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Founders in the Living-Dead Trap: A Theoretical Exploration at Entrepreneurship's Dark Core

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Abstract: This paper explores the concept of the living-dead trap (LDT), a pervasive state of entrepreneurship resulting from the decision to persevere in the operation of a venture in the face of sustained financial underperformance and personal psychological disutility. Financially underperforming firms can survive for long periods, usually with injections of sweat equity and debt, often decimating in the process the capital of their founders and investors as well as the obligations incurred to employees and other creditors. More specifically, this paper suggests a personal composite of specific cognitive and affective processes that leads entrepreneurs to commit to "failing but not failed" projects. That is, to fall into a trap known as the living-dead trap. We posit the living-dead phenomenon as a most pervasive state in firm founding drawing on cognitive and affective perspectives to model the attendant decision-making processes.

Keywords: living-dead founders, under-performance, perseverance, entrepreneurial behavior, cognitive perspective, behavioral trap

Introduction

Performance is a central concept in entrepreneurship, strategy and organizational theory. The vast majority of studies on new venture performance analyze either success or failure as the relevant distal outcome. Success has usually been measured by growth (Davidsson, Delmar, and Wiklund 2002; Delmar, Davidsson, and Gartner 2003), the achievement of an initial public offering (IPO) (Giot and Schwienbacher 2007; Aggarwal, Bhagat and Rangan 2009), or a high-valuation trade sale (Gompers and Lerner 2004). When an investment perspective is taken, the latter outcomes represent a harvest opportunity for

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investors. Conversely, failure has been associated with voluntary closure, bankruptcy, or a distressed sale (Watson and Everett 1999). This paper is consistent with other work that examines the effects of failure from the entrepreneur's perspective in a manner distinct from strategic and evolutionary perspectives of failures, enabling the development of theories in realms that include cognition and emotion (Ucbasaran et al. 2013).

The living-dead trap (LDT) construct is the result of a construct development process that reconciles various strands in the literature: the aim is a model which explains one of the most elusive phenomena in entrepreneurship. The paper positions the trap phenomenon at the center of firm founding. The original literature strand leveraged by this paper focuses on the empirical identification of the living dead phenomenon (Ruhnka, Feldman, and Dean 1992) that did not addres its causes. The living dead naturally rested on the investor and, thus, on the shareholder perspective (Friedman 1962). This paper amends that original perspective. Given its grounding in stakeholder theory (Freeman 1984), it includes a second stakeholder who serves as both principal and agent: the entrepreneur. Paradoxically, the founder is both the origin of the LDT phenomenon and its primary victim. This theoretical puzzle is addressed via recourse to an emerging and increasingly voluminous literature stream drawing from psychology: the behavioral perspective (which began with Kahneman and Tversky 1979).

The cognitive and affective perspectives anchored in behavioral theory, which did originate with observed decision-making anomalies, are becoming increasingly relevant in entrepreneurship (e. g., Baron 2004, or Grégoire, Corbett, and McMullen 2010). What makes the LDT unique is that previously, behavioral and cognitive science have not been systematically or comprehensively applied to underperforming firm founders who, contrary to normative rational choice, refuse to terminate their ventures. Parallel to this discourse, we find robust literature on permanently failing organizations (Meyer and Zucker 1989), living-dead organizations (Ruhnka, Feldman, and Dean 1992), and under-performing organizations (DeTienne, Shepherd, and DeCastro 2008; Gimeno et al. 1997). These contributions tacitly approach the LDT but have not made the step that this paper proposes: the articulation of a discrete explanatory model around an LDT construct and its attendant taxonomy.

This integrated, controlled, interdisciplinary approach to theory development is at the core of this paper and constitutes its principal contribution to the literature. While this paper is both a natural and critical extension of the existing literature, it operates at a high integrated level its tenets being falsifiable, thus opening a variety of avenues for future research, especially of an empirical nature given the trap's relevance to practice. The variables of the causal model and, specifically, the mediator variables of the cognitive and affective composite are subjected to both validity testing and measurements of their strength levels vis-à-vis the dependent LDT variable. Living-dead owners sustaining underperforming firms can be found in all industries and business arenas – including professional businesses, family businesses, small and midsized enterprises (SMEs), and certainly "lifestyle businesses" (Reynolds and Curtin 2010). Empirical research has extensively studied new venture performance by examining the mortality rates of start-ups (Dowell and Swaminathan 2006; Nerkar and Shane 2003). These studies, grounded primarily in the population ecology tradition, invariably define start-up failure as the exit from an industry due either to dissolution or to acquisition. Survival, the negation of failure, is assumed to proxy success in these studies, as the liabilities of newness are significant (Stinchcombe 1965). In contrast to these studies implying success as the opposite of exit, other studies in the entrepreneurship literature have gone a step further and defined various other success criteria, including IPO (Giot and Schwienbacher 2007), and high-valuation trade sale (Gompers and Lerner 2004). Just as population ecology defined success as the opposite of observable exits, these studies impute failure as the opposite of successful events. Beyond polarized categorizations, sustained underperformance is posited in the paper to be a discrete state and occupies an important tract of the continuum between the standard performance outcome extremes.

This reflection raises important questions about the criteria considered to measure performance. Since entrepreneurship revolves around the discovery and exploitation of profitable opportunities for private wealth generation, financial criteria are usually considered the most appropriate measure of venture performance. Yet beyond objective financial performance, many entrepreneurs are motivated to start a business on the basis of lifestyle considerations, the motivation to become one's own boss (Leung 2002), or other subjective, personal factors. Empirical evidence indicates that both financial (returns on capital and higher incomes) and non-financial psychological and lifestyle criteria are employed by entrepreneurs to assess their business performance, and the latter have even been deemed to be more important (Walker and Brown 2004).

Defining Performance

The consideration of both financial and personal or emotional criteria is conceptually appropriate in the context of entrepreneurship, because this phenomenon is initiated by the relationship between agent (entrepreneur) and structure (opportunity) as a duality (Shane 2003). Examining the duality between the founder and his or her creation has the potential to extend existing theories, such as those dealing with perseverance and resilience (Ucbasaran et al. 2013), which is appropriate in the context of LDT behavioral outcomes. A duality, as opposed to a dualism, presents two constructs that cannot exist, or be understood, separate from each other (Sarason, Dean, and Dillard 2006). Since entrepreneurship is essentially built on an individual-opportunity nexus, performance must be assessed in the specific context of a single individual and opportunity – rather than, say, an industry benchmark, as purported in strategic management. Empirical evidence for this differentiated approach to performance is provided by Gimeno et al. (1997), who suggest that entrepreneurs determine the threshold of performance. This threshold might be a combination of both objective factors (financial utility) and subjective factors (emotional utility) weighed by the entrepreneur.

From this foundation, and heeding the call to align the definition of business failure with a specific study's research question (Ucbasaran et al. 2013), we model entrepreneurial performance on the basis of how one element of the duality (the firm) affects the decisions and behavior of the other element (the founder), upon whose opportunity costs we focus. The performance assessment is conceptualized as three distinct categories, consistent with research that views the cost of failure not just in financial terms but also in social and psychological costs (Ucbasaran et al. 2013). Our objective financial assessment includes (a) the returns on the capital invested criteria (above alternative risk-weighted uses of capital) usually accrued as annual profits or during an exit event but also assessable via third party valuation – for instance, during a given investment round. The second objective financial assessment criteria is (b) the wage earnings criteria (salary above comparable labor market options for the founder) accrued to compensate the founder as operator, manager or stable contributor to the venture. The subjective assessment is (c) the emotional utility derived from the venture vis-à-vis the emotional utility derived from alternative income-generating activities (one concern under this scenario is that founders can earn relative psychological disutility). If we combine the three performance assessment criteria – that is, the two objective financial utility criteria and the subjective emotional utility criteria – various venture performance possibilities emerge. For instance, a venture may offer to the founder a below-market salary, psychological disutility, and ultimately financial success in the form of high returns on capital. This is just one of the multiple performance configurations in the entrepreneurial performance taxonomy that assumes the founder perspective, none of which falls below the venture viability threshold, which are described in the three-way assessment performance structure summarized in Table 1. Many of the possibilities in the taxonomy might constitute consistent

Table 1: Entrepreneurial performance taxonomy for surviving firms.

Capital gain	Income	Emotional utility	Entrepreneur's state
Y	Y	Y	Happily successful
Y	Y	N	Living successful
Y	N	Y	Happily invested
Y	N	N	Living invested
N	Y	Y	Happily salaried
N	Y	N	Living salaried
N	N	Y	Happily dead
N	N	N	Living dead

performance constructs with discrete patterns and thus warrant research attention. However, the scope of this paper is restricted to the living-dead founder category.

Defining Living-Dead Entrepreneurs

The original "living-dead" construct takes the investor perspective. The vivid metaphor is attributed to Franklin "Pitch" Johnson, a noted Silicon Valley venture capitalist (VC), who coined the term to describe firms that neither provide stellar returns nor allow a quick write-off of the investments to the VC. The term first appeared in the literature in Bourgeois and Eisenhardt's (1987) in-depth case study detailing the strategic decision-making processes of the top management team of a "living-dead" firm, which found that the managers are unable to perform rational and quick analyses. In this situation, even investors were found unable to extricate themselves from their ventures, as "these are insufficiently successful to be taken public, but neither are they clear enough failures to die" (Bourgeois and Eisenhardt 1987, 143).

Ruhnka, Feldman, and Dean (1992), in their survey of VC managers, found "living-dead" firms to be economically self-sustaining albeit unable to achieve levels of sales, growth and profitability sufficient to produce attractive rates of return and exit opportunities for their VC investors. In effect, these are marginally performing, not-yet insolvent firms that tend to persist, yet they fail to meet the expectations of VCs. Although the concept of living dead has traditionally been used in the context of VC investments to express "side deals," we employ it to denote underperforming founders (including both financial and emotional underperformance dimensions per the taxonomy in Table 1) and hence struggling business ventures in general.

It is of note that the investor and founder perspectives might overlap, and as in any other principal–agent relationship, tension is to be expected. Such agency conflict notwithstanding, at times the founder wears the two hats of manager and significant investor; hence the agent can also be a principal (seldom the other way around). Nonetheless, we distinguish the two praxis roles because they lead to distinct theoretical perspectives. For instance, in Table 1 the entrepreneurial performance structure capturing the three performance assessment criteria yields the "unhappy success" category, which is characterized by positive financial (income and returns) utility but emotional disutility. From the investor perspective, this outcome would be considered a clear success, as would the "unhappy investor" founder category, which represents emotional disutility and negative income for the salaried founder while managing to yield positive investment returns (e. g., via an exit).

Given the investor perspective originally informing the original "living dead" (Bourgeois and Eisenhardt 1987), it isn't surprising that many VCs tolerate, rather than terminate, living-dead investments by irrationally escalating their commitment and reinvesting in ventures heading for failure due to erroneous judgment (Birmingham, Busenitz, and Arthurs 2003). Ventures are not terminated despite failing to meet their founders' and investors' financial expectations, even if they are economically viable (Ruhnka, Feldman, and Dean 1992). From an opportunity cost of capital perspective, better alternative uses of capital exist. This paper extends the notion of the living dead a step further by introducing the concept of a LDT, hence introducing the behavioral, theoretical framework anchored in cognition and emotion to attempt *to explain* the *trap* phenomenon. This implies a focus on the entrepreneur's perspective, who as the operating free agent is assumed to always be in possession of the option of quitting the underperforming venture.

Disbanding a venture after a long, or not-so-long, period of underperformance is the obvious normative action for founders. Bhidé (2000) advises entrepreneurs to "walk away" from underperforming ventures, because turnaround hopes related to radical action or an unexpected bonanza seldom materialize. Despite such advice, we purport that many entrepreneurs at the helm of such ventures remain committed to their projects and throw good money after bad while carrying on their struggle. Theorists of old, such as Knight (1921, 366), had already noticed the phenomenon in the early 1900s: "Man may possibly be timid and critical on first embarking in new venture, but once committed, it seems unquestionable that the general rule is to hold on to the last ditch." We suggest that founders holding on to the last ditch are akin to free men and women building their own prison, their very personal LDT.

Defining the Relevance of the Living-Dead Trap

A better theoretical understanding and a conceptual model of the LDT seem relevant for the principal stakeholders of the venture, both the entrepreneurs and the investors, as well as those addressing entrepreneurship as educators or policy makers. This understanding begins with the empirical evidence of base failure rates found in the extant literature. A review of both practice and academic literature yields an approximation to base failure rates contingent on the premise that failure is equated with non-survival. Expanding on our earlier reference to the population ecology tradition, empirical studies are pressed for base survival rates greater than 50 % after the first five years of incorporation. With remarkable consistency across the period from 1977 to 2001, the five-year survival rate for new firms was, on average, 48–49 % (Strangler 2009). Knaup and Piazza's (2007) business longevity study noted 44 % survival rates through the fourth year, further decreasing to 31 % through the seventh year. Similarly, Bruno, Leidecker, and Harder (1987) indicated that within the first five years, 54.5 % of new businesses fail; by the end of the tenth year the figure was 81 %. More optimistically, Audretsch, Houweling, and Roy Thurik (1997) recorded survival rates of 69 % after four years and 44 % after 10 years. The academic literature is unequivocal in its assessment that most start-ups end in failure (Headd 2003). Regarding survival, it cannot be equated with success either, as the living-dead construct purports and as Cooper, Gimeno-Gascon, and Woo (1994, 372) summarize: "The failure rate of new firms is high (Shapero and Giglierano 1982) and many survivors achieve only marginal performance (Reynolds 1987)."

Surviving founders have a significant probability of becoming living-dead entrepreneurs, because they do not synchronize the decision to quit with the chronic and long-drawn underperformance that precedes non-sustainability and termination and, as a result, commit resources above and well beyond what is warranted by the objective facts of the venture situation. At this stage, entrepreneurs often solicit and invest new financial and other resources into their "one basket" (the venture), and eventually the consequences of a failure (e. g., a bankruptcy) become only more dramatic. As entrepreneurs persist with these ventures, languishing in the twilight zone between improbable success and delayed failure, they invest additional resources, often in the form of cash (from family and friends, and possibly "fools") and sweat equity, because bank loans and equity investments are difficult to obtain when a business approaches insolvency (Beaulieu 1996). Such investments can be characterized as throwing good money after bad. Eventually, the business reaches a point when a fall in revenues and/or a rise in expenses are of such magnitude that the firm becomes unsustainable and insolvent and is unable to attract new commitments in the form of debt or equity funding, the resources in the founder's network having been exhausted. Sooner or later, most founders will not be able to afford the chronic underperformance of their business and they will quit … much later than they should have, and at a much greater loss than rational decision-making would have predicted.

By quitting late in the game, not only will entrepreneurs lose a significant amount of their investment (Bhidé 2000), they will also most likely suffer even more from the stigma of failure (Sheperd, Wiklund, and Haynie 2009). This points to emotional disutility, since the daunting task of improving performance in a distressed business is likely to take a toll on the entrepreneur's physical and psychological health (Jamal 1997). The often traumatic and emotional quality of the venture experience has been amply documented (Cope 2011). And, as if personality degeneration, loneliness and conflict (e. g., with partners or employees) are not sufficiently painful, family and social relationships may also suffer (Akande 1994).

The normative implications of research on the LDT are straightforward and provide entrepreneurs, investors and educators with a valuable framework to better pinpoint and evaluate the decision to quit an underperforming but viable business. Since most business ventures fail in the first five years, knowing when to "pull the plug" might be just as important as seizing an opportunity to set up a business. In this regard, recent methodologies, such as lean start-up based upon "fail fast," might implicitly undermine the assumption of the LDT and postulate its avoidance. Beyond the normative "what to do," this contributions theoretical development perspective focuses on the "how" and "why."

This article also joins other work on venture survival by implicitly questioning the heroic, high-performance associations with venture creation. Moreover, it suggests a realistic, dynamic, grounded narrative of venture founding and development that brings to the fore a fuller range of the *a priori* venture outcome probability distribution, one that extends well beyond the clear-cut success and "failure understood as termination" dichotomy. As such, our article complements the stream of research that highlights how entrepreneurs persevere in the face of challenges and setbacks (Åstebro, Jeffrey, and Adomdza 2007; Sheperd, Wiklund, and Haynie 2009; van Gelderen 2012). We aim to shed some light on a neglected dimension of entrepreneurship – perseverance under conditions of sustained underperformance – and elucidate the cognitive and affective decision-making processes that mediate the behavior which brings about the non-discontinuance of underperformance, the LDT. More specifically, we propose a conceptual framework for LDT, and we present a series of related propositions.

We conceptually define the LDT as a state characterized by sustained underperformance combined with survival, where founders explicitly or implicitly make the decision *not* to quit. When the decision to persevere is non-explicit it is *de facto*, representing a non-decision to continue. Firms in this sub-optimal underperforming state can persist for long periods of time, often beyond the original expectations of their founders and investors. Although living-dead ventures might generate a profit, they are underperforming on all three comparative opportunity cost/performance assessment criteria (i. e., capital gain, income, and emotional utility) outlined earlier (Table 1). Certain factors are responsible for rendering underperformance increasingly more chronic as time passes. For example, the entrepreneur might not consider the cash, effort and time invested in the venture (sweat equity), or the psychological degradation, when calculating the venture's return on investment. Hamilton (2000), who is often cited, finds that after a decade in business, median entrepreneurial earnings are 35 % lower than predicted alternative wages (adding nonwage compensation, such as employer-provided health insurance, worsens the comparison for firm founders, who as a group are not necessarily less talented or lower-ability workers). In addition, opportunity costs arise, given the difficulty ex-entrepreneurs face in re-entering corporate life at levels equivalent to those their career tracks would have afforded them had they not ventured (Worcester 2001). In summary, not only is the business venture struggling financially, sustaining viability while barely making a profit, the entrepreneur also often fails to achieve his or her personal (subjective) objectives. Moreover, evidence points to the mortgaging of the entrepreneur's very future.

Modeling the Living-Dead Trap

Conceptually, the phenomenon of the living dead is linked to the stream of work on "permanently failing organizations," which is defined by Meyer and Zucker (1989, 19) as "organizations whose performance, by any standard, falls short of expectations, yet whose existence continues," sometimes over long periods of time. Van Witteloostuijn (1998) attributes a firm's tendency to "keep on ticking" to institutional factors such as idiosyncrasies and narrow stakeholder interests, often specific to a given industry, yielding intra-firm conflict that is nearly impossible to manage. Consequently, underperformance is the "unintended result of a myriad of practices," never the result of "deliberate or intentional" actions of decision makers (Rouleau, Gagnon, and Cloutier 2008, 34). We propose a perspective that centers on the ultimate decision-maker for the firm, the entrepreneur, capable in his or her own agency to reach (or terminate) the state of a "permanently failing organization," a deliberate result of implicit and explicit decision-making shaped by cognitive and affective factors.

Figure 1 (below) models the decision flow leading to the living-dead state of a permanently failing organization. The mediating variable is a personal cognitive and affective composite that represents the sum of cognitive and affective forces, compelling a founder with an underperforming yet viable venture either to quit or to persevere. Maintaining the venture represents a behavior that leads to the LDT, notwithstanding the small percentage of ventures whose fortunes will turn around in the most unkind of circumstances (given that the likelihood of success is very small for new ventures, turnaround probabilities are posited to be even lower for underperforming ventures). Exiting at a loss, and assuming the sunk costs, is the normative solution for underperforming ventures.

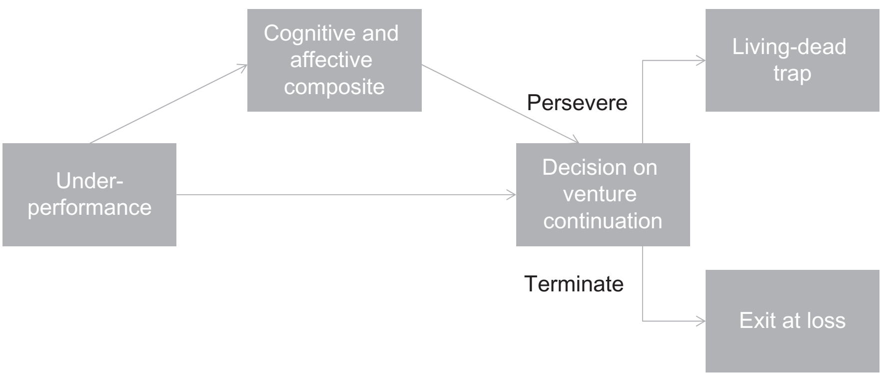

Figure 1: Decision-making process leading to the living-dead trap.

Proposition 1: *The entrepreneur makes the decision to persevere, or the non-decision not to quit, an underperforming venture and hence falls into the living-dead trap. Alternatively, he or she makes the decision to terminate the venture. Either decision occurs via the mediation of a posited, personal, cognitive and affective composite that captures all of the cognitive and affective vectors which associate the venture to the founder.*

The composite cognitive construct in Figure 1 is a composite of cognitive and affective forces, leading to the behavior to persevere. While the balance of the fundamental constituting forces forming the composite (such as irrational escalation of commitment as proposed by Bazerman 2002) causes founders to make the decision to persevere, the strength of each constituting force and its impact on decision-making will, of course, vary across individual founders. This cognitive and affective composite construct suggests that cognitive and affective perspectives can provide a useful anchor to explain the LDT, the non-rationality of throwing good money after bad. For instance, while other factors such as project and social determinants may explain an escalation of commitment, Sleesman et al. (2012) noted that psychological determinants represent the most frequently studied phenomenon in the literature. This latter category recognizes that "decision makers engage in cognitive and affective processing of information that often leads them to redouble their commitment to failing projects, rather than de-escalate" (Sleesman et al. 2012, 544).

The cognitive perspective, which addresses mental representations (expressed through cognitive maps, perceptions, and schema) and the dynamic interactions between environment, cognition, and action, has been suggested as adequate for entrepreneurship research (Grégoire, Corbett, and McMullen 2010). Since the entrepreneurial process is initiated and implemented by individuals, Baron (2004) has suggested that the cognitive perspective may shed new light on key aspects of entrepreneurial behavior (e. g., decision making, problem solving, and self-regulation of behavior). Indeed, entrepreneurs must resort to cognitive and affective resources in the process of firm creation as they are faced with uncertainty and business challenges of an unparalleled magnitude, such as the impossibility of calculating *a priori* potential losses or the unpredictable nature of gains (Dew et al. 2009). Social cognitive theory (Bandura 1986) suggests that the effects of personal disposition (such as overconfidence, optimism, persistence or passion) are often determined by their interaction with important behavioral and environmental factors. Somewhat paradoxically, the very same cognitive and affective variables, such as optimism, commitment, persistence or deficient affective forecasts that are the hallmark of successful entrepreneurs, can also lead to their demise. In terms of the decision to quit or not to quit when faced with an underperforming venture, the mediating personal cognitive and affective composite components can be deconstructed or unpacked into critical cognitive and affective causes such as the endowment effect, sunk cost bias, over-optimism, over-confidence or the deficient affective forecast. Among myriad possibilities, there are central factors that lead entrepreneurs to avoid the decision to terminate in the face of underperformance. At the single LDT entrepreneur level, assuming that certain causes prove more salient than others, some of the identified factors will not be prove noteworthy. Additionally, the psychological make-up of the single entrepreneur might incorporate additional causes. To understand the relationship between one specific cognitive or affective factor constitutive of the personal cognitive and affective composite impacting the decision to persevere, or not to quit, and fall into the LDT, we review these factors, which the extant literature, as applied to our research question, might suggest to be relevant in the LDT context.

Endowment Effect

Anecdotal evidence from entrepreneurs asked to accept regular employment suggests that a “mild form of hara-kiri” would be preferred over giving up their business (Ronstadt 1986). Entrepreneurs, therefore, prefer the *status quo*, and, as Rouleau, Gagnon, and Cloutier (2008, 33) remarked: “In an organization stuck somewhere between inertia and performance, a relative no-man’s land will probably sustain itself until the next crisis.” Kahneman, Knetsch, and Thaler (2000) suggested that this behavior stems, to a large extent, from the “endowment effect” – a consequence of attachment to a possession.

Possession attachment describes the relationship between an individual and a specific material object that has been psychologically appropriated, decommodified, and singularized through person–object interaction (Schultz-Kleine and Menzel-Baker 2004). Additionally, owners often regard a possession as part of themselves and their own identity (Belk 1988). Since the entrepreneur-venture duality forms the cornerstone of entrepreneurship, entrepreneurs often define themselves in relation to their venture, and they are therefore likely to show a strong attachment to their venture. For example, many refer to their firm as “their baby” (Cardon et al. 2005).

An important consequence of the endowment effect is that individuals value the assets they own more highly than assets not included in their present ownership. As a result, they will demand a higher selling point for a good they own than the price they would be willing to pay for the item if they did not own it and had to purchase it. This is because the seller is taking into account the potential (emotional) loss they would suffer by selling the good. Zellweger and Astrachan (2008) demonstrated that for owner-managers, the minimum acceptable price for the owner-manager consists of an “objective” price determined by conventional valuation methods and an emotional value. Entrepreneurs are often oblivious to this bias in the business valuation and have difficulty finding a buyer who offers the “right” price to close the deal.

Consequently, entrepreneurs become entangled in a LDT because they suffer from “psychological inertia” (Sandri et al. 2010). In summary, they hold onto a losing project for much longer than real-options reasoning would predict. The ensnaring nature of the status quo bias is further defined by Loewenstein and Adler (2000, 734) as people in general who are “unwittingly trapped by their choices; they make choices with an unrealistic sense of their reversibility.” Therefore:

Proposition 2: *The endowment effect is positively related to the living-dead trap.*

Sunk Cost

Entrepreneurs who establish a new venture typically invest considerable personal resources, time and energy to ensure the venture's viability. It is therefore not surprising that they appear reluctant to terminate their business in the light of concerns that they might be perceived as having wasted these initial resources (Shepherd et al. 2008). Previous research indicates that initial capital provides the entrepreneur a buffer to withstand poor performance and liquidity problems without having to exit the business (Brüderl and Schüssler 1990; Levinthal 1991). However, "it may also suggest that financial investments are largely irreversible" (Gimeno et al. 1997, 776). As a result, individuals continue an endeavor once they have made an investment of money, time and/or energy because to terminate a course of action would appear wasteful (Arkes and Blumer 1985).

The dilemma is particularly acute when the decision involves whether to discontinue an unproductive line of behavior or to commit more effort and resources into ensuring that this course of action pays off. In these circumstances, there appears to be a tendency to escalate commitment above and beyond what the objective facts of the situation warrant (Staw 1981). As entrepreneurs persist with their ventures, they invest additional cash and sweat equity because bank loans and equity investments are difficult to obtain when the business approaches insolvency (Beaulieu 1996). This translates into an escalation situation, where decision makers continue in their commitment to a specific course of action despite information suggesting that the course of action is failing (Staw 1981; Staw and Ross 1987).

The sunk cost trap underpins and is also closely related to the escalation of commitment, which is prevalent among entrepreneurs because (1) they have feelings of responsibility for the initial decision – once individuals make a decision, they feel responsible for it, and they view reversing the decision as backing away from such responsibility; (2) the effort involved in making the start-up decisions require difficult cognitive work – most people are reluctant to begin the process all over again; and (3) there exist concerns about the loss of face and image that may result from admitting that one has made a mistake (Baron 1998). Therefore:

Proposition 3: *The sunk cost trap is positively related to the living-dead trap.*

Over-optimism

There is substantial evidence in many domains that individuals are optimistic, in that they have a generalized positive outlook toward the future (Scheier and

Carver 1985). In terms of firm founding, this has often been perceived as a *condicio sine qua non*, or an essential element or condition. Cassar (2010) found substantial over-optimism in nascent entrepreneurs' expectations, in that they overestimate the probability that their nascent activity will result in an operating venture. Further, for those ventures that achieve operational capacity, individuals often overestimate expected future sales employment. Over-optimism is not always conducive to underperformance nor is it irrational, and it has sometimes been posited that self-selection based on rational choices can result in over-optimism among entrepreneurs. For example, founders hold over-optimistic beliefs simply as a consequence of acting rationally on noisy yet unbiased signals of returns from vocational activity (Van den Steen 2004).

Overall in practice, optimism has been found to be quite resistant to many de-biasing interventions, such as making people aware of the risks, changing the presentation mode of the risks, changing the intensity of the risks, and generating reasons why these risks might occur (Weinstein and Klein 1995). Consistent with the idea that the de-biasing of optimists is a difficult task, Åstebro, Jeffrey, and Adomdza (2007) found that optimistic inventors often pay little attention to advice that asks them to modify their behavior and stop spending more. Therefore:

Proposition 4: *Over-optimism is positively related to the living-dead trap.*

Over-confidence

Similarly, individuals generally exhibit overconfidence, in that they overestimate their ability to do well (Larwood and Whittaker 1977). In the field of entrepreneurship, a stream of research demonstrates that overconfidence is the cause of "excessive business entry" (Camerer and Lovallo 2000; Wickham 2006). Such over-confidence may be related to an individual's knowledge, ability to predict the future, or general personal abilities (Hayward, Shepherd, and Griffin 2006; Simon and Houghton 2003).

In their study of reinvestment decisions by entrepreneurs, McCarthy, Schoorman, and Cooper (1993) found that overconfidence is consistently the strongest predictor of new capital invested. This finding suggests that when entrepreneurs express a level of confidence that exceeds their own beliefs about the norms for success, it may be the clearest signal that a significant level of psychological commitment has been made and that the individual might be at risk for escalation bias in future decisions. Therefore:

Proposition 5: *Over-confidence is positively related to the living-dead trap.*

Deficient Affective Forecast

Many important decisions are based on affective forecasts – people's predictions about their future feelings. This factor is important, as it addresses the issue and the emergence of emotional disutility, which defines the living dead. When deciding whether to continue running an underperforming firm, entrepreneurs are likely to consider the intensity and the duration of the pleasure they will derive from this action. On the positive side, pleasure might also be derived from the learning opportunity associated with the failed business (McGrath 1999) and the learning gained in mastering the challenges of keeping the venture afloat. The affective expectations model indicates that the degree to which a person believes they will enjoy an experience (affective expectation) is as important as what actually happens during the experience in determining his or her evaluation of the experience (affective reaction) (Wilson et al. 1989).

To the extent that an entrepreneur has a track record in establishing and operating an underperforming firm, a reasonable strategy would be to use the memories of their past effective experiences to predict their future ones. In order to learn from past experiences, however, entrepreneurs must be able to correctly recall their previous feelings. Klaaren, Hodges, and Wilson (1994) suggest that there is often a retrospective bias, whereby people re-interpret aspects of the experience that were inconsistent with expectations or selectively remember the experience.

There is a great deal of evidence regarding impact bias in making predictions about emotional reactions to future events. For example, college football fans overestimated the impact of a win by their favorite team (Wilson et al. 2000), and college students overestimated the impact of receiving an unexpectedly high or low grade on a test (Buehler and McFarland 2001). The impact has been found in a variety of populations (e. g., college students, professors, vacationers, people taking medical tests) experiencing different emotional events (e. g., romantic breakups, personal insults, sports victories, electoral defeats, tragic stories; for a review, see Wilson and Gilbert 2003).

We suggest that entrepreneurs with positive expectations are likely to put a favorable spin on outcomes they receive and the outcomes they expect, even when existing outcomes might reasonably be considered disappointing, and future outcomes equally unpromising. As Cooper and Artz (1995, 440) remarked, those entrepreneurs "who had a positive view of their initial prospects later viewed the experience of business ownership more favorably, regardless of subsequent performance." We therefore posit that:

Proposition 6: *A defective affective forecast is positively related to the living-dead trap.*

One of the recurring points of the above prepositions is that the reviewed constituent affective and cognitive factors are often conceived as an indispensable condition, for jumping into the ocean and starting one's venture. As entrepreneurship's core, they possess a paradoxical dual role: The very enablers of entrepreneurship do, in fact, destroy entrepreneurs.

Conclusions

In this paper, we built a conceptual model explaining the living-dead phenomenon. Drawing on the cognitive and affective perspectives of this phenomenon, we identified a personal cognitive and affective composite that mediated between the founder's non-performing venture and his or her decision not to quit – that is, the gateway to the LDT snare.

Contributions

This paper attempts to contribute to the entrepreneurship literature by discerning the LDT phenomenon, which has received relatively scant scholarly attention to date probably because it is a theoretical anomaly requiring a variety of literature and theories to discuss and model. There is also the stigma associated with labels such as "underperformance" or "failure," with protagonists characterized as "loser entrepreneurs" who cannot even manage to fail properly. In this paper, we sought to gain a better understanding of the LDT, among other reasons for failure, because it might be the most relevant state of entrepreneurship.

The conceptual development of the LDT and its explicative cognitive and affective composite as a mediating force both qualify and challenge some of the existing understandings of firm founding. For instance, Gimeno et al.'s (1997) work on underperformance posits a threshold model – namely, a threshold internally defined by the firm, below which the owner-managers would dissolve the firm. Their findings suggest that underperforming firms continue not because they are irrational or are throwing good money after bad money, but because their owner-managers are satisfied with a lower return over that which an alternative investment might provide. The LDT, on the other hand, suggests that the purported threshold is left unconsidered or that it is dynamic and mediated by emotions and cognition, the threshold incidentally declining as the firm ages. Building upon the threshold theory, DeTienne, Shepherd, and DeCastro (2008) found that entrepreneurs significantly factor in environmental munificence, personal investment, personal option, and previous organizational success when making a decision about persistence with an underperforming firm. However, one of their most important findings was that there is heterogeneity among entrepreneurs in terms of their cognition and extrinsic motivation, and this heterogeneity can help to explain why firms have different and dynamic thresholds of performance and why the living dead exist. And yet at the end of the day, and despite negative financial outcomes associated with delaying business failure, research suggests that entrepreneurs persist over an extended period of time (Gimeno et al. 1997; Karakaya 2000). This paper extends a series of theoretical perspectives and findings into the LDT construct, which then articulate the processes operating at the underperforming founder level. These processes are conceptualized as a cognitive and affective composite that functions as the critical mediator variable during the decision to terminate the non-performing venture.

Implications

The paper's focus on theoretical development renders it conducive to research aimed at enriching our theoretical understanding of entrepreneurial behavior. There exist several research opportunities to further explore the living-dead phenomenon and its trap. Concepts and methods to detect, avoid and defuse the LDT should be of interest to practitioners and to entrepreneurship educators alike. As an example, a measurable benchmark of sustained entrepreneurial underperformance – akin to a living-dead indicator – could be developed. Such an indicator would enable the description of living-dead founders in objective, measurable terms and may eventually lead to the development of an LDT assessment tool. Further work addressing the impact of individuals' identification with outcomes of entrapment would contribute to the field of entrepreneurship. For example, Brockner et al. (1986) suggested that negative feedback initially increases task persistence. If, however, individuals continue to receive negative feedback in spite of increased persistence, then they will begin to withdraw from, rather than persist in, the task at hand. Here again, we find derived normative suggestions, including the need to make entrepreneurs cognizant that time and expenses already invested are nothing more than "sunk costs," forcing a second, more meditated plunge into the decision-making process (Bazerman 2002). Despite the discourse about the virtue of passion and perseverance, it is therefore equally important for entrepreneurs in underperforming businesses to receive negative feedback and advice about the state of their projects, as well as about their own cognitive and affective states. By what behavioral logic can they be made to recognize early on that they have reached a dead end when this is, by all benchmarks, the inevitable conclusion?

Another research stream could focus on the criteria and debiasing methods employed to exit a living-dead situation and to escape the corollary entrapment. VCs could provide a useful understanding, as well as valuable pointers, in this field. As we have seen, despite being expert, detached decision-makers, VCs are also subject to the escalation of commitment (e. g., in the context of staged funding), and have difficulty taking corrective action even when facing negative information warranting termination (Birmingham, Busenitz, and Arthurs 2003). However, by virtue of the fact that VCs are seldom involved in business operations, they may be less likely to suffer from the cognitive and affective biases discussed. Their unambiguous mandate is to create value for their investors and to terminate chronically underperforming ventures. It would be useful to identify the specific indicators VCs employ to discontinue or refrain from further investment.

Beyond the earlier discussion on threshold theory, existing theories and concepts could be refined to mitigate the risk to fall into the LDT. For instance, the regulatory focus theory (Higgins 1998) may serve as a powerful tool in understanding goal-directed behavior in underperforming firms. The regulatory focus theory delineates how people engage in self-regulation, or the process of bringing oneself into alignment with one's standards and goals. At any given point in time, people may engage in self-regulation with a promotion focus or a prevention focus (Brockner, Higgins, and Low 2004). While entrepreneurs maintain their struggle in distressed businesses, driven by their own vision, flexibility, and enthusiasm (a promotion focus), they may lack a prevention focus, and its attendant constraints, to ensure that they remain in touch with reality. A strengthening of the prevention focus would increase the inclination for security and responsibility and may prevent entrepreneurs from falling into the LDT. Similarly, notions of affordable loss may help entrepreneurs estimate what they might be able to put at risk and determine what they are willing to lose in order to persist with an underperforming business. The affordable loss heuristic might also provide entrepreneurs with the emotional back-up required to quit, and thus become a factor in the theorized cognitive and affective composite construct when the time arrives (Dew et al. 2009). We expect this paper to encourage research on how specific affective and cognitive phenomena balance and offset each other and contribute to the decision to continue or discontinue a venture.

Finally, we believe that ongoing research to test and further refine the LDT and its operating causal relationship will increase awareness of the LDT, which is a must in order to make entrepreneurs, investors, and society in general sensitive to the implications of the self-destructing entrapment in failing projects, regardless of whether or not they remain viable for the time being. The more entrepreneurship is recognized as creating wealth for society as a whole, the more pressing it becomes to address those tragic prisoners of their own creation, if only on the grounds of efficiency and ethics. The research agenda outlined above may play a critical role in achieving a much-needed understanding, and hence awareness, of entrepreneurship's dark core.

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