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# Small business owners and health

Olivier Torrès · Roy Thurik

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**Abstract** The present article identifies a societal and scholarly neglect for the field of small business ownership and health. We address health capital and its spillover effects and briefly outline a research program discriminating between pathogenic (negative for health) and salutogenic (positive for health) effects for a small business owner's working life.

**Keywords** Small business owners · Entrepreneurship · Health · Well-being · Salutogenesis

**JEL classification** I30 · L26

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## 1 The health of small business owners

Despite the societal and economic significance of small businesses, the study of the health of their owners has been largely neglected. A small research institute AMAROK was established 10 years ago to analyze precisely this. It is closely connected to the University of Montpellier and the Montpellier Business School. It is not just involved with collecting health data of entrepreneurs but also with studying them for scientific and societal reasons. Moreover, there is a small assistance service connected to it to help out retailers with psychologic support in case of a shop robbery. The scientific analysis and its dissemination are done within a large network of colleagues and friends in France and abroad. In this respect, the first international workshop Health of Small Business Owners and Entrepreneurs held at the Montpellier Business School on September 29–30, 2016, was a milestone.

The present article provides a cursory introduction into the field of small business owners and health. For wider and more systematic overviews, we refer to Torrès (2012a) and Stephan (2018), respectively. The present section deals with health capital and its spillover effects. The second section provides some reflections on why it took so long for applied and scholarly researchers to discover the field. The third section provides some ideas about what a research program may look like and the fourth one concludes stressing the virtues of the discrimination between not just a pathogenic side of business ownership but also a salutogenic one.

## 1.1 Health capital

Steve Jobs was only 56 when he died in 2011. He was the emblem of Californian information technology in general and of Apple Computers in particular. His death hardly affected Apple Computers' share price. It could be argued that his death was horrible news but already expected because of his long period of illness, and that his death was "priced into" share value at the time that he died and that he was not the indisputable leader of Apple Computers any more. This, however, was precisely the case with Christophe de Margerie, president of the oil company Total, the biggest French company in terms of market capitalization. He died in an airplane crash in Moscow in 2014. Total share price hardly moved. The same is true for Carsten Schlöter, director general of the biggest Swiss telephone company Swisscom, who committed suicide in 2013.

It may injure the pride of these captains of industry to know that their companies are too big to fail while they themselves are not. John-Kenneth Galbraith described the big international company as follows: "It is not to individuals but to organizations that power in the business enterprise and power in the society have passed. And modern economic society can only be understood as an effort, wholly successful, to synthesize by organization a group personality far superior for *its purposes* to a natural person, and with the added advantage of immortality" (Galbraith 1985, p. 74).

The impact of CEO morbidity and mortality is radically different for small firms. Henry Mintzberg put it as follows: "The Simple Structure is also the riskiest of structures, hinging on the health and whims of one individual. One heart attack can literally wipe out the organization's prime coordinating mechanism" (Mintzberg 1979, p. 312).

A longitudinal study of Becker and Hvide (2013) using data of 341 Norwegian small firms confirms this idea. It shows that following the owner's death, turnover drops in 60% of the cases and that employment drops in 17% of the cases. In even 20% of the cases, the firm goes bankrupt. The devastation effects of "death, divorce and disease" are often observed in the world of small businesses (Massey et al. 2004). By contrast, the symptoms and related personality traits of certain mental health conditions may be advantageous for entrepreneurs in some circumstances Freeman et al. (2018, this issue).

We arrive here at the main message of the present article and that of the special issue on Small Business Owners and Health. The health capital of the owner is the most important immaterial capital of a small firm (Torrès 2012a). The smaller the firm the bigger its vulnerability in case of a health problem of the owner, be it physical or mental.

## 1.2 Spillover effects

The health of the business owners may have spillover effects on their entourage, not just for the employed (Bono and Ilies 2006; Norman et al. 2005; Van Kleef 2009) but even for the family members because we know that life partners play a prime role when running a business (El Shoubaki et al. 2018). A Danish study shows "that there was a significant relation between entering entrepreneurship and receiving prescriptions for sedative/hypnotics both among the entrepreneurs themselves and their spouses, suggesting that entering entrepreneurship may be associated with increased stress for both the entrepreneurs and their families" (Dahl et al. 2010).

This spillover effect can even be established at an aggregate level. Blanchard et al. (2012) show a link between the number of independent small businesses and some health indicators such as mortality, occurrence of diabetes and obesity, in the surrounding area. The authors suggest that an entrepreneurial culture implies that people take destiny, including health issues, in their own hands. Clearly, more needs to be said about the causalities here. And also about the hypothesis that the spillover effects at the individual level may increase with decreasing size of the business: so-called proximity management (Torrès 2003; Julien 2007). Taken together, the direct and indirect spillover effects call for the careful analysis of small business owners' health.

## 2 Why the health of small business owners is underresearched?

Data on the health of small business owners are, until recently, hardly available and, consequently, there are only few studies attempting to explain health differences, their cause or their consequences. We focus on two reasons why this may be the case.

## 2.1 Focus on health of the employed

Villermé (1840) was among the first to observe that the development towards mass industrialization led to pathogenic effects of a new and widespread nature among the workers. Occupational health care of the 19th and twentieth century had a social mission: to protect those who are most vulnerable like working children and women. The focus on the working class remained a central theme in health care legislation (Barthe 1944). And this focus, together with the advent of the managed economy with its dominance of the big enterprise (Audretsch and Thurik 2001), led to a certain disregard of health care arrangements of workers in small companies and their owners (Pinder et al. 2016; Hasle et al. 2009). The industry-wide arrangements of the late twentieth century brought the workers of the small companies alongside those in their bigger counterparts but the negligence of the owners remained intact.

The relatively low percentage of non-salary workers in developed countries of about 12% on average (OECD 2018) did not contribute to a catch-up mechanism, nor does their heterogeneity comprising of business owners with different legal backgrounds, self-employed, artisans, etc. This lacuna is sometimes described as follows: there appear to be more data and studies of the health of the blue whale than of entrepreneurs (Torrès 2012a). In view of the economic importance of small businesses in developed and developing economies, the health of small business owners is slowly becoming a public issue (Torrès 2012a; Vinberg et al. 2012; Stephan and Roesler 2010; Stephan 2018).

## 2.2 Focus on the Schumpeterian hero

The second reason for the neglect of the study of small business owners' health has to do with the romanticization of entrepreneurship and heroic entrepreneurs, which leaves no role for weaknesses, suffering, and, ultimately, health issues. Testimonies of small business owners about the adverse effects of their activities on their physical or mental health are rare. In a 2007 survey of the French Ministry of Labor, 58% of non-salaried workers said that they felt obliged to hide their emotions and to pretend being good humored whereas this percentage was 42% for salaried workers (Coutrot and Mermilliod 2010). A study of the French Public Investment Bank showing that the burnout risk for French small business owners is considerable earned very little recognition (Torrès and

Targy 2016). The optimistic Schumpeterian victorious warrior such as Richard Branson, Michael Dell, Andy Grove, and Bill Gates seems to be the obvious role model leaving no room for pathogenic perspectives.

Stress (Akande 1994; Lechat 2014; Cardon and Patel 2015; Hessels et al. 2017), work-family balance (Parasuraman et al. 1996; Kirkwood and Toothill 2008), work overload (Boyd and Gumpert 1983; Buttner 1992), and role conflicts (Parasuraman et al. 1996; INSERM 2011) are covered in the scholarly entrepreneurship literature but health, and bad health in particular, are only slowly making it into this literature. The present article with some focus on the pathogenic side is meant to compensate for this neglect.

## 3 A research program addressing the health of small business owners

Obviously, the link between small business owners and their health has two sides. How does ownership influence health and how does health influence ownership? The influence of health on ownership can have a selection effect (for instance, unhealthy people shy away from setting up a business) or a treatment effect (for instance, being an entrepreneur can be beneficial or detrimental for one's health). Or in the words of the present paper, the influence of ownership on health can be positive (salutogenesis) or detrimental (pathogenesis). Moreover, there can be confounding mechanisms: having lived as a child in an affluent, entrepreneurial family may have positive effects on both the likelihood of staying healthy and becoming an entrepreneur. Lastly, health can have both a mental and a physical dimension. We will attempt to deal with the above issues in the remainder of the present section.

### 3.1 The causes of small business owners' health

McMichael was the first to show that the mortality of workers is inferior to that of the general population (McMichael 1976). He attributed this to a selection effect: to get a job you need to be healthy. Of course, this selection process continues after a worker is recruited (Gollac and Volkoff 2006) which is termed the exclusion effect. The theory of the healthy worker effect has also been applied to small business owners (Chao et al. 2010; Rietveld et al. 2016; Baron et al. 2016; Gonçalves and Martins 2018). The attraction/selection/

attrition model of Schneider et al. (1995) is helpful to understand why certain people are attracted to certain employment environments, why certain employment environments select certain people and which combinations survive. Baron et al. (2016) apply this approach to small business ownership.

The process of selection and exclusion cannot be assumed to be similar for small business owners and employed persons. Small business owners take less sick leave than those working for them (Benavides et al. 2000; FSB 2006; Pfeifer 2013; Merchant et al. 2014). Pfeifer (2013) points at work satisfaction (based upon autonomy and identification) which plays a role here. Monneuse (2013) shows that working despite being ill is common among independent workers.

The distinction between “opportunity” and “necessity” applies to entrepreneurial entry and exit rather than to those of workers. The distinction between “opportunity entrepreneurship” and “necessity entrepreneurship” is a central theme in the work of the Global Entrepreneurship Monitor. Entrepreneurial entry by necessity may go together with the lower levels of mental sanity resulting from the previous state of unemployment. The same may be true for salaried workers. But the extent of these effects and the salutogenic effect of resuming work is still to be investigated.

A small but sympathetic literature is developing around micro businesses and handicapped persons who become self-employed by necessity (Callahan et al. 2002; Hagner and Davies 2002; Walls et al. 2001; Yamamoto et al. 2012) which contradicts the theory of the healthy worker effect. This is one more reason to develop a research program of the health of small business owners distinct from that of the employed. In some cases, less healthy persons may fit better in ownership roles than in wage work (Hessels et al. forthcoming).

All the above examples and small literatures show that the causes of the health of business owners and of workers may be different.

### 3.2 The consequences for small business owners' health

In her literature survey of types, antecedents, and consequences of the general mental well-being of entrepreneurs, Stephan (2018) discriminates between six broad categories: work characteristics (64 studies); personality traits; values and other personal resources (54 studies); firm and financial characteristics (37 studies); social

support and stressors (25 studies); market and country context (26 studies); and physical context (four studies). She presents the antecedents according to whether they have positive effects (resources) or negative effects (stressors or vulnerabilities) on entrepreneurs' general mental well-being. We adopt a similar setup below (Torrès 2012a).

#### 3.2.1 *The negative consequences of small business ownership for health*

Like any worker, small business owners are confronted with pathogenic factors, the most important being stress. Many studies such as Boyd and Gumpert (1983), Buttner (1992), Cardon and Patel (2015), Jamal (1997), and Andersson (2008) show that the owner faces higher stress levels than the employed. Mixed and nuanced results are shown in Algava et al. (2012), Prottas and Thompson (2006), and Oren (2012), while Rahim (1996) and Baron et al. (2016) identify owners with a lower stress level. Moreover, the discrimination between hindrance stressors (role conflict, role ambiguity, lack of resources, daily hassles, etc.) and challenge stressors (opportunities for personal learning, growth, responsibility, time pressure, achievement, etc.) (Rodell and Judge 2009; Cavanaugh et al. 2000) will most likely provide some interesting results. Drawing upon the Job Demand-Control (JDC) model, Hessels et al. (2017) investigate differences in work-related stress between the self-employed and wage workers. Empirical analysis of a longitudinal Australian sample shows that the self-employed experience less work-related stress than wage workers. What seems to be at play here is the role of Job control fully mediating the negative relationship between self-employment and work-related stress. In general, it cannot be assumed that the stress factors of owners and workers are similar (Grant and Ferris 2012; Lechat 2014; Lechat and Torrès 2017).

Work overload is another often studied pathogenic factor (Buttner 1992; Akande 1994; Ahmad and Salim 2009; Boyd and Gumpert 1983). Hahn et al. (2012) identify a weekly working time of nearly 58 h in a survey of 122 owner/managers of German small businesses. In a sample of 500 French small business owners, Torrès (2012b, p. 203) observes that two thirds work at least 50 h a week while sacrificing one weekend day. Working long hours, on diverse tasks or with high intensity, is not in itself a pathogenic factor. Research is

definitively needed to establish how stress dimensions work out as pathogenic factors.

Uncertainty is often identified as an important pathogenic factor (Ferrie et al. 2005; Probst 2005). A Canadian study (INSERM 2011, p. 21.) identifies uncertainty, next to other factors such as long working hours, variation in turnover, and liquidity problems, as a major pathogenic influence. Also in France, uncertainty is documented to be a bigger problem for the self-employed than for salaried workers (Coutrot and Mermilliod 2010). Finally, uncertainty and its pathogenic effects can easily spillover to the private life of family members (Westman et al. 2001).

Gumpert and Boyd (1984), however, focused on loneliness of business owners. It may contribute to the likelihood of burnout as a factor contributing again to lower experience of mental health (Jamal 2007; Shepherd et al. 2010; Ben Tahar 2014; Fernet et al. 2016). This loneliness can be particularly harmful when difficult decisions have to be taken such as firing employees (Torrès 2011).

The list of pathogenic candidates is nearly endless including role conflicts, work family balance issues, and financial problems (Stephan 2018).

### 3.2.2 *The theory of salutogenesis and sense of coherence*

Antonovsky (1979, 1987) was the first to show the beneficial effect of working life in a world where the negative effects such as mortality, morbidity, incapacity, and invalidity dominated. He used the terms salutogenesis and pathogenesis. “Formally, pathogenesis is the study of disease origins and causes. Pathogenesis starts by considering disease and infirmity and then works retrospectively to determine how individuals can avoid, manage, and/or eliminate that disease or infirmity. In contrast, salutogenesis, the study of health origins and causes, starts by considering health and looks prospectively at how to create, enhance, and improve physical, mental and social well-being” (Becker et al. 2010, p. 26). Antonovsky’s views influenced the public health area which started to assimilate the promotion of good health next to the prevention of illnesses (Becker et al. 2002). Breed et al. (2006, p. 76) describe the functioning of salutogenesis as follows: “On the cognitive level, the individual is able to view stimuli from the environment in a positive and constructive manner, and to use the information towards effective decision making. On the

affective level, the individual functions with self-awareness, confidence, self-fulfillment, viewing stimuli as meaningful and acting with commitment towards life in a mature manner. On the motivational level, the individual has intrinsic motivation, perceives stimuli as a challenge which directs his/her energy to cope, solve problems, and achieve results. The interpersonal characteristics entail the capacity to form meaningful and rewarding relationships with others at work and in society.”

The romantic view of Filion (2011, p. 48) tells us much about salutogenesis for business owners: “An entrepreneur is an imaginative, intuitive, resourceful, tenacious actor, a results-oriented designer of innovations who is able to develop risky opportunities, who learns to be creative and resourceful, takes action by making practical use of limited resources and a network of contacts, and who is able to structure organizational activities to form a client satisfaction system that contributes an added value”. We discover various aspects of salutogenesis in his text: motivation, care, analytical capacities, creativity, initiative, anticipation, foresight, ability to set goals and objectives, problem-solving skills, self-confidence related to clearly defined identity, long-term commitment, energy, result orientation, passion, (internal) locus-of-control, determination, perseverance, tenacity, resourcefulness, coordination, networking skills, flexibility, empathy, listening and communication skills, adaptability, ability to trust, seeks challenges (Filion 2011, p. 46).

And indeed, work satisfaction is recorded to be higher for business owners than for employed (Van der Zwan et al. 2018; Naughton 1987; Blanchflower and Oswald 2004; Benz and Frey 2004, 2008; Andersson 2008; Block and Koellinger 2009; Lange 2009; El Harbi and Grolleau 2012; Binder and Coad 2013, 2014; Kapoor 2001). The same is true for life satisfaction (Naughton 1987; Blanchflower and Oswald 1998; Kapoor 2001) although elsewhere some inconclusive results are found (Blanchflower and Oswald 2004; Block and Koellinger 2009; Andersson 2008).

A key element of salutogenesis is “sense of coherence” which Antonovsky developed on the basis of his account of World War II concentration camp survivors (Antonovsky 1979, 1987, 1993). Sense of coherence is defined by Antonovsky as follows: “a global orientation that expresses the extent to which one has a pervasive, enduring though dynamic feeling of confidence that (1) the stimuli deriving from one’s



internal and external environments in the course of living are structured, predictable and explicable; (2) the resources are available to one to meet the demands posed by these stimuli; and (3) these demands are challenges, worthy of investment and engagement.” (Antonovsky 1987, p. 19). Eriksson and Lindström (2006) show in their vast literature survey that sense of coherence is strongly connected to perceived health, in particular, mental health. As far as we could find, there are only few studies for workers (Van Schalkwyk and Rothmann 2008; Muller and Rothmann 2009), for managers (Coetzee and Viviers 2006) or for small business owners (Debray et al. 2016).

### 3.2.3 *There is more to salutogenesis than sense of coherence*

Psychology research, and in particular positive psychology and health psychology, have studied other phenomena which have a positive effect on health, of which optimism is the most important one (Scheier and Carver 1987; Bruchon Schweitzer 2001; Carver and Scheier 2005; Mäkikangas and Kinnunen 2003; Rasmussen et al. 2009). Entrepreneurship research shows that business owners are generally more optimistic than the employed (Trevelyan 2008; Cossette 2014). Optimism is also identified as one of the components of psychological capital (Luthans et al. 2007) together with self-efficacy, hope, and resilience. The four components are considered as state phenomena rather than personality traits which suggests that they may change over time (Luthans 2012; De Hoe and Janssen 2016). Psychological capital slowly becomes an important object of entrepreneurship research (Hayek 2012; Baron et al. 2016; De Hoe and Janssen 2016). It has been measured at the level of business owners using several dimensions: optimism (Trevelyan 2008), hope (Jensen and Luthans 2002; Peterson and Luthans 2003), resilience (Bullough et al. 2014; Bernard and Dubard Barbosa 2016), and self-efficacy (Brandstatter 2011).

But the list of salutogenic factors is long. Strümpfer (1990) suggested that there are six significant salutogenic strengths: hardiness, internal locus of control, learned resourcefulness, potency, self-efficacy, and sense of coherence.” Next to the factors of Strümpfer, Breed et al. (2006, p. 74) mention self-actualization, sense of coherence, hardiness, potency, self-efficacy, learned resourcefulness, internal locus of control, coping, well-being, creativity and flow, resilience,

emotional intelligence, engagement, authenticity, happiness, humor, positive affect, courage, gratitude, faith, and optimism.

The most complete list of salutogenic factors is found in Lindström and Eriksson (2005) who discriminate between 25 ones.

Of course, there are caveats when studying salutogenesis. Binder and Coad (2014) show that salutogenesis plays a role for opportunity entrepreneurship but not for necessity entrepreneurship. Block and Koellinger (2009) identify a group of nascent entrepreneurs that cannot get satisfaction with their start-up because they did not choose to become entrepreneurs in the first place. This group of unsatisfied entrepreneurs includes individuals starting a business after a period of long-term unemployment and those individuals with a lack of better employment alternatives (necessity entrepreneurs). Van der Zwan et al. (2018) show that entrepreneurs show a higher level of work satisfaction but a lower life satisfaction. Fayolle (2013) and Fayolle and Nakara (2012) show that necessity entrepreneurship is the “hidden face of entrepreneurship” associated with job insecurity and precarious employment.

## 4 Conclusion

Apart from many other biologic and contextual factors, the health of small business owners depends upon the pathogenic and the salutogenic effects of their specific professional activities. Clearly, the same holds true for all other professions. The difference is that in the case of small business owners these effects may be more pronounced and that, given the societal and economic importance of small businesses, the type, the antecedents, and the consequences of both pathogenic and salutogenic effects are heavily underresearched (Torrès 2012a; Stephan 2018).

This calls for a big research agenda not just on the types, antecedents, and consequences of the many individual pathogenic and salutogenic effects but also on their interaction and impact on many aspects of the mental and physical health of small business owners. The remaining five articles of the present special issue will deal with several elements of such a research agenda. In particular, Freeman et al. (2018, this issue) look into the prevalence and co-occurrence of some psychiatric conditions among entrepreneurs in comparison with non-entrepreneurs. Toivanen et al. (2018, this

issue) analyze differences in acute cardiovascular disease in terms of stroke and myocardial infarction incidence between self-employed individuals and paid employees using Swedish population survey data. Soenen et al. (2018, this issue) explore the impact of entrepreneurs' overall justice perceptions on emotional exhaustion and firm performance using the allostatic load model, developed in stress research. Canits et al. (2018, this issue) investigate the association between attention deficit hyperactivity disorder symptoms and academic entrepreneurial preference using data of French, Italian and Spanish university workers and the theoretical lens of Person-Environment fit. Lerner et al. (2018, this issue) aim to contribute by testing the connection between attention deficit hyperactivity disorder in the clinical sense and entrepreneurial intention and action based on a data set of nearly 10,000 students and cross-sectional methodology. Below, we will touch upon some other and miscellaneous aspects of such prospective research agenda.

There may be a temporal aspect in the balance between pathogenic and the salutogenic effects in that, for instance, the euphoric start of a new and growing venture gives way for the monotony of running an existing and sluggish business. The balance of pathogenic and salutogenic effects may change over time. There may even be feedback loops and dynamic effects. Ute Stephan explains this as follows: "This reinforces the need to pay greater attention to dynamic processes and changeability over time in understanding entrepreneur's work and their mental well-being. Future research should consider measures of variability and deviation of stressors and resources alongside mean scores" (Stephan 2018, p. 36).

The study of the physiology of the small business owner has not started yet in a coherent fashion: fatigue and sleep are probably crucial mediators between the many pathogenic and salutogenic effects and how they work out for mental and physical health. Is running a business tiresome, for whom and in what circumstances? Do entrepreneurial behaviors like being proactive, innovative and risk-taking influence the quality and quantity of sleep, and what kind of sleep? There is some early work of Florence Guilianni on sleep and its links to fatigue on entrepreneurial alertness (Guilianni 2016; Guilianni and Torrès 2017; Guilianni and Torrès *forthcoming*). In the same way, Gunia (*forthcoming*) explores the three-way relationship between sleep, mental health, and entrepreneurship, focusing on the

important influence of sleep problems on entrepreneurial motives and means. Similarly, Baron (1998) deals with the link between fatigue and entrepreneurial cognition, in particular in environments with information overload, a high level of uncertainty or novelty and emotional and temporal pressures. Much remains to be learned about the physiology of the small business owner.

There is a lack of epidemiologic studies on phenomena like sick leave and time to return to work. Merchant et al. (2014) show that on average owner/managers of small businesses have less sick leave and shorter return times than employed workers. When one of the authors of the present article asked his surgeon about when he could resume working after a planned medical operation, the surgeon responded that it depended upon whether he was self-employed or not. Of course, this difference between non-salaried and salaried workers may be motivated by financial incentives or emotional reasons. There may even be confounding effects and common denominators such as resilience which increases the likelihood of establishing a business and lowers that of giving in to the suffering of illnesses. The epidemiologic results of Toivanen et al. (2018, this issue) on cardiovascular diseases tell us that business owners do not suffer from them more than salaried workers but that industry effects are at play.

There is definitively no need to invent new epidemiologic indicators and the comparison between small business owners and salaried workers can also reveal some of the beneficial effects of a salaried working life. Too often epidemiologic studies concentrate on the pathogenic effects of the working environment. The present special issue suffers from this same shortcoming because phenomena like attention deficit/hyperactivity disorder, self-reported psychiatric concerns, emotional exhaustion, stroke and myocardial infarction, and cardiovascular disease are investigated in the environment of small business owners or of those who aspire to become one. However, the many positive effects for small business owners when compared to their salaried counterparts may very well contribute to a future where epidemiologic studies consistently take salutogenic effects into account.

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