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Financial stress and quit intention: the mediating role of entrepreneurs' affective commitment

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Abstract

One primary reason why entrepreneurs abandon their entrepreneurial goals is due to pressing financial difficulties. In one experimental and two field studies, we investigated the relationship between entrepreneurs' financial stress and their intention to quit their businesses. In line with the challenge—hindrance stressor (CHS) framework, all three studies showed a positive link between financial stress and quit intention, both concurrently and over time. Furthermore, drawing on self-determination theory (SDT), we found support for affective commitment (but not continuance commitment) to the entrepreneurial endeavors as a mediator of the relationship. The findings provide novel insights into financial stress as a relevant entrepreneurial hindrance stressor and the role of the emotional bond formed (and dissolved) between entrepreneurs and their jobs as the mediating mechanism. Practical suggestions include considering the affective commitment levels of entrepreneurs to enhance consultancy and decision-making in entrepreneurship.

Keywords Entrepreneurship · Financial stress · Challenge-hindrance stressor · Job commitment · Ouit intention

Unexpected turns are commonplace in entrepreneurship. In the best-case scenario, new opportunities arise that benefit the company's wealth. However, if things go awry (e.g., when an important client is lost, the price of raw materials skyrocket, or a pandemic roams the world), financial problems may develop and endanger business progress and success (Stephan, 2018). Financial struggles often obstruct business

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development, posing difficulties for entrepreneurs to pay their bills and invest in new materials (Gorgievski et al., 2010). If financial problems accumulate, entrepreneurs may even consider quitting their businesses (Gorgievski et al., 2010).

The intention to quit refers to an entrepreneur's desire or goal to give up on the business, either at the current moment or later. Considering quitting the business in response to financial stress is not necessarily a poor decision as it may prevent further economic loss (Shepherd et al., 2015; Wennberg et al., 2010). However, entrepreneurs sacrifice money, time, and energy to get their businesses off the ground. They have often formed close bonds with their ventures and associated tasks, making exiting a life-changing event (Jenkins & Byrne, 2020; Kleine et al., 2023; Lee et al., 2022). In addition, entrepreneurial businesses contribute to a society's economic prosperity by creating jobs and stimulating innovation (Zahra & Wright, 2016), making premature business exits potentially detrimental from a societal perspective. Understanding the factors that predict the intention to quit enables strategic planning for a potential entrepreneurial exit and can aid in preventing it when it is not (yet) warranted.

Drawing on the challenge-hindrance stressor (CHS) framework (Cavanaugh et al., 2000), we propose that business-related financial stress acts as an entrepreneurial hindrance stressor, which heightens strain without promoting growth or development. In line with its role as a hindrance stressor, financial stress is proposed to predict entrepreneurs' intentions to exit their businesses (Lindblom et al., 2020b; Shahid & Kundi, 2021). We argue that this relationship is mediated through entrepreneurs' affective commitment to their entrepreneurial endeavors. Specifically, based on self-determination theory (SDT; Gagné & Deci, 2005), we argue that financial stress compromises entrepreneurs' affective commitment through a decrease in their sense of autonomy (Schummer et al., 2019). Reducing their affective commitment in response to financial stress may help entrepreneurs regulate the negative emotions triggered by financial difficulties and the accompanying decrease in their sense of autonomy (Shepherd et al., 2011). The role of commitment has become a subject of increasing interest in the entrepreneurship literature (e.g., Gabay-Mariani & Adam, 2020; Gabay-Mariani & Boissin, 2021; Mignonac et al., 2015; Mohamed & Karoui Zouaoui, 2021; Salisu et al., 2020; Schummer et al., 2019; St-Jean et al., 2023; Tasnim et al., 2014; Valéau et al., 2024). However, we have limited insight into the role of affective commitment in explaining the relationship between entrepreneurial stressors and quit intention.

With the current research, we aim to contribute to entrepreneurial stress research and counseling practice in three ways. First, by focusing on the financial stress – quit intention relationship, we meet the call for research on the relationship between stressors unique to the entrepreneurial context and entrepreneurial outcomes (Lerman et al., 2021), thus potentially enriching our understanding of entrepreneurial stress reactions. Second, by investigating the mediating role of commitment to the entrepreneurial endeavor, we illuminate the cognitive–emotional mechanism that explains the effects of financial stress on entrepreneurs' quit intention. Understanding the relevance of commitment may also help develop effective counseling strategies that target entrepreneurial (over)commitment in response to exposure to entrepreneurial stressors (Williamson et al., 2021). Third, to the best of our knowledge, no insight exists into the time-lagged relationship between financial stress, entrepreneurial



commitment, and quit intention; however, research revealed that hindrance stressors influence work-related outcomes across several weeks to months (Meier & Spector, 2013; St-Jean et al., 2023). Accordingly, this study investigates the time-lagged effects of financial stress on quit intention, thus providing preliminary insight into how entrepreneurial stressors are associated with quit intention over time.

Business financial stress as a hindrance stressor predicting quit intention

Perceived financial stress occurs when business-related financial problems accumulate or when future financial crises are expected (Schieman & Young, 2011). Financial problems result from internal (e.g., financial fail decisions) or external (e.g., economic crises) conditions. Entrepreneurs experience finance-related stress due to low working capital, a shortage of additional collateral for further bank debt, and constant pressure to pay interest, installments, salary, rent, and tax liabilities (Gautam & Gautam, 2023).

Entrepreneurs' reactions to financial stress may be explained by adopting the challenge-hindrance stressor (CHS) framework (Cavanaugh et al., 2000) to the entrepreneurship context. The CHS framework distinguishes between challenge stressors as promoting and hindrance stressors as constraining personal and professional growth and achievement. Financial stress qualifies as a work-related hindrance stressor relevant to the entrepreneurial domain because it involves "excessive or undesirable constraints that interfere with or hinder an individual's ability to achieve valued goals" (Cavanaugh et al., 2000, p. 67). Meta-analytic evidence exists for a negative link between hindrance stressors and entrepreneurs' well-being (Lerman et al., 2021). However, the literature has covered generic hindrance stressors (e.g., role ambiguity and role conflict) and, thus, is relatively mute regarding stressors specific to the entrepreneurial context.

According to the CHS framework, the link between financial stress and quit intention may be explained by the tendency to avoid stressors that thwart personal growth and development (Cavanaugh et al., 2000). The experience of financial stress as a hindrance stressor may trigger the motivation to move away from the source of the stress, that is, to quit the business. Indeed, researchers have found evidence for links between stressors particularly relevant to entrepreneurs, such as loss of work routine, increasing work pressure, and uncertainty, with entrepreneurial strain (Arshi et al., 2021). In addition, some research has highlighted the adverse consequences of financial stress on entrepreneurs' health and well-being (Annink et al., 2016; Lek et al., 2020; Xu & Jin, 2022) and considerations to quit the business (Callanan & Zimmerman, 2016; Gorgievski et al., 2010). Based on the CHS framework and previous research, we propose:

Hypothesis 1 The experience of business-related financial stress is positively related to entrepreneurs' quit intention.



In addition to understanding the direct link between the experience of financial stress and entrepreneurs' quit intention, we seek to provide insight into the mechanism that explains this relationship. In the following section, we contextualize the role of commitment to the entrepreneurial endeavors as a mediator between the experience of financial stress and quit intention.

The mediating role of commitment to the entrepreneurial endeavor

Occupational commitment refers to an attitude or mindset regarding a person's attachment to their job (Meyer et al., 1993). The original three-component model of commitment by Meyer and Allen (1987, 1991) differentiates between affective, normative, and continuance commitment. Affective and normative commitment have been found to be substantially correlated (Meyer et al., 2002). In the current research, we focus on affective and continuance commitment based on the two-dimensional commitment concept (with an instrumental and an affective component, Cohen, 2007). Affective occupational commitment refers to the emotional attachment to an occupation. Individuals who experience high levels of affective commitment stay in a job because they enjoy it and have a strong connection to it. Continuance commitment refers the perceived costs of leaving a job. People who score high on continuance commitment may feel like they need to stay in a job, for example, because they lack alternatives or have invested a lot into developing a specific skill set required for the job they currently have (Meyer & Allen, 1991).

Based on the CHS framework and the antecedents and consequences of role stress proposed by Schaubroeck et al. (1989), Podsakoff et al. (2007) developed a conceptual framework that explains the relationship of stressors with turnover intention. Specifically, the authors outline how the negative emotions elicited by hindrance stressors enhance disengagement tendencies that manifest in decreased commitment, which, in turn, may lead to the development of withdrawal intentions. Not all aspects of commitment seem equally important as mediators of the relationship between stressors and work outcomes. Specifically, work-related hindrance stressors, such as role stress and role ambiguity, have been shown to be strongly negatively related to affective commitment, but unrelated to continuance commitment (Morrissette & Kisamore, 2020). Meta-analytic evidence supports the link between stressors and affective commitment (Morrissette & Kisamore, 2020). Applied to the entrepreneurial context, it may be argued that financial stress increases the perceived opportunity costs of pursuing a particular venture compared to alternatives like salaried employment or other venturing activities (Ephrem & Murimbika, 2023). Increased opportunity costs may decrease the level of enjoyment entrepreneurs derive from leading their venture, resulting in lower affective commitment to the entrepreneurial endeavor.

Furthermore, entrepreneur's sense of autonomy is premised on their ability to make independent decisions and execute them within the business context. Financial stress, however, threatens this autonomy in several ways. For instance, when an entrepreneur is under considerable financial stress, the focus likely shifts from harnessing creativity and growth to managing immediate survival (Piening et al., 2021). Moreover, financial stress may force entrepreneurs to seek external financial



assistance, such as loans. These external financial sources often come with conditions that may limit the entrepreneur's decision-making power and hence their autonomy (Block et al., 2018; Otto et al., 2020). It has been argued that entrepreneurs' sense of autonomy depends on phases in the business cycle and their financial situation (Ryff, 2019; Van Gelderen & Jansen, 2006). Schummer et al. (2019) found support for the proposition that entrepreneurs' affective commitment is driven by the fulfillment of their need for autonomy, with the relationship being stronger among solo self-employed individuals compared to employer entrepreneurs. Accordingly, it may be argued that financial stress results in lower affective commitment because it compromises entrepreneurs' sense of autonomy.

Regarding the relationship between affective commitment and quit intention, it has been shown that a lack of work enjoyment predicts the intention to quit among entrepreneurs in tourism (Sánchez-Medina et al., 2020). Furthermore, affective commitment has been found to be positively associated with franchisees' performance and negatively with the intention to leave their franchise (Mignonac et al., 2015). Accordingly, based on the CHS framework, SDT, and previous research, we propose that affective commitment to the entrepreneurial endeavor mediates the relationship between entrepreneurs' financial stress and their intention to quit their business.

Hypothesis 2 The positive relationship between entrepreneurs' business-related financial stress and their intention to quit their businesses is mediated by affective commitment to the entrepreneurial endeavor.

Overview of the present studies

The current research seeks to offer comprehensive insights into the relationship between entrepreneurs' financial stress, their intention to quit the business and affective commitment to the entrepreneurial endeavor as the underlying mechanism explaining this relationship. Study 1 investigates the link between financial stress and quit intention using an experimental study design. We compare levels of quit intention between two groups of entrepreneurs randomly allocated to two conditions, manipulating the presence versus absence of financial stress. Study 2 uses data from the PsyCorona project (Leander et al., 2020) to investigate the time-lagged relationship between financial stress and entrepreneurs' intention to quit five weeks later, thus providing preliminary evidence for a temporally lagged association between financial stress and quit intention in an entrepreneurial context. In Study 3, we seek to replicate the findings of the first two studies. In addition, we explore the role of affective commitment to the entrepreneurial endeavor as the mediating mechanism between entrepreneurs' financial stress and their intention to quit the business, measured half a year later. We obtained informed consent from participants and received approval for all three studies from the ethical committee of the Department of Psychology, University of Groningen. The data and analysis code are accessible through the Open Science Framework (OSF) at https://osf.io/hxbe3/?view only=c51e73b8f dbb4e7a847e9446aaf4e08a.



Study 1

Method

Research design and participants

We used a single-factor experimental design to manipulate financial stress. This approach allowed us to isolate and examine the specific impact of financial stress on participants' intention to quit. We manipulated financial stress using vignettes describing the presence (i.e., experimental condition) versus the absence of financial stress (i.e., control condition). By using vignettes, we could standardize the experience of financial stress across participants, thus providing a controlled experimental context to demonstrate the direct impact of financial stress, independent of other influencing factors. The study participants were randomly allocated to the experimental or control condition. We commissioned the professional research-focused panel company, Prolific, to recruit a sample of entrepreneurs. Research has shown that data obtained from Prolific is of high quality compared to data collected from other panel companies (e.g., MTurk) and subject pools (Palan & Schitter, 2018; Peer et al., 2017). To ensure that participants understand the content of the vignettes, only individuals whose first language was English were invited to participate in the study. In line with the definition of entrepreneurship applied in previous research (Gorgievski & Stephan, 2016; Rauch & Frese, 2000), individuals who indicated that they were self-employed and involved in founding a business were eligible to participate in the study.

A total of 404 individuals participated in the survey. Of these, 36 (8.9%) were excluded because they did not indicate to work self-employed or were not involved in founding the business. In addition, nine entrepreneurs (2.2%) who failed at least one of three attention check items (Oppenheimer et al., 2009) and eight entrepreneurs (2.0%) who did not provide data on the model variables were excluded, leaving us with a sample of 351 entrepreneurs.

Of the final sample, 59.8% were female, and 40.2% were male. Entrepreneurs' age ranged from 18 to 74 years, with a mean age of 40.8 years (SD=12.6). The age of the businesses ranged from a little more than one month to over 40 years (M=8.0 years, SD=7.9). Most entrepreneurs were single business owners (n=281, 80.1%), the remainder (n=70, 19.9%) had co-owners. Most entrepreneurs worked in health, education, government, or social and consumer services (n=105, 29.9%), followed by n=68 (19.4%) in information, communications, or technology, n=68 (19.4%) in wholesale and retail, n=47 (13.4%) in finance, real estate, or business services, n=39 (11.1%) in arts and entertainment, n=13 (3.7%) in manufacturing and logistics, and n=11 (3.1%) in agriculture or construction. The participants worked in ten different countries, with the vast majority living in the United Kingdom (n=335, 96.4%).

Manipulation of financial stress

After providing their informed consent to participate in the online experiment, the entrepreneurs were randomly allocated to the experimental (n=166) and control



conditions (n=185). Participants were instructed to fully immerse themselves in the situation described in the text and envision what they would feel, think, and do if they would experience this particular situation. Next, they were presented with a text describing the presence (experimental condition) or absence of financial stress (control condition). The scenario texts were developed based on the items of the financial hardship scale (Gorgievski-Duijvesteijn et al., 2005). The text for the financial stress situation reads: "Imagine that in your business you have severe financial difficulties. Because other sources of money disappeared, you recently had to borrow money to pay off debts. However, you were unable to pay your bills on time this month and you are in the red on your current account. In your business, you now need to work with worn-out material because necessary purchases cannot be made. You will unlikely be able to pay redemptions and interests this month. You really struggle to make ends meet."

The control condition text reads: "Imagine you have no financial difficulties in your business. You have solid financial resources and no debts that need to be paid off. Your business is doing well financially and you are able to pay your bills on time. In addition, you have a financial cushion that allows you to buy new equipment for your business when needed. You will be able to pay redemptions and interests this month. You have no difficulties to make ends meet." After reading the vignette texts, participants were asked to respond to items referring to their intention to quit, control variables, and manipulation check items.

Measures

Manipulation check. After reading the text, participants were asked to indicate to what extent they would experience financial stress if they found themselves in the depicted scenario. Specifically, they stated their agreement with three statements adapted from the financial strain scale (Selenko & Batinic, 2011): "I would feel financially strained," "I would often ruminate about my business' financial situation," and "Due to my financial situation, I would have difficulties paying for my expenses". Agreement was indicated on a five-point scale (1 = strongly disagree to 5 = strongly agree; $\alpha = 0.93$).

Intention to quit. The intention to quit in the situation described in the vignettes was measured with two items adapted from the quit intention scale (Gorgievski et al., 2010). Specifically, we asked participants to indicate "the likelihood that in this situation" they would "a) gradually cut down the business," and "b) close the business (for instance, by selling it)". Answers were given on five-point scales ranging from $1=extremely\ unlikely$ to $5=extremely\ likely$. We added one item describing general quit intention ("In this situation, I would think about quitting my business"). Answers were given on a five-point scale ranging from $1=strongly\ disagree$ to $5=strongly\ agree$; $\alpha=0.92$.

Control variables. We controlled for business and entrepreneurial characteristics that have been shown to influence quit intention, such as the age of the business, whether a single owner or co-owners led the company, and demographic information, such as the entrepreneur's age and gender (Chadwick & Raver, 2019; DeTienne, 2010; Neneh, 2022; Wennberg et al., 2010). Because it was possible that the inten-



tion to quit may have been influenced by the financial difficulties the entrepreneurs experienced in their actual businesses, we controlled for their businesses' financial situations. Given that the consequences of the COVID-19 pandemic took a heavy toll on some firms, we also controlled for the influence of the COVID-19 pandemic on the entrepreneurs' financial situations. Specifically, entrepreneurs were asked how much "the Covid-19 pandemic and its consequences have had a negative impact on [their] business' current financial situation". Answers were given on a scale from $1 = strongly \ disagree$ to $5 = strongly \ agree$.

Results

Means, standard deviations, and correlations among the study variables are presented in Table 1.

Manipulation check

A manipulation check across the two conditions showed that the experience of financial stress was higher among participants in the experimental condition (M=4.67, SD=0.47) compared to those in the control condition (M=1.69, SD=0.63, t(337.85)=50.40, p<.001).

Hypothesis test

The results of a linear regression analysis including the experimental condition and control variables as predictors reveal that the manipulation of financial stress significantly predicted entrepreneurs' quit intention (B=1.80, SE=0.09, p<.001, β = 0.73). The mean intention to quit was almost twice as high among entrepreneurs in the experimental condition (M=3.23, SD=1.02) than those in the control condition (M=1.43, SD=0.63, t(269.34)=19.64, p<.001). Furthermore, the experimental condition alone explained 53.7% of the variance in entrepreneurs' intention to quit the business (54.0% with control variables). These results provide clear support for

Table 1 Study 1: Means, standard deviations, and correlations among the model variables

	M	SD	1.	2.	3.	4.	5.	6.	7.
1. Financial stress	1.47	0.50							
2. Quit intention	2.27	1.23	0.73***						
3. Age	41.01	12.45	-0.04	-0.05					
4. Gender	1.59	0.49	-0.04	-0.00	0.05				
5. Business fin. sit.	2.83	1.27	-0.05	-0.01	-0.07	-0.01			
6. Influence Covid-19	3.43	1.39	0.06	0.07	-0.01	0.00	0.60***		
7. Co-ownership	1.20	0.40	-0.03	-0.00	-0.01	-0.03	0.09	-0.01	
8. Business age	8.09	7.91	-0.01	-0.03	0.48***	-0.03	-0.13*	0.01	0.04

Notes N = 351. Code for financial stress: 1 = control condition, 2 = experimental condition; code for gender: 1 = male, 2 = female; code for co-ownership: 1 = not co-owned, 2 = co-owned; business age=years passed since business foundation

^{*}*p*<.1; ***p*<.05; ****p*<.01



Hypothesis 1. Entrepreneurs who immersed themselves in a situation characterized by high business-related financial stress showed higher quit intention measured at the same time point compared to those who imagined they experienced no financial stress.

Study 2

Method

Procedure and participants

We used data collected as part of the PsyCorona study, a cross-societal longitudinal study on individual responses to COVID-19 (Leander et al., 2020). Participants were recruited following a combination of convenience and representative sampling strategies and completed the survey in one out of 30 possible languages. In total, 559 participants indicated to work self-employed (i.e., they indicated that their employment status was best described by the term "self-employed") and were thus eligible as participants for the current study. The time lag between the measurement of financial stress and quit intention was five weeks. Overall, 270 participants dropped out between T1 and T2 (48.3%) and 60 participants (10.7%) did not provide data on the model variables, leaving us with a total of 229 participants (41.0% of the original sample). Study participants were slightly older (n=229, M=4.11, SD=1.36) compared to those who dropped out or did not provide information on model variables (n=330, M=3.70, SD=1.38, t(495.69) = -3.46, p < .001). There were no differences in gender and financial stress. Of the final sample, 53.7% were female, and 46.3% were male. Age was assessed in cohorts, with n=1 (0.4%) age 18 to 24, n=32 (14.00%) age 25–34, n=50 (21.8%) age 35–44, n=46 (20.1%) age 45–54, n=63 (27.5%) age 55–64, n=32 (14.00%) age 65–75, and n=5 (2.2%) age 75–85. Mean business age was 12.9 years (SD=12.9). Participants came from 33 different countries. Most of them came from Europe (n=102, 44.5%) and North America, Australia, and New Zealand (n=60, 26.2%), followed by South and Central America (n=27, 11.8%), Africa (n=19, 8.3%), Eastern and South-Eastern Asia (n=16, 7.0%), and Central and West Asia (n=5, 2.2%).

Measures

Financial stress (T1). To assess their experience of financial stress, entrepreneurs were asked to express their level of agreement with three statements adapted from the financial strain scale (Selenko & Batinic, 2011): "I am financially strained," "I often think about my current financial situation," and "Due to my financial situation, I have difficulties paying for my expenses". Agreement was indicated on a five-point scale (-2=strongly disagree to 2=strongly agree; α = 0.85).

Intention to quit (T2). Entrepreneurs' intention to quit their business was assessed with a single item ("I think about quitting my job," Fine & Nevo, 2008). Participants



	M	SD	1.	2.	3.	4.
1. T1 Financial stress	0.31	1.08		,	,	
2. T2 Quit intention	-1.55	1.73	0.30***			
3. T1 Age	4.11	1.36	0.02	-0.13		
4. T1 Gender	1.46	0.50	0.11	0.10	0.22***	
5. T1 Business age	12.92	12.87	-0.06	-0.19**	0.56***	0.19**

Table 2 Study 2: Means, standard deviations, and correlations among the model variables

Notes N=229. Code for age: 1=18-24 years, 2=25-34 years, 3=35-44 years, 4=45-54 years, 5=55-64 years, 6=65-75 years, 7=75-85 years, 8=85+years; code for gender: 1=male, 2=female; business age=years passed since business foundation

Table 3 Study 2: Parameter estimates of the direct relationship between T1 financial stress and T2 quit intention

Predictor	В	SE		95% CI	p	β
T1 Financial stress	0.40	0.10	0.21	0.59	< 0.001	0.27
T1 Age	-0.09	0.10	-0.28	0.10	0.339	-0.07
T1 Gender	0.41	0.22	-0.02	0.84	0.063	0.12
T1 Business age	-0.02	0.01	-0.04	-0.01	0.033	-0.16

Notes N=229. B=unstandardized estimate; 95% CI=95% confidence interval; $\beta=$ standardized estimate; DV=dependent variable. Code for gender: 1=male, 2=female; business age=years passed since business foundation

rated their agreement on a seven-point scale (-3=strongly disagree to 3=strongly agree).

Control variables (T1). We controlled for entrepreneurs' gender (T1), the age cohort they belonged to (T1), and business age (T2) (Chadwick & Raver, 2019; DeTienne, 2010; Neneh, 2022; Wennberg et al., 2010).

Results

Means, standard deviations, and correlations among study variables are presented in Table 2. We used structural equation modeling to test whether entrepreneurs' experience of financial stress was related to their intention to quit the business five weeks later. The results are presented in Table 3. The overall model fitted the data well, with χ^2 (df) = 18.78(11), p =.065, comparative fit index (CFI) = 0.981, Tucker–Lewis index (TLI)=0.970, root mean square error of approximation (RMSEA) with 90% confidence interval (CI) = 0.056[<0.001, 0.097], and standardized root mean square residual (SRMR) = 0.044 (Browne & Cudeck, 1992; Hu & Bentler, 1999). As predicted, entrepreneurs' quit intention at T2 was positively predicted by their experience of financial stress at T1, lending support to Hypothesis 1. Among the control variables, only business age negatively predicted entrepreneurs' quit intention. The variance explained in T2 quit intention was R^2 = 0.12.



^{*}*p*<.1; ***p*<.05; ****p*<.01

Study 3

Method

Procedure and participants

In Study 3 we investigated the long-term relationship between entrepreneurs' financial stress (T1) and their quit intention measured half a year later (T2). We introduced affective commitment as a mediator in the relationship. Similar to Study 1, we commissioned Prolific to recruit a sample of English-speaking entrepreneurs. The same selection criteria as used in Study 1 were applied (self-employed and involved in founding the business). The data for the study were collected in May and November 2021.

In total, 382 individuals participated in the T1 survey. Of those, 21 indicated not to have been involved in founding the business (5.5%). Of the 361 entrepreneurs who participated in T1, 83 (23.0%) dropped out from T1 to T2 and nine entrepreneurs (2.5%) quit their business between T1 and T2. Eight participants (2.2%) did not provide data on the model variables and were thus removed from the study. None of the remaining participants failed the attention checks (Oppenheimer et al., 2009) at T1 or T2. The final sample consisted of 261 entrepreneurs (72.3% of the original sample). We did not observe differences in age, gender, whether or not they co-owned the business, the time passed since business foundation, affective commitment, and continuance commitment between study participants (n=261) and those who dropped out or did not provide information on the model variables (n=102). However, study participants reported lower financial stress (M=3.02, SD=1.09) than those who dropped out or did not provide information on the model variables (M=3.46, SD=0.92, t(209.22)=3.84, p<.001).

Of the final sample, 61.3% were female, 38.7% were male. Entrepreneurs' age ranged from 20 to 68 years, with a mean age of 39.9 years (SD=11.0 years). The age of the business ranged between a little more than one month to over 36 years (M=6.6 years, SD=6.1). Most entrepreneurs were single business owners (n=221, 84.7%), the remainder (n=40, 15.3%) had co-owners. Most entrepreneurs worked in health, education, government, or social and consumer services (n=75, 28.7%), followed by n=58 (22.2%) in wholesale and retail, n=39 (14.9%) in arts and entertainment, n=34 (13.0%) in information, communications, or technology, n=32 (12.26%) in finance, real estate, or business services, n=13 (5.00%) in agriculture, extractive, or construction, and n=9 (3.5%) in manufacturing and logistics. One participant did not provide this information. All study participants came from the United Kingdom, except for one participant from the United States.

Measures

Financial stress (T1) and quit intention (T2). We used the same financial stress items as in Study 2 (Selenko & Batinic, 2011); $\alpha = 0.83$. Quit intention was measured with the scale used in Study 1 (Gorgievski et al., 2010); $\alpha = 0.85$.



Affective commitment (T1). We measured affective commitment to the entrepreneurial endeavor with adjusted versions of the three highest loading items of the affective occupational commitment scale (Meyer et al., 1993). The items were: "I dislike being an entrepreneur" (reverse-coded), "I regret having started my own business" (reverse-coded), and "I am enthusiastic about being an entrepreneur"; $\alpha = 0.80$.

Continuance commitment (T1). We conducted additional exploratory analyses to investigate the potential role of continuance commitment as a mediator of the relationship between financial stress and quit intention. This analysis may help rule out the possibility that it is not the affective attachment but a broader concept of commitment to the entrepreneurial job that mediates the relationship (as indicated by a significant additional mediation through continuance commitment). Continuance commitment was measured with adjusted versions of the three highest loading items of the occupational continuance commitment scale (Meyer et al., 1993). The items were: "Too much of my life would be disrupted if I were to quit my business", "Changing professions now would require considerable personal sacrifice"; $\alpha = 0.77$.

Control variables. Similar to studies 1 and 2, we controlled for gender, entrepreneurs' age, business age, and co-ownership of the business (DeTienne, 2010; Wennberg et al., 2010).

Results

Means, standard deviations, and correlations among the study variables are presented in Table 4. The results of a preliminary confirmatory factor analysis reveal that the theoretical model with financial stress, quit intention, affective commitment, and continuance commitment loading on four separate factors fitted the data very well (χ^2 (df) = 92.90(48), p< 0.001, CFI = 0.965, TLI = 0.952, RMSEA [90% CI] = 0.060 [0.041, 0.078], and SRMR = 0.054). All fit indices were within commonly accepted boundaries of acceptable model fit (Browne & Cudeck, 1992; Hu & Bentler, 1999). The theoretical model fitted the data better than the two alternative models with finan-

Table 4 Study 3: Means, standard deviations, and correlations among model variables

, , ,	,		,	, 8						
	M	SD	1.	2.	3.	4.	5.	6.	7.	
1. T1 Financial stress	3.02	1.09				,				
2. T1 Affective commitment	4.18	0.78	-0.26***							
3. T1 Continuance commitment	3.64	0.98	0.15*	0.01						
4. T1 Age	39.93	10.98	-0.07	-0.06	0.13*					
5. T1 Gender	1.61	0.49	0.05	0.03	0.06	-0.03				
6. T1 Co-ownership	1.15	0.36	-0.09	0.03	-0.02	-0.02	-0.06			
7. T1 Business age	6.60	6.10	-0.11	-0.05	0.12*	0.46***	-0.16*	0.03		
8. T2 Quit intention	2.06	1.00	0.21***	-0.37***	-0.14*	-0.09	0.00	0.01	-0.05	

Notes N=261. Code for gender: 1=male, 2=female; code for co-ownership: 1=not co-owned, 2=co-owned; business age=years passed since business foundation

^{*}p<.1; **p<.05; ***p<.01



cial stress and quit intention loading on one factor (χ^2 (df) = 456.39(51), p< 0.001, CFI = 0.682, TLI = 0.589, RMSEA [90% CI] = 0.175[0.160, 0.189], and SRMR = 0.134) or the two commitment scales loading on one factor (χ^2 (df) = 313.36(51), p< 0.001, CFI = 0.794, TLI = 0.734, RMSEA [90% CI] = 0.140[0.126, 0.156], and SRMR = 0.125). We conclude that the model variables are sufficiently distinct.

Hypothesis tests

The results of the structural equation modeling based on maximum likelihood are shown in Table 5. In a first step, we examined the direct path between T1 financial stress and T2 quit intention. We found that T1 financial stress positively predicted T2 quit intention, lending support to Hypothesis 1. In a second step, we added the mediation path through affective commitment. The mediation model fitted the data well, with χ^2 (df) = 82.96(56), p =.011, CFI = 0.974, TLI = 0.967, RMSEA [90% CI] = 0.043 [0.021, 0.062], and SRMR = 0.052. As predicted, financial stress was positively related to affective commitment, which was, in turn, negatively related to T2 quit intention. Moreover, the 95% confidence interval (CI) of the indirect effect through affective commitment excluded zero (95% CI [0.08, 0.36]), supporting Hypothesis 2. The variance explained in T2 quit intention was R^2 = 0.22.

Exploratory analysis results

As shown in Table 6, continuance commitment did not act as a mediator of the relationship between T1 financial stress and T2 quit intention. In addition, when

Table 5 Study 3: Parameter estimates of the direct relationship between T1 financial stress and T2 quit intention (Step 1), and of the relationship between T1 financial stress and T2 quit intention mediated through T1 affective commitment (Study 3)

Predictor	В	SE	95% CI _B		p	β
Step 1: Direct effects (DV: Quit intention)						
T1 Financial stress	0.35	0.15	0.11	0.67	0.016	0.22
T1 Age	-0.01	< 0.01	-0.02	< 0.01	0.164	-0.10
T1 Gender	-0.03	0.14	-0.29	0.24	0.835	-0.01
T1 Business age	< 0.01	0.01	-0.02	0.02	0.834	0.01
T1 Co-ownership	0.09	0.18	-0.26	0.45	0.639	0.03
Step 2: Mediation through affective commitment						
T1 Financial stress → T2 Quit intention	0.16	0.14	-0.09	0.45	0.253	0.10
T1 Financial stress → T1 Affective commitment	-0.38	0.11	-0.60	0.17	< 0.001	-0.29
T1 Affective commitment → T2 Quit intention	-0.52	0.11	-0.75	-0.32	< 0.001	-0.41
T1 Financial stress \rightarrow T1 Affective commitment \rightarrow T2 Quit intention	0.20	0.07	0.08	0.36	0.007	0.12
Total effect	0.36	0.15	0.11	0.68	0.016	0.22

Notes N=261. B=unstandardized estimate; 95% $CI_B=95\%$ bootstrap confidence interval (5,000 samples); $\beta=$ standardized estimate; DV=dependent variable. Code for gender: 1=male, 2=female; code for co-ownership: 1=not co-owned, 2=co-owned; business age=years passed since business foundation

Control variables were included in all analyses. We report control variable estimates only for Step 1 because none of the control variables predicted T1 affective commitment or T2 quit intention



Table 6 Study 3: Parameter estimates of the relationship between T1 financial stress and T2 quit intention,
mediated through T1 continuance commitment (Model 1) and T1 continuance and T1 affective commit-
ment (Model 2)

Predictor	В	SE	95% CI _B		p	β				
Model 1: Mediation through continuance commit	Model 1: Mediation through continuance commitment									
T1 Financial stress → T2 Quit intention	0.41	0.15	0.15	0.74	0.007	0.26				
T1 Financial stress → T1 Continuance commitment	0.23	0.11	0.03	0.46	0.034	0.17				
T1 Continuance commitment → T2 Quit intention	-0.21	0.10	-0.40	< 0.01	0.038	-0.18				
T1 Financial stress \rightarrow T1 Continuance commitment \rightarrow T2 Quit intention	-0.05	0.04	-0.13	< 0.01	0.174	-0.03				
Total effect	0.36	0.15	0.11	0.67	0.014	0.22				
Model 2: Mediation through continuance and affective commitment										
T1 Financial stress → T2 Quit intention	0.21	0.15	-0.05	0.53	0.146	0.13				
T1 Financial stress → T1 Affective commitment	-0.38	0.11	-0.60	-0.18	< 0.001	-0.29				
T1 Affective commitment → T2 Quit intention	-0.51	0.11	-0.75	-0.30	< 0.001	-0.41				
T1 Financial stress → T1 Continuance commitment	0.23	0.11	0.03	0.46	0.036	0.17				
T1 Continuance commitment → T2 Quit intention	-0.19	0.09	-0.36	< 0.01	0.041	-0.16				
T1 Financial stress \rightarrow T1 Affective commitment \rightarrow T2 Quit intention	0.19	0.07	0.08	0.35	0.007	0.12				
T1 Financial stress \rightarrow T1 Continuance commitment \rightarrow T2 Quit intention	-0.04	0.03	-0.12	< 0.01	0.171	-0.03				
Total effect	0.36	0.15	0.12	0.68	0.014	0.22				

Notes N=261. B=unstandardized estimate; 95% $CI_B = 95\%$ bootstrap confidence interval (5,000 samples); $\beta=$ standardized estimate; DV=dependent variable. Code for gender: 1=male, 2=female

Control variables were included in all analyses. We report control variable estimates only for Step 1 because none of the control variables were related to T1 affective commitment, T1 continuance commitment, or T2 quit intention

both affective and continuance commitment were added as mediators, model fit decreased slightly compared to the model with only affective commitment added as mediator (χ^2 (df) = 164.67(92), p<.001, CFI=0.944, TLI=0.931, RMSEA [90% CI]=0.055[0.041, 0.068], and SRMR=0.060). Furthermore, the indirect effect through affective commitment remained significant (95% CI [0.08, 0.35]). However, the 95% CI of the indirect effect through continuance commitment included zero (95% CI [-0.12, <0.01]). Accordingly, we conclude that continuance commitment did not mediate the relationship between financial stress and time-lagged quit intention.

Discussion

Summary and theoretical implications

The research results underscore the relevance of financial stress as a predictor of entrepreneurs' intention to quit their businesses. Across threes studies, there was consistent support for Hypothesis 1—that is, financial stress predicts entrepreneurs'



intention to quit their business. In Study 1, the experimental manipulation of financial stress explained over half of the variance (52.8%) in quit intention. Study 2 observed a positive relationship over time—financial stress predicted quit intention measured five weeks later. The magnitude of the effects differed across studies, arguably as a result of study design (manipulation vs. measurement in the field) and time lags in the assessments (concurrent vs. different time lags). Study 3 added a new layer of complexity by introducing affective commitment to the entrepreneurial endeavor as a mediator.

Research examining entrepreneurship-specific challenge and hindrance stressors and the consequences of such stressors for entrepreneurial well-being and performance has spurred over the past years (Arshi et al., 202; De Witte & Van Hootegem, 2021; Lerman et al., 2021; St-Jean & Tremblay, 2023; Wach et al., 2021). Our findings complement previous research by providing insight into the applicability of the CHS perspective to explain the link between financial stress and quit intention. The findings of the current study show that the experience of financial stress is associated with entrepreneurs' intention to move away from the stressor by intending to quit the business. Insight into entrepreneurial stress processes is primarily based on cross-sectional findings (Rauch et al., 2018). The findings of the current studies reveal that financial stress may be related to concurrent quit intention and quit intention measured five weeks and half a year later, suggesting that financial stress represents a hindrance stressor associated with stress reactions that unfold over a longer time frame.

Our research findings underscore the role of affective commitment as a mediator in the relationship between financial stress and the intention to quit. As anticipated, affective commitment explained the relationship between financial stress and quit intention. Exploratory analyses revealed that continuance commitment did not mediate this relationship. This finding suggests that an entrepreneur's decision to quit is primarily based on the diminished emotional attachment they experience due to financial challenges, rather than cost-benefit estimations. This insight aligns with research that established that affective, but not continuance commitment, mediates the relationship between stressors and turnover intentions and actual turnover among employees (Morrissette & Kisamore, 2020; Somers, 1995; Wasti, 2003), and research highlighting the relevance of affective commitment for entrepreneurs' intention to quit (Mignonac et al., 2015; Sánchez-Medina et al., 2020). The CHS model may be expanded in the context of entrepreneurship by including affective commitment to the entrepreneurial job as a mediating mechanism between financial stress and the intention to quit. Furthermore, the study findings suggest that entrepreneurs react to financial stress by decreasing their affective commitment to their entrepreneurial pursuits, possibly to reduce negative affective states associated with a decrease in their sense of autonomy (Schummer et al., 2019).

The current findings have implications for affective commitment as a relevant determinant of entrepreneurial resilience. Previous research has shown that resilience mediates the relationship between grit and entrepreneurial career success (Salisu et al., 2017). On the one hand, lowering the emotional bond to the business may help entrepreneurs prepare themselves mentally for business exit, thus decreasing their level of emotional suffering if the business needs to be closed. On the other hand,



increasing affective commitment may help entrepreneurs deal with immediate hardship, potentially leading to greater success in the long term.

Limitations and future research

Using an experimental research design in Study 1, we provide an empirical basis for the causal link between entrepreneurs' experience of financial stress and their intention to quit the business. In addition, in two field studies using data of entrepreneurs collected at two measurement occasions with different time lags (Studies 2 and 3), we offer insight into longer-term relationships. Moreover, this is the first study that highlights the role of entrepreneurs' affective commitment to their entrepreneurial endeavor as a central mediating mechanism between the experience of financial stress and the intention to quit the business. However, the current research is not without limitations. Each of the individual studies has its particular strengths and weaknesses. First, Study 2 demonstrated considerable attrition (over 40%). Accordingly, the results of Study 2 need to be interpreted with caution. More research is needed to confirm a positive relationship between financial stress and quit intention measured half a year later (Jakobsen et al., 2017). Additionally, there were systematic differences in age, with the included participants being slightly older. While these differences do not influence the conclusions we may draw from the findings, future studies should aim to retain representative samples in follow-up measurements to ensure the results are generalizable. In Study 3, we observed systematic attrition, with participants experiencing less financial stress being overrepresented in the T2 sample. The overrepresentation of less stressed individuals in T2 samples has been observed in entrepreneurship research (Obschonka et al., 2017, 2023). Future research replicating the proposed research model should prioritize balanced representations of financially troubled and less troubled individuals in follow-up samples.

Second, we employed a single-factor experimental design to isolate the effect of financial stress on quit intention in Study 1. However, it is essential to acknowledge that real-life cognition and behavior are often influenced by multiple factors simultaneously. Psychological and environmental factors, such as experience, positive thinking, or the availability of social support may be explored as additional predictors of quit intention and moderators of the relationship between financial stress and quit intention in future research (Arshi et al., 2021; Kipkosgei, 2022; Na-Nan, 2023; Xu & Jin, 2022).

Third, in Study 2, the intention to quit was measured by asking whether participants considered quitting their job, potentially leading to a misalignment in responses, as some participants may be hybrid entrepreneurs who considered quitting their secondary employment rather than their primary self-employment. However, as the study only included individuals who indicated that their current job was best described by the term "self-employed", the impact of considering quitting their side-job should be minimal and unlikely impact the study's overall conclusions. Future research may differentiate between full and hybrid entrepreneurs and explicitly ask about the intention to quit their entrepreneurial endeavors.

Fourth, the selection of a time lag in Study 2 was driven by endeavors to diminish the risk of inflated correlations that can occur due to common method variance (Pod-



sakoff et al., 2003). Although similar time lags have been incorporated, for example, in studies focused on entrepreneurial passion (Gielnik et al., 2014; Lex et al., 2020) or innovation climate (Kaewsaeng-on et al., 2022), the choice of a five-week time lag was arbitrary and slightly shorter or longer time lags would have been reasonable as well. The lack of systematic methods for determining the optimal time lag in longitudinal studies is a recognized issue in the literature as there exist no theoretical and practical guidance regarding the determination of optimal time lags (Dormann & Griffin, 2015). A possible solution for future studies would be to conduct a multiwave study with many waves separated by very short intervals and interpolate from the results (Dormann & Griffin, 2015).

Fifth, we may not draw any causal inferences from the findings reported in Studies 2 and 3. While we identified a significant link between the occurrence of financial stress and entrepreneurs' time-lagged intention to quit, we cannot rule out the possibility of a bidirectional relationship. For example, entrepreneurs who react to the occurrence of financial stress with increased quit intention may consequently experience even more financial stress because the strong intention to move away from the stressors by quitting the business makes it difficult for them to concentrate on developing appropriate exit strategies or to undertake necessary efforts to get their business back on a successful track. Future research may investigate the relationship between financial stress and quit intention over a longer time frame involving more than two measurement occasions to reveal insight into potential bidirectional relationships.

Sixth, our samples share specific characteristics that limit the generalizability of the current findings to a broader population of entrepreneurs. Although we included the ownership status as a control variable into the analyses, due to the unbalanced size of groups with versus without co-owners, we cannot exclude the possibility that differences in the relationship between financial stress and quit intention exist among bigger businesses led by multiple people (Pinzón et al., 2022). Additionally, the majority of individuals in our samples were women (ranging between 54 and 61%). However, the majority of entrepreneurs worldwide are still male (Hill et al., 2023), which limits the generalizability of the observed findings, given the non-representative gender distribution in our samples. Future studies should use more representative samples to test the robustness of the obtained findings.

The current research highlights several opportunities for future studies. As pointed out by scholars examining the processes of entrepreneurial exit, quitting the business may not necessarily be a wrong decision (Wennberg et al., 2010). Only a small percentage of entrepreneurs who participated in Study 3 had quit their businesses. We may not draw any conclusions regarding the consequences of quit intention on distal outcomes, such as entrepreneurs' well-being and business performance. For example, it is possible that entrepreneurs who decided to quit their businesses are better off than entrepreneurs whose quit intention remains high over a longer period of time. Future research may investigate parallel developments in entrepreneurs' financial prosperity, health and well-being, and their intention to quit. Longitudinal data assessment combined with modeling techniques that focus on change over time, such as latent growth mixture modeling, may be used to investigate correlates and outcomes of stress reaction trajectories that differ between entrepreneurs (Muthen & Muthen, 2000). In addition, personality characteristics, such as resistance to change,



may foster trajectories characterized by consistently high or even increasing quit intention over time, without actually quitting the business (Maier et al., 2015).

Recent research findings reveal that the choice of exit strategies is influenced by the scope of the available support (Koładkiewicz et al., 2022). Internal and external social networks play a critical role during all stages of entrepreneurship (Neneh, 2022; Pittz et al., 2021). For example, co-founders, stakeholders, institutions, social structures, and society may influence the foundation and growth of a business, as well as business exit (Kaciak et al., 2021). Accordingly, the amount and type of support that entrepreneurs receive from their environment may not only directly impact the relationship between stressors and stress reactions but may be considered as additional levels in this relationship that share common variance. A multilevel model may investigate mechanisms shared among entrepreneurs in one entrepreneurial team, broader business networks or industries, and countries or societies with distinct attitudes toward entrepreneurship.

Based on SDT, it may be argued that the experience of financial stress results in a decrease in affective commitment due to its negative influence on entrepreneurs' sense of autonomy (Gagné & Deci, 2005; Schummer et al., 2019). Future research should measure entrepreneurs' sense of autonomy as a reaction to the exposure to entrepreneurial hindrance stressors. Examining a sense of autonomy as a potential explanatory mechanism through which financial stress exhibits its influence on affective commitment may provide a valuable contribution to applicability of SDT in the context of entrepreneurs' reactions to hindrance stressors.

Finally, future research may examine dispositional features as additional drivers of affective commitment and their interplay with entrepreneurial stressors. For example, it has been demonstrated that dispositional optimism negatively predicts entrepreneurs' exit intentions through life satisfaction (Lindblom et al., 2020a). Accordingly, future research may shed light on how entrepreneurial stressors exhibit distinct effects on entrepreneurs' affective commitment, depending on entrepreneurs' traits, such as dispositional optimism.

Practical implications

Our findings suggest a strong link between the experience of financial stress and the intention to quit the business. Appropriate consultancy and business interventions may help entrepreneurs get their business back on track whenever possible or develop cost-effective exit strategies, thus avoiding worst-case scenarios of business liquidation and bankruptcy when facing financial trouble. The current research reveals that entrepreneurs' affective binding to their business plays an essential role in conveying the effects of financial stress on quit intention. If, on the one hand, in case the business may have the potential to become profitable again, consultants may try to boost entrepreneurs' affective commitment to the business, thus potentially increasing their motivation to get it back on track. This may, for example, be achieved through interventions that target entrepreneurial self-efficacy, which has been identified as the primary driver of entrepreneurial passion, which, in turn, is positively associated with entrepreneurs' affective commitment to the business (Gielnik et al., 2017; Tasnim et al., 2014). If, on the other hand, liquidation of the business seems unavoidable,



counselors may try to decrease entrepreneurs' emotional bounds to the business, thus potentially preventing an escalation of commitment and further economic loss (De Witte & Van Hootegem, 2021; Shepherd et al., 2009; Wennberg et al., 2010). For example, they may foster a focus on alternative future job prospects (Shepherd et al., 2011). Indeed, supporting an exit strategy may also have societal benefits. Instead of subsidizing and supporting businesses with low chances of success, efforts to motivate entrepreneurs pursuing their ventures should focus on the subset of companies with growth potential (Shane, 2009). Overall, a neutral reflection on the businesses' future potential should guide appropriate strategies to increase versus decrease entrepreneurs' affective commitment.

Declarations

Competing Interests All authors confirm that there are no conflicts of interest to declare.

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