



Narcissism and entrepreneurship: Evidence from six datasets

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ABSTRACT

Widespread attention is being paid to the alleged rise of narcissism in people in general and business leaders in particular. Surprisingly, hardly any studies have focused on the link between narcissism and entrepreneurship. Using self-reported data from 4798 respondents from three countries, we explore the associations between trait narcissism and six different entrepreneurial aspects that represent the entire entrepreneurial process. Overall, our findings suggest that a positive link exists between narcissism and entrepreneurship that is particularly salient in the early stage of the entrepreneurial process (e.g., entrepreneurial intention) and in the individual aspects of entrepreneurship (e.g., entrepreneurial orientation, well-being of the entrepreneur). Our additional analyses reveal that the adaptive aspect of narcissism (i.e., leadership/authority) is most consistently linked to entrepreneurship and that the links between narcissism and entrepreneurship are predominately linear. Finally, our findings are largely robust when different sets of controls are added.

1. Introduction

In the past decades, narcissism, a label that originates from the ancient Greek myth of Narcissus, who fell in love with his own image, has seen an upsurge in both public and scholarly interest. In particular, academic scholars have linked narcissism to important processes and outcomes in our daily lives, such as decision making, work performance, and unethical behavior (see Braun, 2017; Morf and Rhodewalt, 2001a for reviews). Furthermore, several studies have suggested that the level of narcissism has increased over time and has become a salient aspect of recent generations (Twenge, 2006; Twenge et al., 2008). See Trzesniewski et al. (2008) and Wetzel et al. (2017) for alternative views.

Although a narcissist is typically viewed as someone who is arrogant, self-entitled, aggressive (Campbell and Foster, 2011; Pincus

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and Lukowitsky, 2010), and eagerly seeks attention from others (Ellison et al., 2011; Seidman, 2013), narcissism can also be regarded as a healthy and natural part of our personality and mental development (Bender, 2012). For example, narcissism is positively associated with extraversion and subjective well-being and inversely associated with depression, sadness, loneliness, and neuroticism (Miller and Campbell, 2008; Sedikides et al., 2004). Moreover, recent evidence has demonstrated that a moderate level of narcissism can be desirable within certain contexts and for fulfilling specific tasks, such as giving a job interview (Paulhus et al., 2013), making a presentation (Oltmanns et al., 2004), and making a first acquaintance (Back et al., 2010). Given their extroverted personality and self-enhancing behavioral tendencies, narcissists are likely to stand out from the crowd (Mehdizadeh, 2010; Nathan DeWall et al., 2011) and emerge as leaders (Grijalva et al., 2015; Nevicka et al., 2011). Importantly, when narcissists emerge as leaders, they are often rated as more effective even if they are not more effective objectively (Deluga, 1997; Guedes, 2017; Nevicka et al., 2018).

Recently, growing but mainly anecdotal evidence is coming to light that suggests that narcissism plays a role in entrepreneurship (McKinney, 2013; Navis and Ozbek, 2016). According to the person-environment (P-E) fit theory, individuals are attracted to a work environment (e.g., demands, values, requirements) that matches their characteristics (e.g., abilities, personalities, and needs) (Kristof-Brown et al., 2005). Entrepreneurs are commonly portrayed as a symbol of wealth, power, and success (Wooldridge, 2009). Therefore, we expect that narcissists—who have a strong desire to seek attention, admiration, and power (Morf and Rhodewalt, 2001b)—are attracted to entrepreneurship. In fact, the popular press (Clifford, 2015; Mallaby, 2018; Phillip, 2017) and scholarly research (Ahmadian et al., 2017; Visser et al., 2017) frequently associate high-profile entrepreneurs, such as Donald Trump and Elon Musk, with narcissism.

Despite growing public interest and anecdotal evidence, limited scholarly attention has been paid to the link between narcissism and entrepreneurship. To date, only a handful of academic studies have investigated this relationship. This limited research mainly relies on data collected on students and CEOs and focuses on the intention to become an entrepreneur and the strategic orientation of a firm toward entrepreneurship. Furthermore, because many definitions and measures exist for both entrepreneurship and narcissism, the question arises as to whether existing findings are robust across these definitions and measures.

The upsurge of narcissism in business and society, together with the essential role that entrepreneurs play in job creation, innovation, and economic development (Carree and Thurik, 2003; Malchow-Møller et al., 2011), call for a systematic and large-scale study examining the link between narcissism and different aspects of entrepreneurship. Does narcissism associate uniformly with different aspects of entrepreneurship? Does narcissism associate with entrepreneurs' business success and well-being? Answers to these questions are vital, not only for our understanding of the importance of narcissism for entrepreneurship (or vice-versa) but also for designing possible interventions to mitigate the potential downside of narcissism.

In this paper, we conduct a large-scale study with a total of 4798 respondents to investigate the relation between narcissism and six different aspects of entrepreneurship. These six aspects of entrepreneurship represent the entire entrepreneurial process and are also known as entrepreneurial engagement levels (Grilo and Thurik, 2008) or the entrepreneurial ladder (van der Zwan et al., 2010). Well-being is included in the present study because it is considered to be an important outcome variable in the narcissism (Rose and Campbell, 2004; Zuckerman and O'Loughlin, 2009) and entrepreneurship literature (Wiklund et al., 2019). The process-based view of entrepreneurship is essential to the understanding of the role of narcissism in entrepreneurship because doing so allow us to observe the role of narcissism across the entire entrepreneurial process rather than in isolated stages. (Baron, 2003; Jack and Anderson, 2002).

Important to note is that we do not investigate narcissism as a mental disorder (i.e., narcissistic personality disorder). Instead, we view narcissism as a trait-like disposition (see Weiss and Miller, 2018) that exists in the general population and can be measured along a continuum in which individuals vary from having *no* narcissistic tendency to a *very strong* narcissistic tendency (Cain et al., 2008; Miller and Campbell, 2008).

Drawing on P-E fit theory, we expect that a positive link exists between narcissism and entrepreneurship. We also expect that this link is easiest to establish in the early stages of the entrepreneurial process during which people are attracted and selected to become entrepreneurs. However, given the exploratory nature of our study and the lack of previous research, we do not have a specific hypothesis on the relationship between narcissism and the six entrepreneurial aspects. Our contribution is empirical in nature because we aim to establish regularities in the link between narcissism and various aspects of entrepreneurship that might be useful for future research and theory building.

2. Methods

Our primary goal is to examine the role of narcissism in entrepreneurship throughout the entire entrepreneurial process. Particularly, we used six independent datasets ($N = 4798$) collected in France, Japan, and the Netherlands to examine the link between narcissism and various aspects of entrepreneurship. These include entrepreneurial intention, (individual and business) entrepreneurial orientation, entrepreneurial choice, entrepreneurial success, and well-being of entrepreneur. The definition of each aspect can be found in section 1.2 of the Supplementary Information (SI) Appendix. The six data sets allow for eleven separate studies (Table 1) which result in 20 different associations between narcissism and entrepreneurship (Tables 2 and 3). A full description of our methodology, data, supplementary analyses, and translations can also be found in our SI Appendix. Tables S2, S6, S7, S12, S13, and S16 present the means, standard variations, correlations, and internal consistency scores of the variables in datasets 1, 2, 3, 4, 5, and 6, respectively.

2.1. Dataset 1

Dataset 1 included Dutch-speaking university students ($N = 182$) who participated in the study in exchange for course credits and/or a financial reward of five euros. The sample consisted of mainly Dutch students (96%) with a mean age of 20.6 years. Nearly half of the

Table 1
Overview of the six datasets.

Dataset	Study	Measure of narcissism	Entrepreneurial aspects	Sample	Sample Size
1	1, 10	16-item Narcissistic Personality Inventory	Entrepreneurial intention; Individual entrepreneurial orientation	Dutch students	182
2	2, 4	16-item Narcissistic Personality Inventory	Entrepreneurial intention; Entrepreneurial choice	Dutch students, salaried workers and entrepreneurs	2446
3	3, 5	4-item sub-measure from Dirty Dozen	Entrepreneurial intention; Entrepreneurial choice	Dutch students, salaried workers and entrepreneurs	1252
4	6, 8	40-item Narcissistic Personality Inventory	Entrepreneurial success; Well-being of entrepreneur	French SME owners	257
5	7, 9	40-item Narcissistic Personality Inventory	Entrepreneurial success; Well-being of entrepreneur	Japanese SME owners	340
6	5, 11	4-item sub-measure from Dirty Dozen	Entrepreneurial choice; Business entrepreneurial orientation	CEOs of Dutch SMEs	321

Notes. Total sample size = 4798.

Datasets 2 and 3 include start-ups and entrepreneurs with various levels of experience. SME is a small-to medium-sized enterprise.

respondents were male (42.9%). The majority were bachelor's degree students (82.4%) with a major in economics or psychology. Four of the respondents had entrepreneurial experience.

2.2. Datasets 2 and 3

Respondents of datasets 2 and 3 were recruited using a Dutch company that facilitates coaching services, such as assessment tools and training programs, for coaching businesses and organizations about entrepreneurship.

Dataset 2 consisted of 3022 respondents. Most respondents were salaried workers (38.3%), followed by entrepreneurs (29.1%), unemployed individuals (19.1%), and students (13.6%). Unemployed individuals were not included in the main analysis, thus leading to a final sample of 2446 respondents. To examine the link between narcissism and entrepreneurial intention as well as entrepreneurial choice, we split dataset 2 into two subsets. The first subset consisted of 410 students (53% male; 48% bachelor's degree or higher) and was used for study 2. The second subset consisted of 2036 salaried workers and entrepreneurs (49% male; 58.4% bachelor's degree or higher) and was used for study 4.

Table 2
Bivariate correlations (r) and standardized regression coefficients (β) between various measures of narcissism and aspects of entrepreneurship.

Study	Dataset	Narcissism Measure	Entrepreneurial Aspect	r	B	$\beta_{addition}$
1	1	NPI-16	Intention	.23**	.27**	.20*
2	2	NPI-16	Intention	.11*	.12*	–
3	3	Dirty Dozen	Intention	.15*	.14*	–
4	2	NPI-16	Choice (versus salaried workers)	.03	.05*	.05
5	3	Dirty Dozen	Choice (versus salaried workers)	-.06	-.01	-.01
5	3, 6	Dirty Dozen	Choice (versus CEOs)	.31**	.13**	.14**
6	4	NPI-40	Success (Number of employees)	.03	-.02	-.00
6	4	NPI-40	Success (Turnover)	-.02	-.04	-.02
6	4	NPI-40	Success (Expected business growth)	.12	.06	.08
6	4	NPI-40	Success (Business success)	.07	.01	-.01
6	4	NPI-40	Success (Relative business success)	.22**	.19*	.18*
7	5	NPI-40	Success (Number of employees)	.02	.03	.02
7	5	NPI-40	Success (Turnover)	.07	.11*	.11
7	5	NPI-40	Success (Expected business growth)	.07	.08	.10
8	4	NPI-40	Well-being (Life satisfaction)	.14*	.13*	.13*
8	4	NPI-40	Well-being (Career satisfaction)	.06	.05	.02
9	5	NPI-40	Well-being (Life satisfaction)	.21**	.20**	.17**
9	5	NPI-40	Well-being (Career satisfaction)	.27**	.27**	.26**
10	1	NPI-16	Individual entrepreneurial orientation	.27**	.31**	.16*
11	6	Dirty Dozen	Business entrepreneurial orientation	.14*	.12*	.13*

Notes. NPI = Narcissistic Personality Inventory; Dirty Dozen = 4-item narcissism sub-measure of the Dirty Dozen measure.

For entrepreneurial choice, we dummy coded the occupation of the respondents (0 = salaried workers or CEOs; 1 = entrepreneurs). Relative business success = Business success relative to the main competitor.

$\beta_{addition}$ = Standardized regression coefficient of a robustness check with different sets of control variables.

Standardized regression coefficients were computed, including control variables.

* $p < .05$; ** $p < .01$ (two-sided tests).

Table 3Bivariate correlations (*r*) between the three dimensions of narcissism and six aspects of entrepreneurship.

Study	Dataset	Measure of narcissism	Entrepreneurial aspect	L/A	GE	E/E
1	1	NPI-16	Entrepreneurial intention	.28**	.17*	-.03
2	2	NPI-16	Entrepreneurial intention	.14**	.00	.08
3	3	Dirty Dozen	Entrepreneurial intention	–	–	–
4	2	NPI-16	Entrepreneurial choice (versus salaried workers)	.02	.03	-.03
5	3	Dirty Dozen	Entrepreneurial choice (versus salaried workers)	–	–	–
5	3, 6	Dirty Dozen	Entrepreneurial choice (versus CEOs)	–	–	–
6	4	NPI-40	Entrepreneurial Success: Number of employees	.16**	-.02	-.13*
6	4	NPI-40	Entrepreneurial Success: Turnover	.04	-.03	-.11
6	4	NPI-40	Entrepreneurial Success: Expected business growth	.13*	.06	.00
6	4	NPI-40	Entrepreneurial Success: Business success	.11	-.02	.01
6	4	NPI-40	Entrepreneurial Success: Relative business success	.21**	.10	.03
7	5	NPI-40	Entrepreneurial Success: Number of employees	.08	.00	-.01
7	5	NPI-40	Entrepreneurial Success: Turnover	.10	.02	.09
7	5	NPI-40	Entrepreneurial Success: Expected business growth	.14*	.00	-.03
8	4	NPI-40	Well-being of entrepreneur: life satisfaction	.12	.15*	-.22**
8	4	NPI-40	Well-being of entrepreneur: career satisfaction	.08	.06	-.14*
9	5	NPI-40	Well-being of entrepreneur: life satisfaction	.14**	.12*	.04
9	5	NPI-40	Well-being of entrepreneur: career satisfaction	.20**	.21**	.01
10	1	NPI-16	Individual entrepreneurial orientation	.16*	.31**	-.03
11	6	Dirty Dozen	Business entrepreneurial orientation	–	–	–

Note. NPI = Narcissistic Personality Inventory; Dirty Dozen = 4-item narcissism sub-measure of Dirty Dozen.

L/A = Leadership/Authority; GE = Grandiose Exhibitionism; E/E = Entitlement/Exploitativeness.

Relative business success = Business success relative to the main competitor.

For entrepreneurial choice, we dummy coded the occupation of the respondents (0 = salaried workers; 1 = entrepreneurs).

p* < .05; *p* < .01 (two-sided tests).

Dataset 3 dataset consisted of 1449 respondents. Most respondents were salaried workers (37.8%), followed by entrepreneurs (32.9%), students (15.7%), and unemployed individuals (13.6%). Our final sample contained 1252 respondents after unemployed individuals were removed. As we did with dataset 2, we created two subsets of dataset 3. The first subset consisted of 228 students (59.6% male; 40.3% bachelor's degree or higher) and was used for study 3. The second subset consisted of 1024 salaried workers and entrepreneurs (49.7% male; 65.5% bachelor's degree or higher) and was used for study 5.

2.3. Datasets 4 and 5

Datasets 4 and 5 were collected by an organization that aims to promote the mental and physical health of self-employed workers.

Dataset 4 consisted of 257 owners of small and medium-sized enterprises (SMEs) located in France. The majority of the respondents were male (72.0%), married (55.1%), and the founder of the business (68.8%). The respondents of this sample had an average age of 47.2 years. The average number of employees was 4.72. Most of the businesses (95.1%) had a turnover of less than two million euros.

Dataset 5 consisted of 340 SME owners located in Japan. The majority of the respondents were male (89.5%), married (86.2%), and founder of the business (61.8%). The average age of the SME owners was 63.6 years. The average size of the business was 13.63 employees, and the majority of the companies (78.5%) had a turnover of less than two million euros.

2.4. Dataset 6

Dataset 6 was collected in 2014 as part of a larger research project on entrepreneurship in the Netherlands. The original dataset consisted of 321 CEOs and 188 top management team members of SMEs in the Netherlands. Businesses in this dataset have an average size of 37.06 employees, and the majority belongs to the manufacturing and professional services industry.

For this study, we focused only on the data collected from CEOs. The CEOs in this dataset were mainly male (96%) with an average age of 51.1 years. The CEOs surveyed had worked in their current firms for an average of 16.2 years, and approximately 40% of the CEOs were founders or co-founders of their firms.

3. Results

The relationship between the degree of narcissism and the six aspects of entrepreneurship was investigated using IBM SPSS (version 24). An overview of the findings across all eleven studies can be found in Fig. 1 and Table 2 (see Tables S19 and S20 for more details). The measures of narcissism and the entrepreneurial aspects examined in each study are outlined in Table 2. The descriptive statistics, correlations, internal consistency scores of the measures in our datasets, and the resulting regression coefficients, can be found in the SI Appendix. To minimize data loss, we handled missing data using pairwise deletion.

We discriminate between bivariate correlations and what we refer to as our main results. Unlike bivariate correlations, our main results are obtained by performing specific regression analyses in which controls are included. To summarize, we found that, of the 20

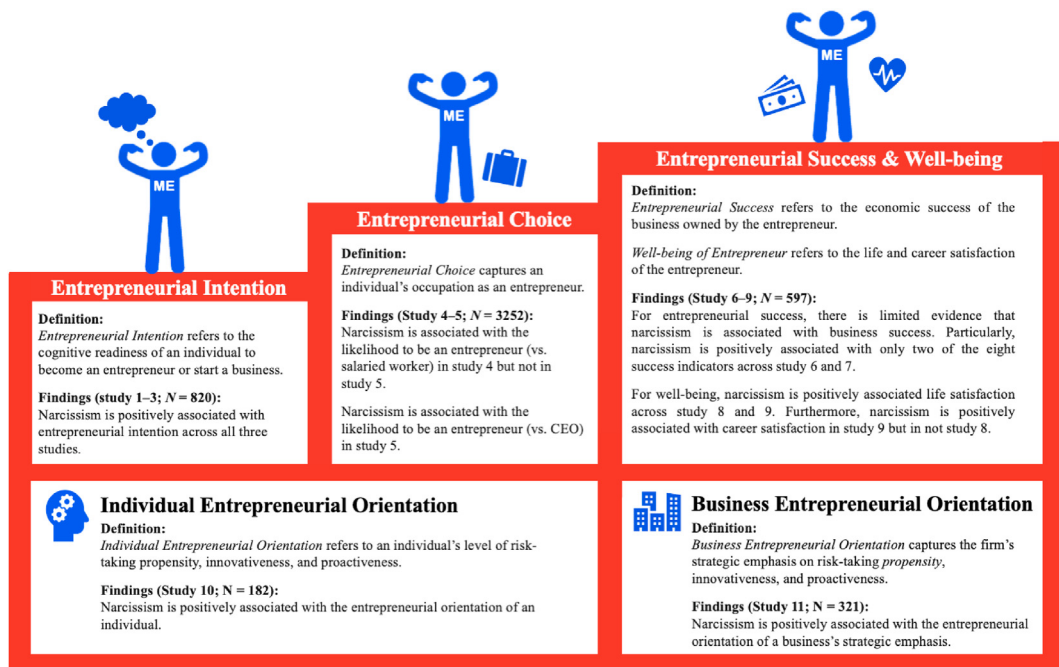


Fig. 1. The definition of the six entrepreneurial aspects (entrepreneurial ladder) and our findings from eleven studies.

correlations coefficients (denoted by “ r ”), ten are positive and significant, and only two are negative but not significant. Furthermore, out of the 20 standardized regression coefficients (denoted by “ β ”), twelve are positive and significant, and only three are negative but not significant. The findings are subsequently discussed and organized according to the six aspects of entrepreneurship.

3.1. Studies 1, 2, and 3: narcissism and entrepreneurial intention

In studies 1, 2, and 3, we examined the relationship between narcissism and entrepreneurial intention (see Tables S3, S8, and S9 for a summary of the regression analyses). Study 1 indicates a significant positive association between narcissism and entrepreneurial intention ($\beta = 0.27, p < .01$). Both study 2 ($p < .05$) and study 3 ($p < .05$) showed that the likelihood of having an entrepreneurial intention is positively associated with narcissism.

3.2. Study 4 and 5: narcissism and entrepreneurial choice

In studies 4 and 5, we examined the relationship between narcissism and the likelihood of choosing an entrepreneurial career (versus other careers) (see Tables S10 and S11 for a summary of the regression analyses). In study 4, we found that the likelihood of becoming an entrepreneur (versus a salaried worker) increased with narcissism ($p < .05$). In study 5, we found that the likelihood of becoming an entrepreneur (versus a salaried worker) was not associated with narcissism ($p = .09$). However, we found that the likelihood of becoming an entrepreneur (versus a non-founder CEO) increased significantly with narcissism ($p < .01$).

3.3. Study 6 and 7: narcissism and entrepreneurial success

In studies 6 and 7, the relationship between the narcissism of entrepreneurs and entrepreneurial success (i.e., success of their businesses) was examined (see Tables S14 and S15 for a summary of the regression analyses). Study 6 showed no association between narcissism and the number of employees ($\beta = -0.02, p = .78$), nor between narcissism and business turnover ($\beta = -0.04, p = .56$). Similarly, we found no association between narcissism and expected business growth ($\beta = 0.06, p = .34$), nor between narcissism and business success ($\beta = 0.01, p = .84$). However, we found that narcissism was positively associated with business success relative to the main competitor ($\beta = 0.19, p < .05$). In study 7, we found that although narcissism was not associated with the number of employees ($\beta = 0.03, p = .60$), it was positively related to the business' turnover ($\beta = 0.11, p < .05$). Finally, study 7 showed no evidence of an association between narcissism and expected business growth ($\beta = 0.08, p = .15$).

3.4. Study 8 and 9: narcissism and well-being of entrepreneur

In studies 8 and 9, we examined the relationship between narcissism and the well-being of entrepreneurs (see Tables S14 and S15 for a summary of the regression analyses). In study 8, we found a positive association between narcissism and entrepreneurs' life

satisfaction ($\beta = 0.13, p < .05$) but did not find an association with career satisfaction ($\beta = 0.05, p = .41$). However, in study 9, we found that narcissism was positively associated with both life satisfaction ($\beta = 0.20, p < .01$) and career satisfaction ($\beta = 0.27, p < .01$).

3.5. Study 10 and 11: narcissism and entrepreneurial orientation

In studies 10 and 11, we investigated the relationship between narcissism and individual entrepreneurial orientation (see [Tables S17 and S18](#) for further details). We found in study 10 that narcissism is positively associated with individual entrepreneurial orientation ($\beta = 0.31, p < .01$). In study 11, we found that CEOs' narcissism is positively associated with business entrepreneurial orientation ($\beta = 0.12, p < .05$).

3.6. Additional analyses: sub-dimensions of narcissism

Narcissism has frequently been shown to be a complex and multi-dimensional construct ([Clarke et al., 2015](#)). Accordingly, we explored whether the relationship between narcissism and entrepreneurship differs across the three dimensions of narcissism proposed by [Ackerman et al. \(2011\)](#). The three dimensions of narcissism were the Leadership/Authority (L/A) dimension, the Grandiose Exhibitionism (GE) dimension, and the Entitlement/Exploitativeness (E/E) dimension. The results are summarized in [Table 3](#).

3.7. Additional analyses: curvilinear relationship

So far, we have examined the relationship between narcissism and entrepreneurship using a linear model. However, it is possible that the relationships are non-linear ([Goncalo et al., 2010](#); [Grijalva et al., 2015](#)). Across all 20 relationships that we examined, we found only one significant curvilinear relationship between narcissism and entrepreneurial intention in dataset 2 ($p < .05$). Specifically, entrepreneurial intention increased up to the narcissism score of approximately .70 (which accounted for approximately 89% of the cases) and decreased beyond this level.

3.8. Additional analyses: robustness check

We tested our findings against different sets of control variables available in the datasets and that have shown to be relevant for the respective relationship in the previous literature. A summary of the findings is provided in [Table 2](#). A detailed description of the control variables examined, and the findings can be found in section 3.9 of the SI Appendix. Overall, we found that our main findings were generally robust against the control of different sets of variables.

4. Discussion

The primary objective of the present study was to provide an empirical account of the alleged link between narcissism and entrepreneurship. Our findings, which are based on six datasets and organized according to eleven studies, suggest that narcissism manifests differentially across the entrepreneurial process.

Of the entrepreneurial aspects examined in this study, entrepreneurial intention had the most consistent link with narcissism. One reason that narcissists are attracted to entrepreneurship may be the high person-job fit. In particular, the needs for attention, admiration, power, and autonomy of narcissists fit well with the heroic public image ([Mathieu and St-Jean, 2013](#); [Wooldridge, 2009](#)) and entrepreneurs' relatively challenging and risky work environment ([Stewart and Roth, 2001](#)).

For entrepreneurial choice, our findings are inconclusive. This may be explained by the different measures of narcissism adopted in the two relevant datasets. Since the Dirty Dozen sub-measure of narcissism mainly reflects the dimensions of grandiosity and entitlement but not the dimension of leadership/authority, it may not be a useful measure for comparing entrepreneurs and salaried workers. Furthermore, it is plausible that narcissists are attracted not only to entrepreneurship but also other career choices (e.g., artists, politicians, journalists) that fuel their need for attention and a sense of entitlement. However, we found that the likelihood of becoming an entrepreneur versus non-founder CEO is positively associated with narcissism as captured by the Dirty Dozen sub-measure of narcissism.

One of the least explored relationships in entrepreneurship is that between narcissism and entrepreneurial success. Our findings indicate that the degree of SME owners' narcissism is not associated with the success of a business, which is consistent with previous research that found no significant association between the narcissism and job performance of salaried workers ([O'Boyle et al., 2012](#)) nor the association between CEO narcissism and business performance ([Chatterjee and Hambrick, 2007](#)). However, this finding contrasts with the positive association found between narcissism and the presidential performance of U.S. presidents ([Deluga, 1997](#); [Watts et al., 2013](#)). Interestingly, the level of SME owners' narcissism is positively associated with the business success relative to the main competitors perceived by the SME owners. This suggests that SME owners who have a relatively high narcissistic tendency tend to think they perform better than others.

For the well-being of entrepreneurs, our results show that narcissism is positively associated with life satisfaction across two samples of SME owners and positively associated with the career satisfaction of SME owners in one of the two samples. Our findings are in line with the emerging stream of research suggesting that narcissism can be beneficial to individual well-being, such as happiness ([Rose, 2002](#)), life satisfaction ([Hill and Roberts, 2012](#)), and psychological health ([Sedikides et al., 2004](#)). Thus, our findings extend previous findings by showing that narcissism is positively associated with well-being also among entrepreneurs.

The positive association between narcissism and entrepreneurship also holds for individual entrepreneurial orientation, that is, the

extent to which a person is risk-taking, innovative, and proactive. Importantly, the positive relationship with the degree of narcissism does not only manifest itself at the individual level but also at the business level. That is, we find that organizations managed by more narcissistic top executives are more likely to pursue strategies that resemble the typical characteristics of entrepreneurs (i.e., risk-taking, innovative, and proactive).

In summary, our findings suggest that narcissism is a mixed blessing to the entrepreneurial process. In particular, although narcissistic individuals may be attracted by the image and nature of entrepreneurship, they may have less control in the later phases of the entrepreneurial process in which external factors (e.g., market conditions, stakeholders) come into play. Over time, the undesirable aspects of narcissism may counter the initial positive aspects. This temporal change in charisma is best explained by the “chocolate-cake model”: interacting with narcissists is similar to eating a chocolate cake—whereas the richness of the cake may be gratifying in the beginning, it can become overwhelming after a while (Campbell, 2005).

However, worth noting is that even if narcissistic entrepreneurs are not more successful financially, our findings suggest that they are generally more satisfied with their lives and careers. This finding echoes that of Liu et al. (2019), who suggest that narcissistic entrepreneurs are less likely to learn from failure and more likely to restart their venture because they are satisfied with their life and work as an entrepreneur.

Our study contributes to the literature and practice in three ways. *First*, our large-scale study provides a comprehensive overview of the alleged link between narcissism and entrepreneurship. *Second*, we expand the extant knowledge by providing initial evidence of the link between narcissism and various aspects of entrepreneurship that to date were not yet systematically explored. *Third*, despite the missing link with entrepreneurial success, our findings show that narcissistic individuals have strong intentions to become and are satisfied with being an entrepreneur. Narcissistic individuals may be better off running their own businesses instead of being employed for regular wages. *Finally*, our additional analyses provide evidence of the differential associations between three dimensions of narcissism and entrepreneurship (see Table 3 for a summary).

Next, we discuss a few potential limitations of the present study and provide some suggestions for future research. *First*, we note that we only used cross-sectional data in our analyses. Hence, we are not able to establish causal relationships between narcissism and entrepreneurship. Although narcissism is generally regarded as a stable trait that is unlikely to change over time (del Rosario and White, 2005; John and Robins, 1994), longitudinal research is recommended to confirm the causal link between narcissism and entrepreneurship.

Second, narcissistic individuals who tend to have an inflated self-view and a high self-enhancement motive may respond in a socially desirable manner. Therefore, we attempted to limit the social desirability bias by stressing respondents' confidentiality and the importance of truthful answers to our questionnaires. Consistent with previous research (Foster and Trimm, 2008; Sedikides et al., 2004), we found no significant association between narcissism and socially desirable responses in dataset 4. Moreover, in our study, narcissism is not associated with business performance. In short, we find no clear evidence of social desirability bias.

Third, because only self-reported data were used, our findings may be affected by common method bias (Podsakoff et al., 2003). Our results from the Harman's single factor test suggested that the first factor explains no more than 30% of the variance across all examined datasets, which is well below the 50% threshold suggested by Podsakoff and Organ (1986). Nonetheless, we encourage future research to examine the link between narcissism and entrepreneurship using data obtained from different sources (e.g., colleagues, family members) and different methodologies (e.g., text analysis, behavioral measures).

The present research focuses on the link between narcissism and entrepreneurship. Future research may identify other contexts that have a high person-environment fit with narcissists, such as politics (“Outsiders' chance,” 2016). It may also explore personal characteristics (e.g., high self-esteem, humility) that help to mitigate the negative effect of a high degree of narcissism or to understand other forms of narcissism such as pathological or perverse narcissism (Pincus and Lukowitsky, 2010; Racamier, 2014). Besides, a more nuanced understanding of the link between narcissism and entrepreneurship is warranted. Although our study has separately explored the dimensions of narcissism, it would be interesting to understand the role that narcissism plays in other specific entrepreneurial activities (e.g., fundraising). Finally, future research may adopt the translated scales used in this study to examine narcissism and entrepreneurship in yet other cultural contexts (see section 5 of the SI Appendix for translated measures of narcissism).

Author statement

The contribution of each author is as follows: Y.K.L., R.T., and I.F. conceived the project and designed the studies. Y.K.L., M.D., K.K., O.T., and I.V. collected the data. Y.K.L., R.T., and I.F. analysed and interpreted the data. Y.K.L. drafted a first version of the manuscript while R.T. supervised the writing of the many subsequent versions. All authors contributed to critically reading the manuscript.

Declaration of competing interest

None.

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Appendix A. Supplementary data

Supplementary data to this article can be found online at <https://doi.org/10.1016/j.jbvi.2020.e00216>.

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