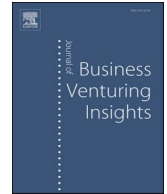




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What Makes Entrepreneurs Happy? Psychological Flexibility and Entrepreneurs' Satisfaction

Joeri van Hugten^{a,*}, Zainab-Noor el Hejazi^b, Jacqueline Brassey^{a,c},
 Johanna Vanderstraeten^b, Nele Cannaearts^d, Ellen Loots^d, Wim Coreynen^{a,f},
 Arjen van Witteloostuijn^{a,b,e}

^a Vrije Universiteit Amsterdam, De Boelelaan 1105, 1081 HV, Amsterdam, the Netherlands

^b University of Antwerp, Prinsstraat 13, 2000, Antwerp, Belgium

^c IE University, María de Molina, 31 Bis, 28006, Madrid, Spain

^d Erasmus University Rotterdam, Burg. Oudlaan 50, 3062 PA, Rotterdam, the Netherlands

^e Antwerp Management School, Boogkeers 5, 2000, Antwerpen, Belgium

^f Utrecht University, Heidelberglaan 8, 3584 CS, Utrecht, the Netherlands

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ABSTRACT

This paper investigates entrepreneurs' satisfaction. We conceptually replicate and extend Carree and Verheul's (2012) Dutch study on the drivers of entrepreneurs' satisfaction with data from Belgian entrepreneurs. Thus, we respond to the need to replicate more in the (social) sciences, including entrepreneurship studies. The 'extension' aspect contributes novel theoretical understanding and empirical explanatory power of entrepreneurs' satisfaction. Specifically, the paper introduces psychological flexibility as an important new predictor of entrepreneurs' satisfaction. Indeed, we provide evidence that entrepreneurs with greater psychological flexibility are, on average, more satisfied.

1. Introduction

Entrepreneurs' career puts a unique strain on their satisfaction with work and life in general (Berglund et al., 2016; Patzelt and Shepherd, 2011). It is important to understand entrepreneurs' satisfaction not only because this is a key driver of happiness at the level of the individual entrepreneur, but also because this may impact the quality of their ventures' contribution to the community (Bradley and Roberts, 2004; De Cock et al., 2020; Dijkhuizen et al., 2018; Kibler et al., 2019). Evidence abounds that "happy" entrepreneurs are more likely to persist and perform better than their "unhappy" counterparts (see the overview of Stephan, 2018). Specifically, we want to understand satisfaction in four domains: i.e., satisfaction with (1) income; (2) work; (3) work-life balance; and (4) personal life. Carree and Verheul (2012) – hereafter CV – provide a good starting point toward such understanding.

This paper contributes to entrepreneurs' satisfaction research (Stephan, 2018) by means of what can be regarded as a conceptual replication and extension of CV (albeit only partially so). The difference between a direct vis-à-vis a conceptual replication is that a direct replication uses the same data collection procedures and measurement scales as the original, but in a different sample, whereas a conceptual replication analyzes the same conceptual model, but the concepts are measured differently (Walker et al., 2019). In doing

* Corresponding author.

E-mail address: j.g.w.j.van.hugten@vu.nl (J. van Hugten).

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so, we respond to the plea to replicate more in the (social) sciences, including entrepreneurship studies (cf. van Witteloostuijn et al., 2016). As van Witteloostuijn (2016, p. 485) argues, referring to Bettis (2012): “Only by replicating prior work, can we develop external and internal validity; only then, the boundary conditions of earlier novelty can be defined, step by step.” We chose to (partially) replicate CV because that is a comprehensive study on entrepreneurs’ satisfaction with a large sample, and including many kinds of independent and three dependent variables. That provides a good platform to replicate a variety of targets, so that we can quickly learn about a variety of variables, as opposed to replications with the aim of proving that an original study is wrong or right based on one coefficient.

The ‘extension’-part of ‘conceptual replication and extension’ refers to the three ways in which we extend CV’s study. First, and most importantly, we propose a new explanatory variable, psychological flexibility, and test how this is an important determinant of entrepreneurs’ satisfaction. The importance of psychological flexibility in psychology warrants applying this concept in an entrepreneurship setting. By introducing psychological flexibility as an extension to a conceptual replication of CV’s comprehensive study, we can effectively demonstrate the explanatory power this adds to entrepreneurs’ satisfaction research. We contextualize the novelty of studying psychological flexibility and explain its added value for the entrepreneurship domain in more detail below. Second, we further extend CV by considering an additional dependent variable: personal life satisfaction (Binder and Coad, 2016), on top of the three used by CV. Third, we broaden the population under study in a theoretically relevant way by sampling entrepreneurs with a wider range of experience in being an entrepreneur, as opposed to CV’s focus on only entrepreneurs who started a venture less than one year ago (though 8% had a venture before their current one). We do so with data from a sample of entrepreneurs from Flanders, which is the Dutch-speaking part of Belgium. Hence, our sample of Flemish entrepreneurs is not that culturally different from CV’s sample of Dutch entrepreneurs.

1.1. What is psychological flexibility?

Researchers in clinical psychology are interested in cognitive behavioral therapy tools to help people overcome psychological distress. One approach that has gained substantial traction is ‘acceptance and commitment therapy’ or ACT (Hayes et al., 2011). The associated ‘hexaflex’ model of acceptance and commitment therapy distinguishes six skills that comprise psychological flexibility (cf. Rolffs et al., 2018) (in no particular order):

- 1) *Acceptance* involves facing sad feelings and letting them pass through on their way out, as opposed to avoiding or resisting them;
- 2) *Committed action* implies doing, as opposed to delaying and dreaming;
- 3) *Defusion* means separating thoughts from emotions in order to be able to think about emotions from a distance;
- 4) *Mindfulness* is staying focused on the present moment despite distracting negative thoughts;
- 5) *Self-as-context* means putting things in perspective, and recognizing that everyone makes mistakes and that you cannot control everything; and
- 6) *Values* refers to being strongly rooted in values as opposed to being confused about what you want.

In a nutshell, psychological flexibility is a set of skills that facilitates an individual to move toward what is important to her or him, and to cognitively regulate emotions that might hold her or him back. In line with its clinical background, psychological flexibility is especially related to changing relationships with unhelpful emotions, and does not concern itself with positive emotions. Note that while clinical psychologists are interested in training people to become better at psychological flexibility, we use this construct here simply to understand between-entrepreneur differences. Furthermore, we are not so much interested in (the effect of) the six skills separately, but rather in psychological flexibility as a whole, or as a ‘holistic’ construct.

In the business domain, the somewhat similar concept of ‘emotional intelligence’ (Salovey and Mayer, 1990) was popular for a while. And recently, the term ‘emotional agility’ has been popularized (David, 2016), and studied in a workplace setting (Brassey et al., 2019, 2020). We follow most recent work in business and psychology by using the term ‘psychological flexibility’ (Bond et al., 2006). Moreover, this label much better captures the underlying processes, as these are both cognitive and emotional in nature.

1.2. How does psychological flexibility differ from similar concepts?

The novelty of considering psychological flexibility as a predictor of entrepreneurs’ satisfaction can be assessed by distinguishing that construct from related work. The most closely related work is that on the effect of psychological capital on entrepreneurs’ subjective well-being, mediated by stress (Baron et al., 2016). Psychological capital is comprised of (work-related) self-efficacy, optimism, hope, and resilience (Luthans et al., 2007; Chadwick and Raver, 2018). The distinction is that psychological flexibility can be seen as a more in-depth approach to the resilience aspect of psychological capital. Specifically, psychological flexibility refers to concrete behaviors and mental processes that underlie individual resilience. Relevant consequences of this distinction are noted in the Method section.

Other related studies involve those on regulatory coping, which partly overlaps with psychological flexibility. For example, items such as “I had a drink or took a pill” (Patzelt and Shepherd, 2011, p. 232), and “I focused on the problem to see how I could solve it” (Uy et al., 2013, p. 588) are almost opposite to psychological flexibility, while “waited for feelings to pass” (Patzelt and Shepherd, 2011, p. 232) can reflect the acceptance aspect of psychological flexibility. Further differences relate to the dependent variables. In Patzelt and Shepherd (2011), coping is associated with more negative emotions, which suggests that the outcome variable captures a causal effect of the opposite sign of the effect we are interested in here. The difference with the study of psychological well-being (Uy et al., 2013) is

that psychological flexibility has more overlap with psychological well-being than it has with coping. So, the effect of coping on psychological well-being cannot be mapped onto the impact of psychological flexibility on satisfaction. Hence, Uy et al. (2013) is difficult to compare to the current study.

Psychological flexibility also differs from mindfulness as applied to entrepreneurial activity in van Gelderen et al. (2019). Here, as explained above, the distinction is that mindfulness is only one of the six aspects of the broader psychological flexibility construct. Thus, the concept of psychological flexibility is more comprehensive, and should hence be more powerful as the psychology research argues these individual skills are especially effective at achieving well-being outcomes in combination (Rolffs et al., 2018).

A final related study worth mentioning is that of Przepiorka (2017), which explains life satisfaction by means of a combination of variables that each partly overlap with a different aspect of psychological flexibility. Specifically, decision-related action orientation partly resembles committed action, failure-related action orientation partly overlaps with acceptance and defusion, and goal commitment is partly similar to committed action. In the next section, we show how our factor analysis leads us to exclude the committed action aspect, which removes most of the overlap with Przepiorka's (2017) study.

In sum, our study contributes to this stream of work on entrepreneurs' satisfaction by introducing a comprehensive concept – psychological flexibility – that (a) complements concepts that already circulate in the literature, (b) captures in considerably more detail a wider set of skills, (c) incorporates state-of-the-art clinical psychology research, and (d) is proven to have a large impact on a variety of aspects of an individual's well-being (cf. Ryff, 2017).

1.3. How does psychological flexibility influence satisfaction?

Acceptance and commitment therapy treatment, as well as individual aspects of psychological flexibility (e.g., defusion), have been linked to outcomes such as reduced depression and distress, but also to increases in general life satisfaction in a variety of clinical, student, and health professional samples (A-Tjak et al., 2015; Gillanders et al., 2014; Öst, 2014). Those associations between psychological flexibility and satisfaction likely generalize to entrepreneurs, especially in light of the evidence for similar other concepts in the entrepreneurial context (Baron et al., 2016; van Gelderen et al., 2019; Przepiorka, 2017). Specifically, one of the key aspects of entrepreneurship is risk taking, and hence dealing with uncertainty and inevitable setbacks. How entrepreneurs deal with that should directly shape their satisfaction. The hexaflex model suggests that possessing higher levels of psychological flexibility leads to better handling of the risk of setbacks, of the feeling of uncertainty about those risks, and of realized setbacks (Rolffs et al., 2018). For example, handling setbacks with acceptance, defusion, mindfulness, and self-as-context should lead to less delaying of decisions. Strong self-as-context may enhance assessment of the causes of setbacks, and therefore more accurate solutions (e.g., as opposed to unreasonable blaming one's own ability). A strong sense of values and committed action should make those decisions more directed toward satisfaction (as opposed to haphazard temporary solutions), and committed action should result in full and quick implementation of those decisions. Less delayed, more accurate, and fully implemented decisions directed toward satisfaction should lead to more satisfaction. Therefore, entrepreneurs with greater psychological flexibility are likely to be more satisfied.

Because entrepreneurship is often experienced as an identity rather than simply a job, that effect should not be limited to work satisfaction, but extend to entrepreneurs' satisfaction with their personal lives. Furthermore, entrepreneurs who struggle with setbacks at work often invest personal time (and money) to manage these. Therefore, the effect of psychological flexibility is likely to apply to satisfaction with work-life balance as well. Finally, if psychological flexibility leads to better decisions in response to setbacks, those decisions may increase the venture's income, and thereby venture income satisfaction. Psychological flexibility is *not* expected to lead to greater satisfaction for the same level of income. Indeed, psychological flexibility encourages individuals to accept that low satisfaction occurs as opposed to convincing individuals to be more satisfied with what they have. In sum, the hexaflex model of acceptance and commitment therapy suggests a positive effect of psychological flexibility on entrepreneurs' satisfaction.

2. Method

The data are gathered in the process of an ongoing project aimed at consulting entrepreneurs to help them reach their aims. The program is designed as an evidence-based consulting endeavor in Flanders, the Dutch-speaking part of Belgium, which started in 2016 in close collaboration with the Flemish association of small and medium-sized enterprises (known as UNIZO), financially supported by the Flemish Agency for Innovation and Entrepreneurship (or VLAIO). The key scholarly part of the program involves administering two questionnaires, one regarding the enterprise as a venture and one the entrepreneur as an individual, both including a large set of well-validated survey scales. Financial information is added by Graydon, which is a third-party business data provider. Some entrepreneurs were recruited to join the project, while others volunteered. After an intake session with a coach, entrepreneurs who were especially struggling, looking to end their business, or looking to grow, would be assigned to be part of our study. We devote a full paper to describing the project in full detail in -Anonymized for review-. The sample used in this study consists of 532 participants, and data is complete on all variables needed for this study for 244 of them. Hence, this study's n is 244.

To assess psychological flexibility in a sample of entrepreneurs, we developed a short scale based on the ACT model (Hayes et al., 2011), and related clinical scales (e.g., Gillanders et al., 2014; Francis et al., 2016; Rolffs et al., 2018; Batink et al., 2012), and iterative feedback from giving psychological flexibility training workshops at companies. Basically, we sought to develop an abbreviated and easy-to-use scale with about 15 items, starting from a set of 30, that can be widely implied in business research. Existing ACT-related scales are very lengthy (in the 60-to-120 items range, which is appropriate in a clinical context, but far too time-consuming for entrepreneurs). The full list of items is included in the Appendix, all scored from a low of 1 to a high of 7.

Table 1 shows the results of a principal component analysis of the responses to those questions. Factor 1 roughly captures four ACT

subdimensions. Factor 2 represents committed action and factor 3 measures values.

The next step has been to remove items that may be too conceptually proximate to satisfaction. Preventing excessive conceptual proximity ensures that the correlations we find reflect an effect of one variable on another, as opposed to reflecting an overlap in the measures. For example, val1 is proximate to satisfaction with work-life balance, as it asks to what extent respondents agree with the statement that ‘my life is well balanced’. Thus, we constructed the psychological flexibility variable using only 15 items that load on factor 1 *and* are not too conceptually proximate to satisfaction (the selected 15 items are in italics in Table 1). That selection also excludes all committed action items. Thus, by minimizing conceptual proximity to satisfaction, we also minimize overlap with related concepts such as psychological capital’s self-efficacy, hope, and optimism (Baron et al., 2016), and decision-related action orientation (Przepiorka, 2017). As expected, this turned out to be a conservative choice as the results are about twice as strong if we use all 30 items (available upon request). Cronbach’s α of this 15-item scale is 0.85. We refer to our novel survey instrument as the PFQ-S, Psychological Flexibility Questionnaire-Short.

The following example shows more subtle differences between psychological flexibility and psychological capital, and reveals how the latter suffers more from items being conceptually proximate to satisfaction. Consider ‘Com2 – I am able to divide my long-term goals into short-term opportunities’ from our PFQ-S, and ‘12. At this time, I am meeting the work goals that I have set for myself’ from the psychological capital questionnaire (PCQ; Luthans et al., 2007). Thus, PFQ-S focuses on whether goals are set, and PCQ focuses on whether goals are achieved. That makes PCQ more conceptually proximate to satisfaction, and therefore less informative. Thus, excluding committed action items minimizes the overlap of this paper with Baron et al. (2016), as well as minimizes our variable’s conceptual proximity to satisfaction.

Another example illustrates the difference of our PFQ-S instrument with resilience. Consider ‘Def5 – It is difficult for me to let go of disturbing thoughts at work, even if I know it would help me (reverse coded)’ from PFQ-S compared to ‘I can get through difficult times at work because I’ve experienced difficulty before’ as used by Baron et al. (2016) to capture resilience. Letting go of disturbing thoughts is a concrete behavior. It could affect satisfaction, but that is an empirical question. By contrast, the sense of being able to get through difficult times is almost by definition associated with satisfaction. In other words, your satisfaction is the yardstick for judging whether you have successfully gotten through a difficult time. Therefore, studying psychological flexibility adds a deeper understanding that goes beyond psychological capital (Baron et al., 2016).

Table 2 shows the complete list of variables. As a defining feature of a conceptual replication, we explain how each variable captures the same concept as a variable in CV.

We do not have a counterpart for CV’s *JobSimilarity* (‘To what extent are current activities related to past work?’), *Combine* (‘To

Table 1
Principal component analysis of psychological flexibility (varimax rotation)^{a, b, c}.

Item	Factor 1	Factor 2	Factor 3	Factor 4
<i>acc1</i>	.698			
<i>acc2</i>				.498
<i>acc3</i>	.208		-.202	.314
<i>acc4</i>	.563	-.106	.108	.105
<i>acc5</i>	.537	.250		
<i>com1</i>		.610	.187	
<i>com2</i>		.650		
<i>com3</i>		.732		
<i>com4</i>		.765		
<i>com5</i>		.764		
<i>def1</i>	.618	.148	.131	.177
<i>def2</i>	.218	.439		.284
<i>def3</i>	.553	.197		.194
<i>def4</i>	.574			.235
<i>def5</i>	.679	.105		.257
<i>min1</i>	.671			-.260
<i>min2</i>	.597	.112		-.408
<i>min3</i>	.418	.267	.195	
<i>min4</i>	.132			.314
<i>min5</i>	.259	.336	.309	.220
<i>sel1</i>	.606		.136	
<i>sel2</i>	.369	.122	-.302	.223
<i>sel3</i>	.524	.206	.272	.166
<i>sel4</i>	.126			.430
<i>sel5</i>				.563
<i>val1</i>	.315		.515	.274
<i>val2</i>	.186	.319	.463	
<i>val3</i>	.170	.262	.654	.174
<i>val4</i>	.149	.133	.784	
<i>val5</i>			.721	-.186

^a acc = acceptance; com = committed action; def = defusion; min = mindfulness; sel = self-as-context; val = values.

^b in italics, the items used in the measure.

^c loadings smaller than .1 omitted.

Table 2
Variables and summary statistics (n = 244).

Variable	Description	Mean	SD	Min.	Max.
Income satisfaction	I experience in my work ... satisfaction with my income (1 = does not apply to me; 2 = partly applies to me; 3 = fully applies to me). Counterpart to CV's <i>Satisfaction with respect to income</i> (Thus far, is the income you retrieved from your business in line with your expectations? 1. Much worse than ... 5. Far better than)	2.3	.67	1	3
Work satisfaction	How satisfied are you with your work? (1 = totally not satisfied; 2 = not satisfied; 3 = rather not satisfied; 4 = neither satisfied nor dissatisfied; 5 = rather satisfied; 6 = satisfied; 7 = totally satisfied). Counterpart to CV's <i>Satisfaction with respect to psychological burden</i> (Thus far, is the psychical burden of starting up a business in line with your expectations? 1. Much worse than ... 5. Far better than)	5.42	.98	2	7
Work-life balance satisfaction	How satisfied are you with your work-life balance? (1 = totally not satisfied; 2 = not satisfied; 3 = rather not satisfied; 4 = neither satisfied nor dissatisfied; 5 = rather satisfied; 6 = satisfied; 7 = totally satisfied) Counterpart to CV's <i>Satisfaction with respect to leisure time</i> (Thus far, is your (remaining) leisure time in line with your expectations? 1. Much worse than ... 5. far better than)	4.50	1.59	1	7
Personal life satisfaction	How satisfied are you with your personal life? (1 = totally not satisfied; 2 = not satisfied; 3 = rather not satisfied; 4 = neither satisfied nor dissatisfied; 5 = rather satisfied; 6 = satisfied; 7 = totally satisfied)	5.54	1.18	2	7
Performance	Most recent annual operating income. Counterpart to CV's <i>Performance</i> (What is your average monthly turnover (8 categories)?)	78837	112266	-333136	803578
Education	What is your highest completed education? (1 = no school; 2 = primary school; 3 = high school; 4 = bachelor degree; 5 = master degree; 6 = PhD). Counterpart to CV's <i>Education</i> (which has different categories).	3.95	.82	2	6
Tenure	How many years have you been active in this enterprise? Counterpart to CV's <i>EntExperience</i> .	13.94	9.27	0.75	40
Financial efficacy	Average of a 3-item scale with questions such as: 'How much do you trust your ability to manage the financial gains of your venture?' (1-5) (from McGee et al., 2009) $\alpha = .87$ Counterpart to CV's <i>FinManExperience</i>	3.48	.87	1	5
Need for achievement	Average of an 11-item scale asking about need for achievement. (1-7) (from PRF by Jackson, 1984) $\alpha = .62$ Counterpart to CV's <i>intrinsic</i> together with 'autonomy'.	4.84	.65	3.00	6.46
Need for autonomy	Average of a 16-item scale asking about need for autonomy. (1-7) (from PRF by Jackson, 1984) $\alpha = .70$ Counterpart to CV's <i>intrinsic</i> together with 'achievement'.	4.14	.65	2.56	5.69
Gender	0 = male, 1 = female			0 (n = 182)	1 (n = 62)
Age		43	9.61	23	70
Uncertainty intolerance	Average of an 8-item scale with questions such as 'People should look ahead to avoid surprises'. (1-5) (the items that loaded on the first factor in Freeston et al., 1994) $\alpha = .81$ Counterpart to CV's <i>Risk tolerance</i> (reverse coded).	2.73	.63	1.13	4.38
Firm size	Number of employees. (1 = 1-4; 2 = 5-9; 3 = 10-19; 4 = 20-49; 5 = 50-99; 6 = 100-199) Counterpart to CV's <i>Employees</i> (How many employees do you have?)		Mode = 1	1 (n = 104)	6 (n = 1)
Organization structure	(1 = homogeneous and simple, decision-making often by trial & error; 2 = some specialization with simple information processes; 3 = formal and sophisticated information processes; 4 = creative focus within a matrix structure, somewhat decentralized; 5 = simple decision-making processes with centralized conservative decisions, little information processes even though more are needed). Partly captures what CV want to capture with <i>Outsourcing</i> and <i>Homebase</i>		Mode = 2 (n = 94)	1 (n = 37)	5 (n = 53)
Monitor	Do you actively follow environmental trends that could impact your enterprise? Counterpart to CV's <i>KeepUp</i>			0 (n = 61)	1 (n = 183)
Technological turbulence	Average of a 5-item scale with questions such as 'Technology changes quickly in our industry'. (1-5) (from Jaworski and Kohli, 1993) $\alpha = .81$ Counterpart to CV's <i>Hightech</i>	3.05	.83	1	5
Psychological flexibility	Average score on the 15 survey items selected in Table 1. (1-7) $\alpha = .85$	4.46	.85	2.13	6.47

what extent did the combination of work and household activities play a role in the start-up decision?'), *LifePartner* ('Do you have a life partner?'), *Subsistence* ('To what extent do you depend on profits from the venture for subsistence?'), *Other hours* ('At the start of your firm, how much time did you spend on other activities?'), *FirmStatus* (newly started firm vs restart vs acquisition), *StartCapital* (amount of start-up capital), the indicator for the manufacturing/construction sector or not, and the indicator for the wholesale/retail sector or not. Our organizational structure variable only roughly captures what CV intend to measure with *Outsourcing* ('Are certain activities

within the firm contracted out?') and inversely relates to *Homebase* ('Do you run your business from the home?'). Of all those variables, only *Combine* had a significant positive effect on all three types of satisfaction in CV, while the other variables have mixed or insignificant effects.

Our dependent satisfaction variables and quite a few of the individual-level independent variables are measured by means of the same survey. Potentially, this can lead to common-method bias, inflating our estimates (cf. Chang et al., 2010). However, such bias is likely to be small, if present at all, as many distracting questions were asked in between our central independent variable psychological flexibility, on the one hand, and satisfaction, on the other hand. The median time that passed between completing the satisfaction questions and the items capturing psychological flexibility questions is a little less than 1 h (the first quartile time is a little less than 45 min). All bivariate correlations for our sample are reported in the Appendix in Table A1Table A1.

Finally, before moving to the evidence, we would like to conclude with four methodological reflections. First, whilst interpreting the results of our conceptual (and extended) replication, we should take account of statistical power differences. Our sample size is 244, whereas CV's (2012) is 1107. So, the statistical power of CV's study is much higher than ours. This implies that, if an effect we find is statistically insignificant, this may be due to the lower power of our analyses. Thus, if an effect is insignificant in CV, our insignificant effect may not be evidence of replication. If an effect is significant in CV, our insignificant effect may not be evidence of a 'failure' to replicate. In that case, a cautious interpretation is needed, carefully considering the sign, size, and *degree* of significance of the estimated coefficients.

Second, Bond and Lang (2019) show that the standard measure of happiness is associated with ordered intervals, implying that different estimation and transformation procedures give different outcomes. This issue speaks to happiness (and satisfaction) research at large, and requires further exploration in future work. For the current paper, we measure satisfaction in the same way CV do. So, if these procedures imply a bias, we can still make meaningful comparisons.

Third, CV's and our studies have a cross-section design. Hence, all they could, and all we can do, is to estimate associations. Although we can speculate about causalities using theoretical arguments (which we will do), the empirical identification of directions of causality is simply impossible. Thus, if we use a standard term like 'effect', this has to be interpreted as a correlation. A particularly interesting case of a correlation being different from a causal effect is reverse causality. While we build our story around psychological flexibility causing satisfaction, we expect satisfaction to also cause psychological flexibility. Different types of satisfaction may have different links with different aspects (and hence items) of psychological flexibility. For example, work-life balance satisfaction can imply that a person is well rested/not sleep deprived. Restedness is associated with lower distress (Glozier et al., 2010) possibly because rest reduces amygdala sensitivity to new stressors (Van Der Helm et al., 2011). The amygdala is also likely involved in the response to a stressor like negative thoughts (i.e., defusion item 4). Thus, work-life balance satisfaction can lead to psychological flexibility. Future research with longitudinal data is needed to determine the relative strength of each causal direction.

Fourth, one might argue that variation in a human attribute such as psychological flexibility may well be very limited in a population of entrepreneurs, due to self-selection (Stephan, 2018). Here, the argument is that not only do people sort into entrepreneurship particularly if they score high on psychological flexibility, but also because those entrepreneurs that do score high are much more likely to survive, and to continue as an entrepreneur (van Gelderen et al., 2019). If this would be the case, the distribution of our variable should (i) have a high average value with (ii) little variance. To examine this, Fig. 1 plots the distribution in our sample ($n = 244$), using our 15-item PFQ-S measure.

The mean is 4.5, with a minimum value of 2.1 and a maximum of 6.5, and with a wide "peak" ranging from 3.5 to 5. In all, this provides evidence against the too-little-variance argument. Indeed, entrepreneurs are diverse in terms of psychological flexibility, as they are on other psychological dimensions (see, e.g., Frese and Gielnik, 2014; Baron et al., 2016).

Rather than especially flexible people selecting into entrepreneurship, another possible concern is that especially flexible and satisfied entrepreneurs select into our sample. This concern is partially abated because our project includes entrepreneurs that are

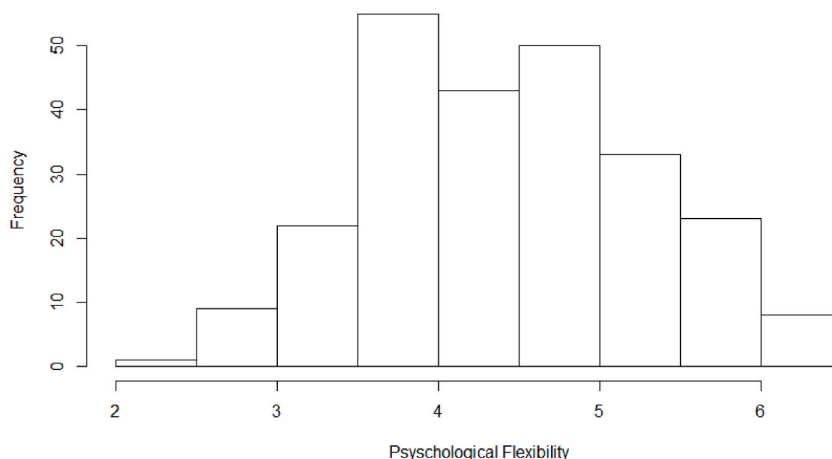


Fig. 1. Psychological flexibility histogram (15 items; $n = 244$).

struggling to survive as well as entrepreneurs that are looking to grow. Another way to address this concern would be to check the distribution of psychological flexibility in studies in the workplace context such as [Brassey et al. \(2020\)](#). Although that study uses a different measure, a similar distribution of our critical psychological flexibility variable could give more confidence. Unfortunately, that study also relies on a nonrandom sample and is therefore subject to similar sample selection concern.

2.1. Evidence

Tables 3–5 compare CV’s findings and our counterpart results for CV’s three types of satisfaction. Table 6 adds satisfaction with personal life as a dependent variable. In each table, Model 1 is the conceptual replication of CV, and Model 2 shows the added explanatory power of *psychological flexibility*. Like CV, we use Ordinary Least Squares (OLS), to maximize comparability. A robustness analysis with Seemingly Unrelated Regression (SUR), as all dependent variables are correlated, produces essentially similar results with only slightly greater p-values (available upon request).

Comparing Model 1 with Model 2, an immediate main conclusion is that entrepreneurs’ psychological flexibility has a strong positive effect on each dependent variable, and substantially improves the R² of each model (from 0.16 to 0.17 for income satisfaction, from 0.21 to 0.25 for work satisfaction, from 0.18 to 0.21 for work-life balance satisfaction, and from 0.12 to 0.16 for personal life satisfaction).

Regarding *performance*, CV find strong effects (both positive and negative). We replicate the positive effect of performance on satisfaction with income, but we find positive effects instead of CV’s negative effects on satisfaction with work and work-life balance. Perhaps, this is because we measure profit instead of turnover, like CV do ([Harter et al., 2002](#), p. 273). We also find a positive effect of performance on satisfaction with personal life. So, entrepreneurs appear to be so entangled with their venture that venture performance plays an important role for satisfaction in a variety of domains ([Binder and Coad, 2016](#)). Note that our research design cannot identify the direction of this effect, being a cross-section (cf. the Method and Discussion sections); it is possible that part of those coefficients reflect satisfaction causing performance, in line with, for example, [Dijkhuizen et al. \(2018\)](#). They find evidence for such a causal direction using a longitudinal design.

For *education*, CV find insignificant effects, except for a weak negative coefficient for income satisfaction. We find a similarly weak negative effect for all types of satisfaction (although the standard error is large).

For *tenure*, our effects are small, while CV report a reasonably large negative effect, especially for income satisfaction and work satisfaction. That discrepancy may be due to the difference between whether someone was an entrepreneur before starting their current venture (i.e., CV’s measure) and how long someone has worked in the current venture (i.e., our measure). Still, our estimates are too small to consider the effect of the concept of experience to be confirmed; it takes 26–160 years before entrepreneurs have an experience effect equivalent to what CV find.

Table 3
Results of OLS model on satisfaction with income^{a, b}.

Variable	Coefficient on CV’s counterpart variable	Model 1	Model 2
Performance	.14***	7.18 ^e ·7 (2.83 ^e ·7) p = .01	6.90 ^e ·7 (2.87 ^e ·7) p = .02
Education	-.03**	-.02 (.05)	-.01 (.05)
Tenure	-.16*	.001 (.007)	.003 (.007)
Financial efficacy	.02	.16 (.05) p = .001	.13 (.05) p = .006
Need for achievement	.31	.02 (.06)	.02 (.06)
Need for autonomy	.31	-.06 (.06)	-.07 (.06)
Gender	.11*	.04 (.09)	.05 (.09)
Age	-.02	.03 (.04)	.03 (.04)
Age ²	.00	-.0003 (.0005)	-.0003 (.0005)
Uncertainty intolerance	-.08**	-.04 (.07)	.02 (.08)
Firm size	-.02		
2		.11 (.10)	.10 (.10)
3		.16 (.11)	.16 (.11)
4		.28 (.21)	.27 (.21)
5		-.28 (.16) p = .09	-.29 (.16) p = .08
6		.33 (.23)	.44 (.024) p = .07
Organization structure	.04/-.09 (reverse coded)		
2		-.04 (.13)	-.07 (.13)
3		.28 (.15) p = .06	.26 (.14) p = .07
4		-.08 (.17)	-.11 (.17)
5		-.15 (.15)	-.15 (.15)
Monitor	.14***	-.12 (.11)	-.12 (.11)
Technological turbulence	-.06	.08 (.05) p = .08	.08 (.05) p = .12
Psychological flexibility			.10 (.06) p = .097
Constant	1.84	1.14 (1.03)	8.23 (1.06)
R ²	.13	.16	.17
Adjusted R ²		.08	.09

^a Robust standard error in parentheses. Exact p-values where relevant. Stars indicate significance as reported in CV.

^b Note that CV’s dependent variable is on a 1–5 scale, while ours is on a 1–3 scale.

Table 4
Results of OLS model on satisfaction with work^{a, b}.

Variable	Coefficient on CV's counterpart variable	Model 1	Model 2
Performance	-.04*	1.09 ^e -6 (4.18 ^e -7) p = .01	1.00 ^e -6 (4.49 ^e -7) p = .03
Education	.00	-.08 (.08)	-.07 (.07)
Tenure	-.18*	-.004 (.011)	-.002 (.011)
Financial efficacy	.04	0.21 (.07) p = .02	.13 (.07) p = .05
Need for achievement	1.21**	.24 (.09) p = .01	.22 (.09) p = .02
Need for autonomy	1.21**	-.08 (.09)	-.12 (.09)
Gender	-.20***	-.04 (.14)	-.01 (.14)
Age	0.09	.03 (.05)	.03 (.05)
Age ²	-.01	-4.47 ^e -4 (5.76 ^e -4)	-4.72 ^e -4 (5.53 ^e -4)
Uncertainty intolerance	-.10***	-.03 (.12)	.16 (.13)
Firm size	-.00		
2		-.03 (.15)	-.06 (.15)
3		.09 (.15)	.09 (.15)
4		.08 (.21)	.06 (.21)
5		-.90 (.84)	-.92 (.83)
6		.96 (.32) p = .003	1.28 (.33) p = .000
Organization structure	.02/-.02 (reverse coded)		
2		.29 (.19)	.23 (.19)
3		.66 (.20) p = .001	.60 (.20) p = .003
4		.19 (.27)	.08 (.27)
5		-.10 (.23)	-.11 (.22)
Monitor	.10***	.10 (.16)	.11 (.15)
Technological turbulence	-.02	.04 (.07)	.01 (.07)
Psychological flexibility			.30 (.09) p = .001
Constant	2.05	3.23 (1.41)	2.27 (1.42)
R ²	.05	.21	.25
Adjusted R ²		.14	.17

^a Robust standard error in parentheses. Exact p-values where relevant. Stars indicate significance as reported in CV.

^b Note that CV's dependent variable is on a 1–5 scale, while ours is on a 1–7 scale.

Table 5
Results of OLS model on satisfaction with work-life balance^{a, b}.

Variable	Coefficient on CV's counterpart variable	Model 1	Model 2
Performance	-.09***	1.59 ^e -6 (6.09 ^e -7) p = .01	1.48 ^e -6 (5.98 ^e -7) p = .01
Education	.01	-.04 (.11)	-.04 (.10)
Tenure	-.05	-.007 (.02)	.02 (.02)
Financial efficacy	.07**	.09 (.12)	-.01 (.11)
Need for achievement	.57	.18 (.15)	.15 (.15)
Need for autonomy	.57	-.24 (.15) p = .11	-.28 (.15) p = .06
Gender	-.13*	-.51 (.22) p = .02	-.47 (.22) p = .03
Age	0.00	-.16 (.06) p = .01	-.16 (.06) p = .01
Age ²	-.00	.002 (.0007) p = .03	.002 (.0007) p = .03
Uncertainty intolerance	(reverse coded) -.01	-.20 (.16)	.04 (.18)
Firm size	.01		
2		.25 (.24)	.22 (.24)
3		.35 (.26)	.35 (.26)
4		-.13 (.42)	-.16 (.41)
5		-2.01 (.95) p = .03	-2.04 (.87) p = .02
6		2.91 (.50) p = .000	3.31 (.51) p = .000
Organization structure	-.03/-0.12* (reverse coded)		
2		.12 (.29)	-.08 (.29)
3		.45 (.31)	.37 (.31)
4		.25 (.37)	.12 (.36)
5		.37 (.32)	.36 (.31)
Monitor	.03	.26 (.23)	.27 (.23)
Technological turbulence	-.07*	.14 (.12)	.10 (.11)
Psychological flexibility			.38 (.13) p = .005
Constant	2.73	7.64 (1.93)	6.41 (1.94)
R ²	.07	.18	.21
Adjusted R ²		.11	.13

^a Robust standard error in parentheses. Exact p-values where relevant. Stars indicate significance as reported in CV.

^b Note that CV's dependent variable is on a 1–5 scale, while ours is on a 1–7 scale.

Table 6
Results of OLS model on satisfaction with personal life.^a

Variable	Coefficient on CV's counterpart variable	Model 1	Model 2
Performance		1.84 ^e -6 (5.53 ^e -7) p = .001	1.73 ^e -6 (5.51 ^e -7) p = .002
Education		-.05 (.09)	-.04 (.09)
Tenure		.015 (.015)	.023 (.015)
Financial efficacy		.09 (.08)	-.01 (.08)
Need for achievement		.19 (.11) p = .10	.16 (.11) p = .15
Need for autonomy		.01 (.11)	-.03 (.11)
Gender		.33 (.16) p = .05	.36 (.16) p = .02
Age		-.08 (.06) p = .19	-.08 (.06) p = .15
Age ²		.0007 (.0007)	.0007 (.0007)
Uncertainty intolerance		-.11 (.13)	.12 (.15)
Firm size			
2		.001 (.18)	-.03 (.18)
3		-.19 (.24)	-.18 (.24)
4		-.13 (.35)	-.16 (.34)
5		-.63 (.60)	-.65 (.52)
6		.71 (.41) p = .09	1.10 (.42) p = .01
Organization structure			
2		.24 (.23)	.15 (.23)
3		.42 (.27)	.35 (.26)
4		.13 (.31)	.003 (.31)
5		.05 (.26)	.04 (.26)
Monitor		.25 (.19)	.26 (.19)
Technological turbulence		.03 (.09)	-.01 (.08)
Psychological flexibility			.37 (.12) p = .002
Constant		5.82 (1.53)	4.62 (1.56)
R ²		.12	.16
Adjusted R ²		.04	.08

^a Robust standard error in parentheses. Exact p-values where relevant.

Regarding *financial efficacy*, we find large positive coefficients for income satisfaction and work satisfaction, and a small coefficient for work-life balance satisfaction. CV's coefficients are in the same direction, but they are strongest for the dependent variable where ours are weakest. Perhaps, such differences in the small details are due to a covariate that competes for explanatory power with financial efficacy that CV include, but for which we do not have a counterpart. Unfortunately, CV do not provide a correlation table, so we cannot assess this in more depth.

Regarding *intrinsic motivation*, we replicate CV's strong positive effect on work satisfaction and the weak effects on the other dependent variables with the need for achievement measure. Furthermore, need for autonomy (our other intrinsic motivation measure) has a negative association with all dependent variables, especially with work-life balance satisfaction. Thus, CV's intrinsic motivation seems to have captured need for achievement, but missed the impact of need for autonomy.

For *gender*, we replicate CV's significant negative effect on work-life balance satisfaction. Our negative effect of gender on satisfaction with (the psychological burdens of) work is weaker than that found by CV. Perhaps, this is because our measure of satisfaction with work does not emphasize the psychological burdens aspect, and gender's effect may be related to that aspect specifically. Finally, we do not find CV's positive gender effect on income satisfaction, but we do find a positive coefficient for personal life satisfaction. Such varied effects of gender show that these domains of satisfaction do meaningfully differ for entrepreneurs.

As to *age*, we follow CV's use of a quadratic term. CV find both positive and negative first-order terms together with negative and positive quadratic terms, all of them being insignificant. We also have weak effects, except for work-life balance satisfaction, where we find that satisfaction decreases with age up to age 35, after which it stagnates until age 50, after which it slowly goes back up. Personal life satisfaction linearly declines with age for the age range in our sample.

Regarding *uncertainty intolerance*, the consistently negative coefficient we find is directionally similar to CV's risk tolerance (reverse coded), only less statistically significant. Furthermore, when psychological flexibility is included, the sign of uncertainty intolerance changes from a negative to a positive effect. Psychological flexibility captures the covariation better, and thus steals uncertainty intolerance's explanatory power. That suggests that the explanatory power of uncertainty intolerance comes from capturing the emotional impact of uncertainty and change in people with high uncertainty intolerance.

Regarding *firm size*, both our and CV's models reveal some insignificant effects. However, our approach of treating firm size as a categorical variable reveals non-linear differences between size classes for satisfaction with work-life balance. Note that there is only one observation in firm size category six.

For *organization structure*, our categorical variable highlights organizations with advanced formal structures consistently as the best for entrepreneurs' satisfaction. This suggests that while CV find that working from home has a positive effect on satisfaction with leisure time, there may also be drawbacks in the sense of the less formal structures associated with working from home.

Regarding *monitoring* environmental changes, CV report strong positive coefficients, especially for income satisfaction. We replicate CV's positive effect for work-life balance, but we find a negative coefficient for income satisfaction. The difference may be due to our measure only asking whether the entrepreneur engages in activities to keep up with the environment, as opposed to CV's measure that

also asks for whether those activities are sufficient. It is also striking that monitoring is as strongly related to work satisfaction as it is to personal life satisfaction, suggesting that the mechanism for its effect may not relate to business ability or strategy, as one might intuitively expect.

As to *technological turbulence*, we find positive effects (most statistically significant for income satisfaction, but largest for work-life balance satisfaction), whereas CV report negative coefficients (most statistically significant and largest for work-life balance satisfaction). This difference is difficult to explain because the measures are similar. Possibly, technological change in 1994 (CV's sample) carries a different meaning than technological change in 2016–2018. For instance, few small businesses worried about the Internet in 1994, whereas today firms in many industries may be taken over by an app tomorrow. Alternatively, technological turbulence is most correlated with monitoring, and because monitoring differs, it may differently partial out the effect of technological turbulence. Unfortunately, as said, CV do not provide a correlation table, so we cannot assess this explanation.

2.2. Mediated effects via performance

CV are also interested in modeling the mediating role of performance. To compare, Table 7 provides an analysis of performance as a counterpart to CV's Table 3 (p. 383). Of CV's variables for which we do not have counterparts, many have significant effects on performance. We are, however, able to replicate the negative effects of intrinsic motivation and gender, and the positive effect of firm size and monitor. Our organizational structure variable approximates the positive effects of more complicated organizational structures that CV find (e.g., outsourcing and not being based at the entrepreneur's home), if we take organization structure level 5 to be the baseline category (5 = simple decision-making processes with centralized conservative decisions, and little information processes even though more are needed). Furthermore, we reveal a significant effect for education, where CV's counterpart variable is insignificant. Possibly, education was insignificant in CV because their significant firm-level variables more directly captured the effect of education, thereby making it superfluous. For example, if education is associated with an increase in start-up capital, which is positively linked with performance, then we find a significant effect of education on performance because we do not have start-up capital as a covariate. The other variables have insignificant coefficients in both our and CV's results.

Psychological flexibility is uncorrelated with venture profit in the current study. We did not develop an expectation regarding this relationship. However, this finding does add to, and somewhat contradicts, the finding that failure-related action orientation (which partly overlaps with the acceptance and defusion aspects of psychological flexibility) is positively related to entrepreneurial success (measured as self-assessed success and performance growth compared to similar other businesses) (Przepiorka, 2017).

CV briefly infer mediation from the separate regression tables. We do formal mediation analyses based on our Model 2. For education, Table 6 shows a weak and negative effect on personal life satisfaction, but the mediation analyses reveal a significant positive indirect effect via performance ($B = 0.04, p = .05$). We have similar small but statistically significant positive mediated effects of

Table 7
Results of OLS model on performance^{a, b}.

Variable	Coefficient on CV's counterpart variable	Model 1	Model 2
Education	0.02	22344 (11600) p = .06	22380 (11602) p = .06
Tenure	0.04	-1618 (1265)	-1362 (1278)
Financial efficacy	0.06	-1473 (10833)	-4702 (11322)
Need for achievement	-0.43	-16252 (15323)	-17099 (15713)
Need for autonomy	-0.43	-36212 (16096) p = .03	-37605 (16343) p = .02
Gender	-0.41***	-26404 (17640) p = .14	-25031 (17833) p = .16
Age	0.024	-1441 (8184)	-1692 (8236)
Age ²	-0.00	30 (97)	29 (96)
Uncertainty intolerance	-0.07 (reverse coded)	2664 (15571)	9471 (21189)
Firm size	0.17***		
2		23224 (19292)	22110 (18808)
3		69736 (23310) p = .003	69687 (23174) p = .003
4		111290 (79767)	109885 (79423)
5		270363 (129627) p = .04	268505 (132063) p = .04
6		17386 (45975)	30533 (51177)
Organization structure	0.42***/0.26*** (reverse coded)		
2		16684 (25592)	13728 (25741)
3		18282 (34525)	15875 (35636)
4		19723 (32874)	15353 (32731)
5		-46780 (31362)	-47028 (31389)
Monitor	0.14***	35682 (16625) p = .03	35883 (16719) p = .03
Technological turbulence	-0.3	5240 (10787)	3999 (10967)
Psychological flexibility			12510 (18103)
Constant		178267 (255311)	137183 (248223)
R ²	0.59	.18	.18
Adjusted R ²		.11	.11

^a Standard error in parentheses. Exact p-values where relevant. Stars indicate significance as reported in CV.

^b Note that CV cut performance into 8 unequal categories of sales revenue, while we use the continuous euro amount of operating income (i.e., sales revenue minus cost). So, effect sizes are incomparable.

education for income satisfaction and work-life balance satisfaction. CV do not find a mediated effect of education because they do not have an effect of education on performance.

Need for autonomy has a negative mediated effect in addition to its negative direct effect on the three kinds of satisfaction in CV (B between -0.02 and -0.05 , p between $.05$ and $.03$). For satisfaction with personal life, the mediated effect is strongest at $B = -0.07$ and $p = .01$.

For monitor, adding the small positive indirect effect via performance to the direct effect reveals a slightly stronger total effect on personal life satisfaction ($B = 0.33$, $p = .07$) than the direct effect reported in Table 6. For the other satisfaction domains, monitor's mediated effects are small.

Note again that a causal interpretation of these mediation effects is dangerous because the coefficient of performance on satisfaction is likely to at least partially reflect satisfaction causing performance (Dijkhuizen et al., 2018). However, psychological flexibility has a strong effect on satisfaction, but is only weakly associated with performance, which suggests that a possible impact of satisfaction on performance is weak.

3. Discussion

Our key finding is that psychological flexibility substantially helps explain entrepreneurs' satisfaction over and above existing explanatory variables, as included in CV and our conceptual replication. This finding is in line with results for psychological flexibility in clinical and student samples (A-Tjak et al., 2015; Gillanders et al., 2014; Öst, 2014). Thus, we extend the understanding of drivers of entrepreneurial satisfaction (Bradley and Roberts, 2004; Stephan, 2018; van Gelderen et al., 2019). Additionally, our findings suggest practical implications on how to support entrepreneurs in their multidimensional satisfaction. Specifically, training to increase psychological flexibility could increase satisfaction, in work and beyond. Furthermore, we identify a theoretical challenge for the application of psychological flexibility to entrepreneurs' satisfaction. Specifically, what to do with the committed action and values aspects, as they load on unique factors and especially suffer from conceptual proximity in the case of satisfaction? In future research, this issue can be explored further.

Conceptual replication as a means to contribute to extant knowledge also in itself can add to our understanding. In the context of our conceptual replication of CV, this is especially true for three cases where differences between our and CV's results help to better understand the mechanism for the effects CV find. First, CV report an effect of education only for satisfaction with income, while the effect of education is consistent across types of satisfaction in our data. So, while CV's results suggest that the mechanism for the effect of education does not apply to others types of satisfaction, our results suggest that the mechanism must be general.

Second, in models without psychological flexibility, on the one hand, we replicate CV's negative effect of uncertainty intolerance (i.e., the positive effect of risk tolerance). But, on the other hand, in models with psychological flexibility that effect disappears or switches sign. This means that the mechanism driving CV's finding for uncertainty intolerance is something that is better captured by psychological flexibility. One possibility is that uncertainty intolerance had a negative effect on satisfaction because entrepreneurs intolerant to uncertainty experienced greater stress and negative emotions due to the uncertainty inherent to their profession (as opposed to for instance uncertainty intolerant entrepreneurs choosing strategies that are too safe and ultimately less satisfying).

Third, CV find a strong effect for 'monitor' while we do not. CV ask whether an entrepreneur is able to monitor their business environment sufficiently, whereas we ask whether active monitoring happens in the first place. Thus, CV's finding may depend on the tautological phrasing (i.e., using the word 'sufficiently'). Hence, our study exemplifies the value and feasibility of going beyond direct replication and toward conceptual replication, to spur more cumulative knowledge development in the research areas of happiness as well as entrepreneurship.

Conceptual replication involves judgement calls about whether measures capture the same concept. For example, CV's satisfaction measures have respondents answers relative to their expectation, while our measures directly ask how satisfied the respondent is. Like the previous three points, that difference seems small but it could explain different results. While it is possible to view that difference as a weakness of not replicating CV closely, we view it as a strength of conceptual replication to allow the space to measure the concept of both our and CV's interest more proximately.

Of course, as any study, ours is not without limitations, which point to interesting future research avenues. Except for the usual suggestions relating to further replications in other contexts (e.g., in other countries) and after additional extensions (e.g., adding other potentially important independent variables), we would like to emphasize the need to move must invest in longitudinal panel studies with a nonrandom sample of entrepreneurs. Only then, we can seriously explore issues of reverse causality and sample selection.

Author statement

Joeri van Hugten: Methodology, Formal analysis, Writing – Original draft, Visualization. Zainab Noor el Hejazi: Validation, Data curation, Writing – Original Draft. Jacqueline Brassey: Conceptualization, Writing – Review & Editing, Resources. Johanna Vanderstraeten: Resources, Data curation, Writing – Review & Editing, Supervision, Project administration, Funding acquisition. Nele Cannaerts: Resources, Writing – Review & Editing. Ellen Loots: Resources, Writing – Review & Editing. Wim Coreynen: Data curation, Writing – Review & Editing, Project administration. Arjen van Witteloostuijn: Conceptualization, Methodology, Resources, Writing – Original Draft, Supervision, Funding acquisition.

Compliance with ethical standards

We thank the our partners in the project: the Flemish association of small and medium-sized enterprises (UNIZO), the Flemish Ministry of Innovation and Entrepreneurship (VLAIO) for financing, and Graydon Belgium for financial data.

Informed consent

Each participant had an intake interview in which they were informed of the project, including an agreement of confidential treatment of their data, after which they were explicitly asked for their consent to join or not (the interviewers also provided options to join other trainings instead of our consulting project).

Declaration of competing interest

The authors declare that they have no conflict of interest.

Appendix

Table A1
Correlations

Variable	1	2	3	4	5	6	7	8	9
1. Psychological flexibility									
2. Performance	.10								
3. Education	.11	.14							
4. Tenure	-.01	-.06	-.21						
5. Financial efficacy	.30	.03	.09	-.03					
6. Need for achievement	.14	-.06	-.04	.00	.06				
7. Need for autonomy	.13	-.04	.15	-.11	-.08	.13			
8. Gender	-.09	-.11	.11	-.08	-.01	-.01	-.15		
9. Age	.23	.03	-.02	.63	.05	-.03	-.04	-.06	
10. Uncertainty intolerance	-.54	-.04	-.12	.03	-.06	-.11	-.08	.02	-.10
11. Firm size	.01	.26	.00	.16	.06	-.01	-.04	-.20	.08
12. Monitor	.09	.11	-.02	.04	.09	.10	.06	-.12	.01
13. Technological turbulence	.10	.00	-.10	.14	-.06	.10	-.08	-.09	.02
14. Income satisfaction	.19	.19	.01	.06	.23	.02	-.17	-.04	.08
15. Work satisfaction	.26	.18	-.02	-.06	.22	.18	-.15	-.09	-.03
16. Work-life balance satisfaction	.17	.16	-.05	.03	.09	.06	-.15	-.19	-.02
17. Personal life satisfaction	.21	.20	-.02	.03	.08	.12	-.08	.07	-.03
Variable	10	11	12	13	14	15	16	17	
10. Uncertainty intolerance									
11. Firm size	.01								
12. Monitor	-.05	.01							
13. Technological turbulence	-.03	-.07	.17						
14. Income satisfaction	-.06	.13	.01	.06					
15. Work satisfaction	-.06	.05	.13	.04	.46				
16. Work-life balance satisfaction	-.04	.10	.13	.09	.30	.40			
17. Personal life satisfaction	-.05	-0.00	.14	.05	.12	.36	.47		

Psychological Flexibility Questionnaire (in italics, the items used in the measure)

Acceptance

Acc1- Worries often stand in the way of my performance (reverse coded)

Acc2 - At work it is OK for me to have my fears be fully present

Acc3 - I do my best to avoid negative experiences at work (reverse coded)

Acc4 - I have to control thoughts that come to mind (reverse coded)

Acc5 - My thoughts and feelings do not prevent me from tapping my full potential at work

Committed Action

Com1 - If I want to achieve something at work, I will go for it

Com2 - I am able to divide my long-term goals into short-term opportunities

Com3 - I regularly make concrete plans for the future for my work and my career

Com4 - I like to take on new challenges at work

Com5 - I actively search for new experiences and learning opportunities at work

Defusion

Def1 - I have the feeling that I no longer see the forest for the trees (reverse coded)

Def2 - It is easy for me to view my thoughts from a different angle

Def3 - If someone makes an unpleasant remark at work, it affects me for a long time (reverse coded)

Def4 - I usually respond strongly to my own negative thoughts (reverse coded)

Def5 - It is difficult for me to let go of disturbing thoughts at work, even if I know it would help me (reverse coded)

Mindfulness

Min1 - I find it difficult to concentrate on what is happening in the here and now (reverse coded)

Min2 - I am easily distracted at work (reverse coded)

Min3 - It is difficult for me to find words that describe my thoughts (reverse coded)

Min4 - I don't approve if I have strange thoughts at work

Min5 - I can easily describe my beliefs and opinions at work

Self-as-context

Sel1 - I feel restricted by everything that I demand from myself at work (reverse coded)

Sel2 - I think I should always be nice (reverse coded)

Sel3 - I suffer from a negative self-image (reverse coded)

Sel4 - If I don't do something well at work, I blame myself for that

Sel5 - I don't expect myself to do everything right at work

Values

Val1 - My life is well balanced

Val2 - I realize that my actions are my own choices

Val3 - I think my life is valuable

Val4 - I find support from the people in my area

Val5 - I think family and / or friends are important

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