. F., & Leary, M. R. (1995). The need to belong: Desire for interpersonal attachments as a fundamental human motivation. *Psychological Bulletin*, 117, 497–529.
- Bennett, A. A., Lanivich, S. E., Akbulut, Y., & Gharagozloo, M. M. (2017). The business owner balancing act: Exploring work-life balance in entrepreneurs. In J. M. Nicklin (Ed.), *Work-life Balance in the 21st Century* (pp. 55–78). NY: Nova Science Publishers.
- Bjørnskov, C., & Foss, N. (2020). Well-being and entrepreneurship: Using establishment size to identify treatment effects and transmission mechanisms. *PLoS ONE*, 15, 1–22.
- Bliese, P. D., Edwards, J. R., & Sonnentag, S. (2017). Stress and well-being at work: A century of empirical trends reflecting theoretical and societal influences. *Journal of Applied Psychology*, 102, 389–402.
- Bradley, D. E., & Roberts, J. A. (2004). Self-employment and job satisfaction: Investigating the role of self-efficacy, depression, and seniority. *Journal of Small Business Management*, 42(1), 37–58.
- Brüggen, C., Hogreve, J., Holmlund, M., Kabadayi, S., & Löfgren, M. (2017). Financial well-being: A conceptualization and research agenda. *Journal of Business Research*, 79, 228–237.
- Buttner, E. H. (1992). Entrepreneurial stress: Is it hazardous to your health? *Journal of Managerial Issues*, 4, 223–240.
- Carsrud, A., & Brännback, M. (2010). Entrepreneurial motivations: What do we still need to know? *Journal of Small Business Management*, 49, 9–26.
- Camman, C., Fichman, M., Jenkins, G. D., & Klesh, J. (1983). Michigan Organizational Assessment Questionnaire. In S. E. Seashore, E. E. Lawler, P. H. Mirvis, & C. Cammann (Eds.), *Assessing organizational change: A guide to methods, measures, and practices* (pp. 71–138). New York: Wiley-Interscience.
- Cavanaugh, M. A., Boswell, W. R., Roehling, M. V., & Boudreau, J. W. (2000). An empirical examination of self-reported work stress among US managers. *Journal of applied psychology*, 85(1), 65–74.
- Ciuchta, M. P., Letwin, C., Stevenson, R. M., McMahon, S., & Huvaj, M. N. (2018). Betting on the coachable entrepreneur: Signaling and social exchange in entrepreneurial pitches. *Entrepreneurship Theory and Practice*, 42(6), 860–885. <https://doi.org/10.1177/1042258717725520>.
- Coad, A., & Binder, M. (2014). Causal linkages between work and life satisfaction and their determinants in a structural VAR approach. *Economics Letters*, 124(2), 263–268.
- Cooper, A. C., & Artz, K. W. (1995). Determinants of satisfaction for entrepreneurs. *Journal of Business Venturing*, 10(6), 439–457.
- Deci, E. L., Olafsen, A. H., & Ryan, R. M. (2017). Self-determination theory in work organizations: The state of a science. *Annual Review of Organizational Psychology and Organizational Behavior*, 4, 19–43.
- Deci, E. L., & Ryan, R. M. (1995). Human autonomy: The basis for true self-esteem. In M. Kerns (Ed.), *Efficacy, Agency, and Self-esteem*. New York: Plenum.
- Deci, E. L., & Ryan, R. M. (2017). *Self-Determination Theory: Basic Psychological Needs in Motivation, Development, and Wellness*. New York, NY: Guilford Press.
- DeSimone, J. A., Harms, P. D., & DeSimone, A. J. (2015). Best practice recommendations for data screening. *Journal of Organizational Behavior*, 36, 171–181.
- Diener, E. (2000). Subjective well-being: The science of happiness, and a proposal for a national index. *American Psychologist*, 55, 34–43.
- Diener, E., & Seligman, M. E. P. (2004). Beyond money: Toward an economy of well-being. *Psychological Science in the Public Interest*, 5, 1–31.
- Dierdorff, E. C., & Ellington, J. K. (2008). It's the nature of the work: Examining behavior-based sources of work–family conflict across occupations. *Journal of Applied Psychology*, 93, 883–892.
- Georgellis, Y., & Yusuf, A. (2016). Is becoming self-employed a panacea for job satisfaction? Longitudinal evidence from work to self-employment transitions. *Journal of Small Business Management*, 54, 53–76.
- Gumpert, D. E., & Boyd, D. P. (1983). The loneliness of the small-business owner. In H. Levinson (Ed.), *Designing and Managing Your Career*. Boston: Harvard Business School.
- Hackman, R. J., & Oldham, G. R. (1975). Development of the job diagnostic survey. *Journal of Applied Psychology*, 60, 159–170.
- Herzberg, F., Mausner, B., & Synderman, B. S. (1959). *The motivation to work*. New York: Wiley & Sons.
- Hobfoll, S. E. (2009). Social support: The movie. *Journal of Social and Personal Relationships*, 26, 93–101.
- Hobfoll, S. E., Freedy, J., Lane, C., & Geller, P. (1990). Conservation of social resources: Social support resource theory. *Journal of Social and Personal Relationships*, 7, 465–480.
- Holding, A., Hope, N., Verner-Fillion, J., & Koestner, R. (2019). In good time: A longitudinal investigation of trait self-control in determining changes in motivation quality. *Personality and Individual Differences*, 139, 132–137.
- Hundley, G. (2001). Why and when are the self-employed more satisfied with their work? *Industrial Relations*, 40, 293–316.
- Joo, S., & Grable, J. E. (2004). An exploratory framework of the determinants of financial satisfaction. *Journal of Family and Economic Issues*, 25(1), 25–50.
- Kibler, E., Wincent, J., Kautonen, T., Cacciotti, G., & Obschonka, M. (2018). Can prosocial motivation harm entrepreneurs' subjective well-being? *Journal of Business Venturing*.
- Kuratko, D., Hornsby, J., & Naffziger, D. (1997). An examination of owner's goals in sustaining entrepreneurship. *Journal of Small Business Management*, 35, 24–33.
- Lanivich, S. E. (2011). Use the RICH: Development and validation of the resource-induced coping heuristic inventory for entrepreneurship. *Frontiers of Entrepreneurship Research*, 31, 225–239.
- Lanivich, S. E. (2015). The RICH entrepreneur: Using conservation of resources theory in contexts of uncertainty. *Entrepreneurship Theory and Practice*, 39(4), 863–894.
- Loscocco, K. A., & Roschelle, A. R. (1991). Influences on the quality of work and non-work life: Two decades in review. *Journal of Vocational Behavior*, 39, 185–225.
- Mandel, M. J. (1996). *The High-Risk Society: Peril and Promise in the New Economy*. New York: Times Business.
- Marshall, D., Meek, W., Swab, G., & Markin, E. (2020). Access to resources and entrepreneurial well-being: A self-efficacy approach. *Journal of Business Research*, 120, 203–212.
- Maslow, A. H. (1968). Some educational implications of the humanistic psychologies. *Harvard Education Review*, 38, 685–696.
- Mead, A. W., & Craig, S. B. (2012). Identifying careless responses in survey data. *Psychological Methods*, 17, 437–455.
- Moore, C. B., McIntyre, N. H., & Lanivich, S. E. (in press). ADHD-Related Neurodiversity and the Entrepreneurial Mindset. *Entrepreneurship Theory and Practice*. doi: 10.1177/1042258719890986.
- Nikolaev, B., Shir, N., & Wiklund, J. (2020). Dispositional positive and negative affect and self-employment transitions: The mediating role of job satisfaction. *Entrepreneurship Theory and Practice*, 44(3), 451–474.
- Nikolova, M. (2019). Switching to self-employment can be good for your health. *Journal of Business Venturing*, 34(4), 664–691.
- Nordenmark, M., Vinberg, S., & Strandh, M. (2012). Job control and demands, work-life balance and well-being among self-employed men and women in Europe. *Vulnerable Groups & Inclusion*, 3, 1–18.
- Olafsen, A., Deci, E., & Halvari, H. (2018). Basic psychological needs and work motivation: A longitudinal test of directionality. *Motivation and Emotion*, 42, 178–189.
- Oswald, A. J., & Wu, S. (2010). Objective confirmation of subjective measures of human well-being: Evidence from the USA. *Science*, 327(5965), 576–579.
- Patrick, H., Canevello, A., Knee, C. R., & Lonsbary, C. (2007). The role of need fulfillment in relationship functioning and well-being: A self-determination theory perspective. *Journal of Personality and Social Psychology*, 92, 434–457.
- Pierce, J. L., Kostova, T., & Dirks, K. T. (2001). Toward a theory of psychological ownership in organizations. *Academy of Management Review*, 26(2), 298–310.
- Porter, C. O., Outlaw, R., Gale, J. P., & Cho, T. S. (2019). The use of online panel data in management research: A review and recommendations. *Journal of Management*, 45, 319–344.
- Prottas, D. J., & Thompson, C. A. (2006). Stress, satisfaction, and the work-family interface: A comparison of self-employed business owners, independents, and organizational employees. *Journal of Occupational Health Psychology*, 11, 366–378.
- Randolph-Seng, B., Mitchell, R. K., Marin, A., & Lee, J. H. (2015). Job security and entrepreneurship: Enemies or Allies? *The Journal of Applied Management and Entrepreneurship*, 20, 24–49.
- Ryan, R. M., & Deci, E. L. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American Psychologist*, 55(1), 68.
- Ryan, R., & Deci, E. (2017). *Self-determination Theory: Basic Psychological Needs in Motivation, Development, and Wellness*. New York: Guilford Publications.
- Ryff, C. D. (2019). Entrepreneurship and eudaimonic well-being: Five venues for new science. *Journal of Business Venturing*, 34(4), 646–663.
- Schjoedt, L. (2009). Entrepreneurial job characteristics: An examination of their effect on entrepreneurial satisfaction. *Entrepreneurship Theory and Practice*, 33, 619–644.
- Sevä, I., & Öun, I. (2015). Self-employment as a strategy for dealing with the competing demands of work and family? The importance of family/lifestyle motives. *Gender, Work and Organization*, 22, 256–272.
- Shane, S., Locke, E., & Collins, C. J. (2003). Entrepreneurial motivation. *Human Resource Management Review*, 13, 257–280.
- Shepherd, D., & Patelt, H. (2017). Researching entrepreneurial decision making. In *Trailblazing in Entrepreneurship* (pp. 257–285). Cham, Switzerland: Palgrave Macmillan.
- Shir, N., Nikolaev, B., & Wincent, J. (2019). Entrepreneurship and well-being: The role of psychological autonomy, competence, and relatedness. *Journal of Business Venturing*, 34(5), 1–17.
- Siemsen, E., Roth, A., & Oliveira, P. (2010). Common method bias in regression models with linear, quadratic, and interaction effects. *Organizational Research Methods*, 13, 456–476. <https://doi.org/10.1177/1094428109351241>.

- Spector, P. E. (2019). Don't cross me: Optimizing the use of cross-sectional designs. *Journal of Business and Psychology*, 34(2), 125–137. <https://doi.org/10.1007/s10869-018-09613-8>.
- Stephan, U. (2018). Entrepreneurs' mental health and well-being: A review and research agenda. *Academy of Management Perspectives*, 32, 290–322.
- Tetrick, L. E., Slack, K. J., Silva, N. D., & Sinclair, R. R. (2000). A comparison of the stress-strain process for business owners and non-owners: Differences in job demands, emotional exhaustion, satisfaction, and social support. *Journal of Occupational Health Psychology*, 5, 464–476.
- Uy, M. A., Foo, M.-D., & Song, Z. (2013). Joint effects of prior start-up experience and coping strategies on entrepreneurs' psychological well-being. *Journal of Business Venturing*, 28, 583–597.
- Van Gelderen, M. (2016). Entrepreneurial autonomy and its dynamics. *Applied Psychology: An International Review*, 65, 541–567.
- Van Geelderden, M., & Jansen, P. G. W. (2006). Autonomy as a startup motive. *Journal of Small Business and Enterprise Development*, 13, 23–32.
- White, R. (1959). Motivational reconsidered: The concept of competence. *Psychological Review*, 66, 297–333.
- Wiklund, J., Nikolaev, B., Shir, N., Foo, M., & Bradley, S. (2019). Entrepreneurship and well-being: Past, present, and future. *Journal of Business Venturing*, 24, 579–588.
- Weiss, A., Bates, T. C., & Luciano, M. (2008). Happiness is a personal(ity) thing: The genetics of personality and wellbeing in a representative sample. *Psychological Science*, 19(3), 205–210.
- Wolf, M. M. (1978). Social validity: The case for subjective measurement or how applied behavior analysis is finding its heart. *Journal of Applied Behavior Analysis*, 11(2), 203–214.
- Yamakawa, Y., Peng, M. W., & Deeds, D. L. (2015). Rising from the ashes: Cognitive determinants of venture growth after entrepreneurial failure. *Entrepreneurship Theory and Practice*, 39(2), 209–236.

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