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Entrepreneurial Continuance Logic: The Interplay of Commitment and Entrepreneurial Responsiveness

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ABSTRACT

Sustaining entrepreneurial ventures has positive socio-economic spillovers. Yet, entrepreneurial perseverance post-startup has received scant attention. This research extends entrepreneurial continuance logic (ECL) as a theoretical base to empirically investigate antecedents and mediators of entrepreneurial continuance. We survey 156 entrepreneurs across the US, UK, South Africa, and India. Results surface attitudinal tensions between transactional attitudes of entrepreneurial responsiveness and calculative commitment and relational attitudes of affective and normative commitment. We find affect is the strongest predictor of continuance intentions but only absent entrepreneurial responsiveness. Entrepreneurial responsiveness is central to ECL, contributing positively to continuance as an antecedent, moderator, and mediator.

KEYWORDS: Entrepreneurial continuance logic, Entrepreneurial commitment, Affective commitment, Normative commitment, Calculative commitment, Entrepreneurial responsiveness

INTRODUCTION

"It does not matter how slowly you go as long as you do not stop." – Confucius

"When everything seems to be going against you, remember that the airplane takes off against the wind, not with it." – Henry Ford

According to the Wall Street Journal (2012), entrepreneurial ventures are the engines of economic growth in an economy; yet "about 60% of start-ups survive to age three and roughly 35% survive to age 10" (Gage, 2012). With such high rates of entrepreneurial mortality, what makes certain entrepreneurs continue pursuing their ventures? Despite the importance of this question, there is scant systematic evidence on the rich tapestry of entrepreneurial continuance behavior, i.e., the intentional willingness of entrepreneurs in maintaining their ventures over time.

Entrepreneurial continuance focuses on post venture-creation psychological behavior rather than business performance. [Continuance does not necessarily correlate with financial business performance. A very small percentage of post-startup entrepreneurial ventures are able to make profit. Consider Amazon.com, which operated at a loss for two decades. As Clarke and Young (2013) remark: “The company barely ekes out a profit, spends a fortune on expansion and free shipping and is famously opaque about its business operations. Yet, investors continue to pour into the stock, pushing up the company’s share price to \$388, a nearly 400 percent rise since the end of the company’s third quarter in September 2008”]. While there is a rich body of literature on new venture creation (e.g. Shook, Priem, & McGee, 2003; Gartner, 1985) and venture failure (e.g. DeTienne, 2010), there is very little understanding of the economics and psychology of post-startup entrepreneurial continuance behavior. Startup or venture creation behavior is often a study of nascent entrepreneurial behavior that is fervent (often spuriously so) with a sense of novelty and autonomy. Entrepreneurial failure and exit behaviors are ex-post and too late, offering little recourse or remedies to save the venture. Thus, investigating the behavioral dynamics underpinning entrepreneurial continuance offers a more complete and holistic understanding of entrepreneurial venturing life cycle.

Given the limited theoretical guidance and importance of entrepreneurial continuance as an important part of the entrepreneurial venture lifecycle, we inquire: *what are the drivers and contingencies that influence an entrepreneurs’ intention to continue with one’s entrepreneurial venture?*

Entrepreneurial continuance is a critically useful lens for understanding entrepreneurial venturing. A failed entrepreneurial venture is a deadweight loss to society owing to costs associated with the loss of jobs, loss of investments, among others. Understanding entrepreneurial continuance can help stakeholders (policy-makers, researchers, investors, and practicing entrepreneurs) create, remedy and revise checks and balances to prevent such deadweight loss. [It is useful to note that our remark on deadweight loss from entrepreneurial failures rather than entrepreneurial exits that might be strategic in nature (e.g. a buy-out or acquisition)].

Our unit of analysis is the entrepreneur as the focal actor in an entrepreneurship. In the first part of this research, we propose a theoretical direction and framework for entrepreneurial continuance logic (ECL). Then, we use ECL, a salient framework, to establish our hypotheses, introducing central concepts and their relationships important to understand entrepreneurial continuance. In the second part, we empirically investigate our hypotheses using data from 156 entrepreneurs across the US, UK, India and South Africa. In the third part, we interpret our results and discuss the nature and interplay of entrepreneurial commitment, entrepreneurial responsiveness, and continuance.

ENTREPRENEURIAL CONTINUANCE LOGIC

A “logic” allows for the formal ordering and organization of a phenomenological ontology by surfacing patterns of values and beliefs (Thornton & Ocasio, 1999). In order to understand the phenomenon of entrepreneurial continuance, we forward the concept of Entrepreneurial Continuance Logic (ECL) as a systematic method to decipher and synthesize the underlying behavioral structure of entrepreneurial continuance.

Over time, scholars have delineated ideal types of logics, which become instantiated in organizations in particular ways (see Thornton et al., 2012). However, entrepreneurial ventures

are myriad in structure and strategy, constructed and deconstructed over time, therefore lack any singular institutional identity or underpinning. Unlike institutions such as capital markets or regulatory bodies with well-defined operational structures, entrepreneurial ventures are relatively more amorphous in structure, devoid of strict formal guidelines for structural existence. Yet entrepreneurial continuance is an existential outcome for entrepreneurial ventures, with transactional and relational cognitive underpinnings.

ECL shows how entrepreneurial continuance is a phenomenon represented by epistemological coherence and value infusion that is core to the construction of logics. ECL begins with root metaphors as constructs defining the ontology of continuance followed with an empirically-evidence archetype detailing the calculus of relationships. Entrepreneurs are focal actors that define the existence of their ventures. ECL unpacks the interplay of entrepreneurs' attitudinal systems in shaping their intentions.

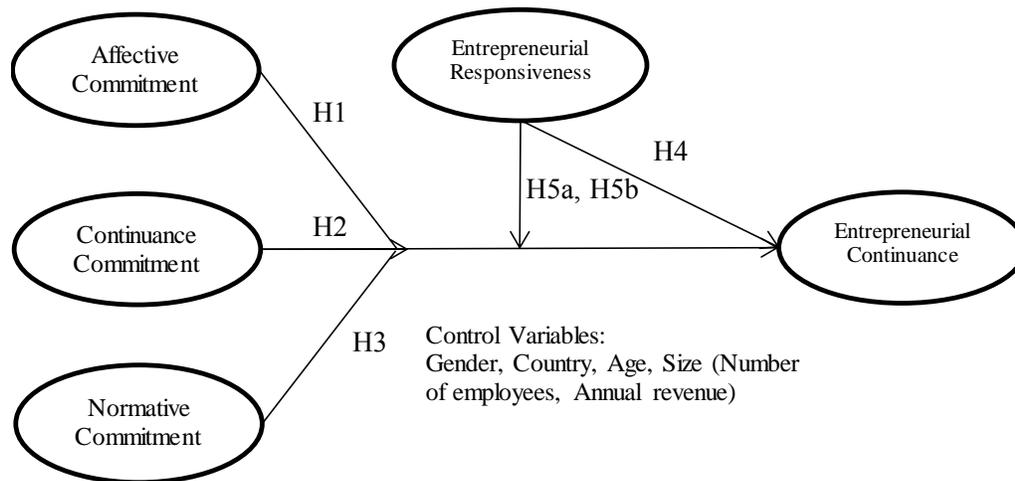
ECL highlights an important attitudinal tension between entrepreneurial rationality and psychology. ECL captures how rational as well as psychological attitudes shape entrepreneurial behavior and decisions. Therein, ECL shifts the focal lens by considering entrepreneurial continuance behavior as underpinned by the juxtaposition of transactional and relational considerations. One dimension of the ECL structure is more transactional, that is, perceptions derived based on more specific, rational considerations. The second dimension of the ECL structure is more relational, that is, perceptions based on less-specific, entrepreneurial attitudes about the venture.

As a logic, ECL informs implementation and instantiation. ECL's instantiation assumes a global logic rather than a "local" logic. We argue that such instantiation makes sense because the phenomenon of entrepreneurial continuance shares the ontological and epistemological space, even when "local" values can shift temporally, socially (across cultures) and spatially (across geographies). A global logic increases generalizability via its epistemological abstraction.

ECL integrates codes and paradigms to represent lived socio-economic realities of entrepreneurial behavior. The logic presents more than an archetypal model or abstract reasoning. Rather, ECL combines the two. ECL begins with an ontology that is an abstraction of the socio-economic realities of entrepreneurial continuance. Thereafter, ECL grounds the ontology with a structured epistemology to justify our beliefs from opinions. Extending the logical discourse, ECL structures the discourse to offer empirical validation to distill the essence of the proposed logic.

ECL is our starting point of analysis of the phenomenology of entrepreneurial continuance. In order to holistically understand the phenomenon, we surface socio-psychological and socio-economic constructions and representations of reality. Our construction uses entrepreneurial commitment and entrepreneurial responsiveness as building blocks typifying entrepreneurial continuance as a phenomenon. Commitment surfaces an entrepreneur's socio-psychological and socio-economic perceptions related to the dyadic relationship and exchange between the entrepreneur and the venture. Entrepreneurial responsiveness highlights an entrepreneur's opportunity-harnessing proclivities and capabilities related to the entrepreneur and the market. Together, ECL offers a useful theoretical guidance that can inform existing as well as future entrepreneurs how to produce and reproduce entrepreneurial continuance behavior.

Figure 1.



Entrepreneurial Continuance

Understanding entrepreneurial continuance intention is the goal of this research. We define entrepreneurial continuance intention as a cognitive representation of the intended and volitional action of an entrepreneur to attach oneself to one's venture over time. Using our definitional premise, entrepreneurial continuance is, therefore, (i) cognitive or intention-related and (ii) focused not on initial venture creation but upon post-startup behavior.

According to Bird (1988: 442), "intentionality is a state of mind directing a person's attention (and therefore experience and action) toward a particular object (goal) or a path in order to achieve something (means)." In the scope of our research, continuance intentions therefore are actionable directions towards the goal of continuance through value-creation, value-maintenance, and/or growth. Regardless of whether an entrepreneur plans to ensure survival (via growth or maintenance) of one's existing venture, the imperative first step is to envision continuing business operations. As Meredith Fineman, the founder and CEO of Finemap Digital, remarks "I've thought I was going to fail many, many times. As an entrepreneur, that thought isn't one that comes once and leaves. At first it's loud and clear like a bullhorn, because you feel alone and like you have no idea what you're doing. But as you continue, I'm now three years in, the idea of failure is more of a hum in the background" (Giang, 2014).

First, continuance intention is a representational manifestation of the entrepreneur's horizon of involvement and engagement with the venture. Entrepreneurial returns on investments are temporally lagged. For investors and creditors to recoup their initial funding, it is incumbent upon them to ensure that entrepreneurs intend to continue their ventures to secure expected rents. Second, entrepreneurs' intentions to discontinue their ventures have further socio-economic costs. Entrepreneurial venturing is a social contract as well as an economic one. As a collaborative activity embedded in the creation of social capital in pursuit of a venture, especially in the early stages of the firm (Venkataraman, 1997), continuance intentions underpin the building of cooperative social contracts.

Entrepreneurial continuance requires expending time, capital and effort to accommodate uncertainty in order to keep the venture active, thus increasing the probability of securing

appropriate future rent premiums. Thus, focusing on entrepreneurial continuance intentions addresses a psychological basis that “allow[s] the impact that entrepreneurial intentions have on organizational direction, survival” (Bird, 1988: 451).

Entrepreneurial Commitment

The structure of ECL begins with the concept of entrepreneurial commitment and sets the stage for entrepreneurial continuance. It is well established that entrepreneurial start-up behavior is rooted in commitment, i.e., nascent entrepreneurs have a level of commitment that prompts venture creation. However, commitment is not temporally invariant (e.g. Gundlach, Achrol, & Mentzer, 1995). As entrepreneurs creep out of the nascence nature of their ventures, commitment remains an important criterion. Thus, ECL uses commitment as a precursor to explain the downstream impact of commitment on continuance intentions.

The concept of commitment grew out of the literature on organizational commitment. Rooted in social psychology and organizational behavior literature, the notion of organizational commitment was established to study employee attrition and turnover behaviors (e.g. Mowday, Porter, Steers, 1982). Studies on organizational commitment underpin their research on the premise that organizational actors, e.g. entrepreneurs, employees, through their interactions and engagements with the focal firm, form or fail to form a sense of attachment with the organization. It is found that organizational actors that perceive a sense of attachment have a greater likelihood of remaining with the organization for a longer tenure compared to organizational actors that do not feel a sense of attachment (Meyer & Allen, 1991; Mowday et al., 1982).

Borrowing the definition of commitment from Mowday et al. (1982) and Meyer and Allen (1991), we define entrepreneurial commitment as the psychological bond between an entrepreneur and the corresponding entrepreneurial venture that makes it less likely for the entrepreneur to voluntarily discontinue active engagement of an entrepreneurial venture.

Affective Commitment

Affective commitment refers to commitment subject to a perceived emotional attachment to, identification with, and involvement with a corresponding entity (Meyer & Allen, 1991). Affective commitment to an entrepreneurial venture thus relates to a user’s sense of attachment to an entrepreneurial venture driven by internal emotional attachments and a sense of involvement and identification (Allen et al., 1996; Meyer, Stanley, Herscovitch, & Topolnytsky, 2002).

An entrepreneur’s affective commitment is rooted in psychological attachment, identification, affiliation, and value congruence (Gundlach et al., 1995). For an entrepreneur, the psychological attachment often originates with a love for the venture, feeling that the essence of the venture is a creative manifestation of the entrepreneur’s idea and definition of the space, the product or the service. The psychological attachment is further nestled by a deeper sense of identification where the entrepreneur is keen on reflecting one’s values and internal affiliations into the venture. With such emotional investment in the venture, an entrepreneur primes oneself for continuance.

Meta-analysis of commitment research suggests that affective commitment has the strongest and most positive correlation with attendance, performance, and organization citizenship behavior compared to other types of commitment (Meyer et al., 2002). In the case of our study,

entrepreneurial discontinuance may be considered similar to withdrawal and turnover. Therefore, we believe affective commitment will similarly have a negative effect on withdrawal and turnover, thus leading to a higher level of continuance intentions. Thus, we argue that entrepreneurs experiencing a sense of affective commitment towards an entrepreneurial venture will be more likely to sustain their pursuit of an entrepreneurial venture.

H1: Higher affective commitment will increase an entrepreneur's continuance intention towards one's entrepreneurial venture.

Normative Commitment

Normative commitment refers to commitment subject to a perceived obligation to continue to serve a corresponding entity (Meyer et al., 1991). In contrast with affective commitment, normative commitment to an entrepreneurial venture thus relates to an internalized sense of obligations that induce entrepreneurs to remain attached to an entrepreneurial venture.

Normative commitment is a relational construct in nature. Users often internalize normative pressures and show commitment because of obligations and socio-cultural mores and norms. Bruton, Ahlstrom, and Puky (2009) note that normative elements, although socially constructed over time, are perceived as objective, factual and natural laws that govern beliefs, attitudes and behavior. Normative commitment towards an entrepreneurial venture can stem from a sense of self-sufficiency, moral obligations towards one's employees, the entrepreneurial product or service, and/or the community. Because normative commitment to an entrepreneurial venture refers to an entrepreneur's psychological bond with one's venture due to perceived obligation or pressure, this notion of social conformance (norms) can deter an entrepreneur from disengagement and positively influence the entrepreneur's intention to continue to pursue the venture.

H2: Higher normative commitment will increase an entrepreneur's continuance intention towards one's entrepreneurial venture.

Calculative Commitment

Calculative commitment refers to commitment subject to a perceived awareness of costs associated with a decision or action (Meyer et al., 1991). An entrepreneur's time, effort, and capital coalesce to create the perceived cost vector, given that time, effort, and capital can be converted into costs. Thus, an entrepreneur's calculative commitment embodies the entrepreneur's attitude towards one's entrepreneurial venture because of perceived costs of time, effort and capital expended in as well as rents derived from the entrepreneurial venture. Using our ECL lens, the structure of continuance commitment is relatively more transactional. An entrepreneur's continuance commitment perceptions subsume financial (e.g. capital and resource costs and derived rents) and non-financial elements such as opportunity costs (Sharma & Irving, 2005) and learning curves (Etzioni, 1986).

Opportunity cost considerations stem from a conscious comparison of alternative or substitute choices and their corresponding returns on investments of time, capital and effort. An alternative or substitute venturing that is perceived to have lower costs can deter an entrepreneur from continuing a venture and rather invest one's time, capital and efforts in substitute ventures that might offer higher returns and/or lower risks. Thus, calculative commitment offers a rational perspective of commitment.

Contending that the dimension of calculative commitment is based on a more rational perspective that an entrepreneur is highly vested, entrepreneurial continuance intentions are predicated by costs (investments) and returns (rents) qualifications and a perceived loss of rents can dampen continuance intentions. The oft-mentioned Aesop's tale of The Fox and the Grapes further underscores our contention. After several attempts at jumping (time and effort investments) to secure the grapes (rents), the fox remarks that "the grapes are sour", and discontinues his venture. We draw upon the analogy and premise that entrepreneurs experiencing variable returns to their scale of calculative commitment are more likely to be more cost-sensitive and would attempt to reduce their cognitive dissonance by disengaging from the venture, strategically or otherwise. For entrepreneurs with high calculative commitment, increasing returns to scale might reduce continuance intentions towards their ventures via strategic buyouts or exits; diminishing returns to scale might also reduce continuance intentions due to opportunity costs and sunk cost considerations.

H3: Higher calculative commitment will reduce an entrepreneur's continuance intention towards one's entrepreneurial venture.

Entrepreneurial Responsiveness

Entrepreneurial environments are inherently dynamic rather than static (Teece, 2012). This assumption holds particular currency and merit in the age of global competition where industrial and organizational equilibria are constantly being punctuated. The dynamic nature of the environment requires that entrepreneurs not only remain mindful of the market dynamics but also "actively seek and avail" various emerging entrepreneurial opportunities. [Entrepreneurial opportunities as defined as "situations in which new goods, services, raw materials, markets and organizing methods can be introduced through the formation of new means, ends, or means-ends relationships" (Eckhardt & Scott 2003: 336)]. Entrepreneurs are very sensitive to environmental music or outside timing and must ensure that they "dance fast" and seek opportunities to synchronize their strategies with external market conditions (Bird, 1988).

Our treatment of entrepreneurial responsiveness refers to an entrepreneur's opportunity-seeking behavior to seek, create and avail possibilities in the environment and the market. [It is useful to distinguish between calculative commitment and entrepreneurial responsiveness. Calculative commitment is a commitment dimension based on objective expectations of socioeconomic tradeoffs. Entrepreneurial responsiveness is a proactive, environmental scanning of and responding to alternatives. An entrepreneur with calculative commitment will have a stronger sense of transactional attachment with one's venture but may not be driven by proactive opportunity-seeking behavior. Similarly, a café owner with high calculative commitment will run the café based on objective expectations of effort and return tradeoffs without active considerations of alternatives (e.g. revamping the café into a lounge because of changing demographic preferences)]. Following Bird's (1988: 446) remark that entrepreneurs "believe that opportunities to create are vested in the present", we argue that an entrepreneur's attitude towards seeking and responding to opportunities is an important facet in the entrepreneurial continuance logic.

Entrepreneurial responsiveness is different from effectuation (Sarasvathy, 2001). While entrepreneurial effectuation is more about *exploring* opportunities and recombining means to achieve desired capabilities and ends, entrepreneurial responsiveness is based on a more deliberate goal-seeking behavior that *exploits* available opportunities. It is an exploration-exploitation difference. We argue that entrepreneurs, dealing with scarce resources (that increase trial-and-error costs), are often required to exploit opportunities. Entrepreneurial

responsiveness then is an indication of an entrepreneur's attitude towards actively *sensing and responding* to market shifts and preferences with an explicit aim towards leveraging that knowledge for a competitive response. Thus, entrepreneurial responsiveness is an actionable proaction and reaction to environmental shifts.

Beyond leveraging, Isenberg (1987), further views responsive, opportunity-seeking behavior as a strategic imperative in a competitive environment where organizations need to be able to remain focused on long term objectives while staying flexible enough to recognize new opportunities. Entrepreneurs that can recognize opportunities can get a jump on others (Stevenson 1985) to maintain competitive advantage and remain a going concern.

From a strategic perspective, entrepreneurial responsiveness allows entrepreneurs to remain flexible and cognizant of the dynamic nature of markets and to adjust their resource capabilities accordingly. [Entrepreneurial commitment and entrepreneurial responsiveness are orthogonal. Entrepreneurial commitment to their ventures does not automatically equate with a passive interaction with one's environment. An entrepreneur's environment is in constant flux, regardless of one's level of commitment to the venture. Here, opportunities afforded by a changing environment shift correspondingly, notwithstanding emotion (affective), obligation (normative), or costs (calculative)]. Given that entrepreneurs operate under resource scarcity, entrepreneurial responsiveness allows entrepreneurs to remain flexible to market needs and to reorganize products, resources and processes to avail of relative optimality. As Teece (2012: 1396) remarks,

“Entrepreneurship is about sensing and understanding opportunities, getting things started, and finding new and better ways of putting things together...Entrepreneurial management has little to do with standardized analysis and optimization. It is more about figuring out the next big opportunity or challenge and how to address it – rather than maintaining and refining existing procedures.”

Thus, entrepreneurial responsiveness is an attitude aimed at seeking and leveraging knowledge about market dynamics such that individuals can confront challenges and capitalize on opportunities, thereby positively shaping continuance intentions.

H4: Higher levels of entrepreneurial responsiveness will increase entrepreneurial continuance intention towards an entrepreneurial venture.

While we posit that entrepreneurial responsiveness will strengthen the relationship between calculative commitment and entrepreneurial continuance, we posit that entrepreneurial responsiveness will dampen the effect of affective commitment and normative commitment on entrepreneurial continuance. On the one hand, entrepreneurial responsiveness is a rational behavior in which entrepreneurs actively sense and acquire knowledge about markets with an aim towards leveraging that knowledge for a competitive response. On the other hand, affective commitment is based on emotion and affect, speaking to the entrepreneur's sense of personal identification and attachment with the organization (Cardon, Zietsma, Saporito, Matherne, & Davis 2005). However, when entrepreneurs have a high sense of entrepreneurial responsiveness and look to the market to act on opportunities in terms of the external marketplace, dissonance is created between the feelings of “passionately psychological” attachment and “dispassionately rational” opportunity-seeking behavior.

This interplay creates attitudinal odds. Because individuals try to minimize cognitive dissonance present in given situations, external market opportunities that are potentially at odds with the entrepreneur's sense of affect may offer a rude awakening. Market realities about the continuance and viability of a venture may differ from an entrepreneur's positive feelings of attachment. Thus, in order to reduce the stress from cognitive dissonance and psychological imbalance, an entrepreneur might opt to discontinue the venture rather than carry on a venture perceived to be too different from the original.

The dissonance and disconnect between normative commitment and entrepreneurial responsiveness are even more acute. Normative commitment is shaped by a sense of relational obligation underpinned by culture, society, family or peers (Wiener, 1982). Entrepreneurs that feel that their commitment comes from a sense of socio-cultural norms such as loyalty might feel a sense of disconnect when trying to reconcile exploiting opportunities by being flexible and following obligatory norms. In face of dissonance, an entrepreneur is likely to distance oneself from the venture when faced with the promises or perils of change. If an entrepreneur feels that entrepreneurial continuance is an obligation to continue while cognizant of the variety of opportunities and options available in the environment, we argue that the entrepreneur would be reticent in continuing the venture.

H5a: Entrepreneurial responsiveness moderates the relationship between affective and normative commitment and entrepreneurial continuance such that increased levels of entrepreneurial responsiveness will dampen the effects of affective and normative commitment on entrepreneurial continuance intentions.

Entrepreneurial responsiveness, argued here as transactional, is often perceived to be at odds with the relational attitudes towards commitment, namely affective and normative. Calculative commitment, which is, on the other hand, transactional, lends cognitive support to entrepreneurial responsiveness.

An entrepreneur's ability to proactively seek opportunities could defray or hedge their concerns about the returns on their side-bets. Assuming that the costs of exploiting and integrating available opportunities is low and that the entrepreneur's commitment is driven by considerations of costs and returns, entrepreneurs are more likely to display higher continuance intentions because they feel that a perceived lack of return on costs may be hedged by a successful exploitation of opportunities. Thus,

H5b: Entrepreneurial responsiveness will moderate the relationship between calculative commitment and entrepreneurial continuance such that increased levels of entrepreneurial responsiveness will strengthen the effect of calculative commitment on entrepreneurial continuance intentions.

METHODS

Data Collection

Our aim is to investigate continuance behaviors among entrepreneurs that are directly involved in the psycho-social and psycho-economic calculus of managing and maintaining their ventures. Data for this research were collected by means of a survey questionnaire administered between April and August 2016. To test our hypotheses, we scope our study to practicing entrepreneurs using Amazon Mechanical Turk ($n = 111$) and snowball sampling ($n = 45$) for a total of 156 respondents.

Our research investigation required practicing entrepreneurs with a going entrepreneurial venture. We collected data during the summer of 2016 from two sources. First, Amazon Mechanical Turk was used to elicit responses from a subject pool of actual practicing entrepreneurs. MTurk is found to be a relevant source for our investigation, given the ability to generate rich and involved responses from professionals vetted for a particular task (e.g. Buhrmester et al., 2011; Chandler et al., 2014; Mason & Suri, 2012). [MTurk respondents usher in a new generation of vetted crowdsourcing. Responses from MTurk generate similar quality respondents to that of StudyResponse.com (Barger & Sinar 2011), a platform used in research (e.g. Piccolo & Colquitt, 2006) published in top-tier journals]. Second, the survey questionnaire was administered to practicing entrepreneurs via snowball sampling through chambers of commerce contacts in the US, South Africa, and the UK.

We requested 500 MTurk responses for a remuneration of \$1 per response. We cautiously maintained a low remuneration amount so as to increase participation because of the interest in the issue rather than being driven by the compensation. MTurk generated 111 completed responses (22.2% response rate). Respondents were globally distributed with 106 from the US, 17 from India, 19 from the UK, 12 from South Africa, 1 from Lesotho, and 1 from Venezuela. Gender (43% females for MTurk vs 39% for snowball) and age distributions are similar across the two samples.

A comparison between our MTurk and snowball sampling responses reveals no differences in age ($F = 1.41, n.s.$), gender ($F = 1.01, n.s.$), and continuance intentions ($F\text{-ratio} = 0.89, n.s.$). This allowed us to (i) establish the credibility of the MTurk sample as being analogous to the snowball sampled entrepreneurs and, thus (ii) pool the samples for an $n = 156$. We assessed the threat from non-response bias by conducting an extrapolation procedure forwarded by Armstrong and Overton (1977). We partitioned the data into four groups based on our snowball sample and the MTurk sample as well as early responses versus late responses. This created a 2x2 structure of snowball-early and snowball-late and MTurk-early and MTurk-late. There were no significant differences between the groups ($F = 1.07, n.s.$). [Given that nearly 70 percent of our sample responses are derived from MTurk, there might be issues of response bias. Response bias is a cognitive bias that can influence respondents to offer gratifying or untruthful responses. Response bias can stem from demand characteristics (because they are a part of a known experiment), acquiescence (tendency to be agreeable) and social desirability (looking more favorable to the group). Although this research included reverse-coded items, anonymity, and self-administration to reduce response bias, it is useful to remark that there might be vestiges of response bias in our observation].

Less than 0.6% of the data was found to be missing. Performing Little's MCAR test indicated that the missing values from the data of interest were indeed MCAR.

Measures and Operationalization of Variables

All of the data and measures used in this study are operationalized, collected, and measured at the individual level of analysis. Data is created by including a survey comprised of six scales for each construct. Items used were assessed on a 7-point Likert-type scale ranging from 1 (strongly disagree) to 7, (strongly agree). The initial instrument was assessed for face validity by pilot testing with PhD students studying business.

Following established recommendations (e.g. Churchill, 1979; Nunnally, 1978), 8 items in the questionnaire were randomly reverse coded to correct for acquiescence or agreement bias

(Baumgartner & Steenkamp, 2001) and to reduce non-substantive cognitive behavior, and improve scale validity and domain coverage (Weijters & Baumgartner, 2012).

We measure entrepreneurial commitment using a scale adapted from well-validated items across Mowday et al.'s (1982) Organizational Commitment Questionnaire (OCQ), and organizational commitment scales developed by Allen and Meyer (1990) and Wang and Datta (2009). Coefficient alpha reliabilities are .81 for affective commitment, .65 for calculative commitment and .72 for normative commitment. The items contributing to the reliable scales are weighted to form a composite score for each of the three commitment constructs. [The composite score is calculated by a weighting algorithm following the Bartlett procedure, in which a least squares formula is used to create factor scores that are not only uncorrelated with other factors, but also uncorrelated with each other.]

We measure entrepreneurial responsiveness using a six-item scale adapted from Srinivasan et al. (2002) and Datta (2011). Entrepreneurial responsiveness is measured based on entrepreneurial abilities towards sensing and responding to external market developments. Entrepreneurial responsiveness has an acceptable .91 coefficient alpha reliability and the items are used to create a composite score.

We measure entrepreneurial continuance intention using an eight-item scale adapted from and developed upon Bhattacharjee (2001) and Wang and Datta (2009). Overall, the composite alpha reliability for entrepreneurial continuance intention is adequate at .94. Factor scores for items are used to create a factor score for entrepreneurial continuance.

Control Variables

In investigating ECL, we use several variables to control for entrepreneur level effects. It is long established that continuance intentions vary by gender (see Fisher et al., 1993 for a review). Female entrepreneurs are less likely to continue in their ventures because of discrimination, family, and other social forces at play. The country where an entrepreneurial venture is based also has its own macro-level factors such as political climate (Bowen & De Clercq 2008), quality of institutions (Sobel, 2008), and policies (Audretsch, Grilo, & Thurik, 2007) that can shape entrepreneurial responsiveness and continuance behaviors. Furthermore, the age and size of the business venture can contribute towards continuance (Arend, 2014). The age of the business venture increases experience in handling adversities and planning for resource and capital contingencies. A more mature entrepreneurial venture is more likely to be able to plan better and absorb shocks. The size of the business, measured by the number of employees, increases the entrepreneur's choice and ability to seek the best employee resource combinations towards dynamic capabilities (Arend, 2014). Thus, we include gender, country of entrepreneurship venture, venture age, and venture size as control variables in the ECL framework.

Demographic Profile

Overall descriptive statistics for our pooled sample are shown in Table 1a. As shown in the table, female entrepreneurs constitute 41% of our sample. US entrepreneurs represent a majority of our sample (106). 48.7% are between the ages of 30-39. 50% of the sample has less than 5 years into the venture with 77.4% of the sample employing less than 19 workers, and a majority (32.2%) representing the services industry.

Table 1a. Demographic Profile of Respondents^a

Variable	Frequency	Percentage
Age		
18-29	38	24.4
30-39	76	48.7
40-49	24	15.4
50-59	15	9.6
60+	3	1.9
Gender		
Male	92	59.0
Female	64	41.0
Number of years in the venture		
Less than 5 years	78	50.0
6-10 years	35	22.4
11-15 years	25	16
16-20 years	9	5.6
Over 20 years	9	5.6
Number of Employees (Venture Size)		
0-19	122	77.4
20-99	24	14.9
100-199	4	2.5
200+	6	3.7
Industry		
Consumer	3	1.9
Food	9	5.8
IT	38	24.4
Manufacturing	8	5.1
Media	16	10.2
Real Estate	6	3.8
Retail	23	14.7
Services	50	32.2
Transportation	3	1.9

^a*n* = 156

Descriptive Statistics, Correlations, Instrument Validity Checks

Our descriptive statistics shed an interesting light on our demographic profile of practicing entrepreneurs. Affective and calculative commitment factor scores do not appear to be skewed. Normative commitment is positively skewed, highlighting an overall lower-level of obligatory attitudes (*mean* = 2.304). Interestingly, entrepreneurial responsiveness (*mean* = 6.069) and entrepreneurial continuance (*mean* = 5.756) are negatively skewed. Reliability check ensures the measurement is internally consistent and replicable. Based on the recommendation that the composite reliability be greater than 0.6 (Nunnally, 1978), our data suggest satisfactory reliability (Table 1b).

Table 1b. Descriptive Statistics and Correlations^a

	Mean	S.D.	1	2	3	4	6
1. Affective Commitment	3.736	.687	(.81)				
2. Normative Commitment	2.304	.748	.304**	(.658)			
3. Calculative Commitment	3.283	.775	.202*	.314**	(.772)		
4. Entr. Responsiveness	6.069	1.000	.385**	.310**	.419**	(.912)	
6. Entr. Continuance	5.756	1.000	.623**	.280**	.510**	.522**	(.940)

Note. Internal consistency reliability (alpha) estimates are reported in parentheses as diagonals.

^a $n = 156$ * $p < .05$. ** $p < .01$. two-tailed.

Convergent and Discriminant Validities

Exploratory Factor Analysis (EFA) is used to reveal the underlying latent factors predicted by a set of manifest variables as items in our survey questionnaire. Construct *convergent validity* is used to check whether the measurement items that should theoretically measure a construct demonstrate strong correlations to each other. Convergent validity can be usually assessed using three criteria (Byrne, 2006; Fornell & Larcker, 1981): (i) all factor loadings are significant and greater than 0.60 for convergent validity, (ii) composite reliabilities for each construct are over 0.80; and (iii) the square roots of average variance extracted (AVE) are over 0.5 to be acceptable. Results suggest that: (i) all factor loadings are above the 0.60 with; (ii) all composite reliabilities are 0.70 or higher; and 3) all square roots of AVEs are over 0.70.

Table 2a. Rotated Factor Loadings

	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5	% of Variance
Continuance 1	0.841395	0.163856	0.081923	0.240862	0.107254	27.58%
Continuance 2	0.817977	0.214276	0.007077	0.131319	0.063614	
Continuance 3	0.817750	0.106085	0.065222	0.157293	0.244276	
Continuance 4	0.798884	0.206862	0.081887	0.218451	0.193626	
Continuance 5	0.768714	0.169016	0.081249	0.024132	0.220406	
Continuance 6	0.756575	0.258183	0.123187	0.117716	0.329593	
Continuance 7	0.755786	0.110799	0.02356	0.059025	0.177156	
Continuance 8	0.750802	0.23987	0.085831	0.303328	0.190893	
Continuance 9	0.675257	0.154014	0.050521	0.386996	0.25003	
Affective 1	0.276082	0.823943	0.059575	0.042736	0.122027	43.37%
Affective 2	0.312801	0.796978	0.144738	0.105321	0.049699	
Affective 3	0.300631	0.712845	0.146559	0.042093	0.156262	
Normative 1	0.119156	0.232867	0.796121	0.201976	0.000123	53.91%
Normative 2	0.101704	0.274292	0.725595	0.069114	0.189497	
Normative 3	0.382672	0.258619	0.698814	0.199224	0.146289	
Calculative 1	0.040634	0.112487	0.040931	0.765775	0.145182	63.59%
Calculative 2	0.306783	0.066462	0.154006	0.710991	0.223183	
Calculative 3	0.362938	0.046642	0.082437	0.673904	0.108173	
Opportunism 1	0.143534	0.148099	0.148645	0.270283	0.823400	71.51%
Opportunism 2	0.173817	0.030453	0.104853	0.177064	0.796878	
Opportunism 3	0.161048	0.033049	0.003105	0.013925	0.789483	

Opportunism 4 0.301269 0.181383 0.088239 0.017422 0.768780
 Opportunism 5 0.276279 0.121012 0.047935 0.260322 0.721984

Note. Extraction Method: Principal Component Analysis; Rotation: Varimax

Discriminant validity refers to whether the measurement items that should be theoretically *unrelated* demonstrate weak correlations to each other. Discriminant validity is assured with factor cross-loadings not exceeding 0.40; Additional discriminant validity using comparing construct correlations with the square root of AVEs from individual constructs. *If the square root of AVE is significantly greater than the construct correlations, discriminant validity is established* (Fornell & Larcker, 1981). The correlation table (Table 2b) below provides further positive support for discriminant validity. Therefore adequate convergent and discriminant validities are achieved in this study. [Results show some measurement deficiencies, albeit within acceptable limits, for normative commitment. However, we include normative commitment measures to ensure theoretical coverage.]

Table 2b. Inter-Construct Correlations

Factor	AC	NC	CC	EO
AC	0.70			
NC	.304	0.49		
CC	.202	.314	0.65	
EO	.385	.310	.419	0.71

Note. Shaded diagonal contains square root of AVE

Our factor loadings results offer adequate support towards their intended constructs. The final model with four independent variables and a dependent variable has no cross-loaded items and explains 71.51% of the variance. Confirmatory factor analysis results suggest overall model fit is marginally acceptable. Given that χ^2 (chi-square) is negatively influenced by sample sizes of <200, we use normed χ^2 (NC) by dividing χ^2/df (degrees of freedom). Our normed χ^2 of 2.026 ($\chi^2 = 220.86$ and $df = 109$) is ~ 2 and considered marginally acceptable.

The absolute and incremental fit indices in CFA represent the variance accounted for in the covariance matrix. GFI is marginal at .880. SRMR is marginally acceptable at .084. RMSEA, our residual fit index is acceptable at .073 (.053 < CI < .093; $\alpha = 0.1$). [It is recommended that, given GFI and AGFI are overly sensitive to sample size, current consensus is not to use these measures (Sharma, Mukherjee, Kumar, & Dillon, 2005)]. Given that the data for all measures of commitment were collected from a single survey questionnaire, we exercise caution and conduct a CFA to confirm the multidimensionality of the commitment construct. The results support a three-construct definition for commitment. Specifically, the three construct model provides a better fit ($\chi^2 = 50.109$, $df = 24$, $p < .001$, CFI = .775, RMSEA = .084) significantly better than a single construct ($\chi^2 = 92.31$, $df = 27$, $p < .01$, CFI = .437, RMSEA = .125).

Factor Composites

This research uses factor score composites for each of its latent constructs for hypothesis testing. While factor score composites are well established (e.g., Harzing, 2002; Bollen & Lennox, 1991) point at the usefulness and robustness of linear composites of factor scores in standing in for latent constructs in regression (Skrondal & Laake, 2001). The resulting composite scores are mean-centered to increase orthogonality.

RESULTS

A series of regression models are used to report findings for our hypotheses. Results of the regression analysis are presented in Table 3. Model 1 tests the magnitude and significance of our control variables. Continuance intentions significantly vary by gender ($F = 4.78, p < .05$), but do not significantly vary by country ($F = 0.55, n.s.$). In model 1 we test the significance of the remaining control variables. Age of the entrepreneurial venture has a significant, albeit marginally negative, effect on continuance intentions ($\beta = -0.05, p < 0.001$). Size of the entrepreneurial venture does not have a significant effect on continuance intentions ($\beta = 0.038, n.s.$).

Model 2 tests the direct effects of affective, normative, and calculative commitment on continuance as posited in hypotheses 1-3. In Model 2 (*adjusted R-sq*: 54.38%), affective continuance is the strongest antecedent to continuance ($\beta = 0.47, p < 0.001$) followed by calculative ($\beta = 0.45, p < 0.001$). Normative commitment is marginally negative and insignificant ($\beta = -0.03, n.s.$). Therefore, we find support for hypothesis 1 that suggested affective commitment would increase an entrepreneur's continuance intentions. Hypotheses 2 and 3 were not supported. Hypothesis 2 posited normative commitment would increase continuance intentions, yet it was not significant. Hypothesis 3 posited calculative commitment would reduce continuance intentions, yet the effect was positive. The number of employees turns significant, with marginal impact, perhaps because employees can provide a cognitive anchor for keeping the venture going. Perhaps, it is suggestive of a social network capital perspective of entrepreneurship.

Model 3 tests hypothesis 4 that suggested entrepreneurial responsiveness would increase continuance intentions. In Model 3 (*adjusted R-sq*: 35.3%), entrepreneurial responsiveness is a significant antecedent to continuance ($\beta = 0.38, p < 0.01$), thus hypothesis 4 is supported. Venture age remains significant, and number of employees gains significance, but with marginal impact, owing to the entrepreneur's ability to choose and utilize resources to seek and respond to opportunities (Arend, 2014).

Model 4 tests direct effects postulated in hypotheses 1-4 and moderating effects suggested in 5a-5b simultaneously. In Model 4 (*adjusted R-sq* = 59%), affective commitment ($\beta = 0.45, p < 0.001$), calculative commitment ($\beta = 0.35, p < 0.001$), and entrepreneurial responsiveness ($\beta = 0.17, p < 0.01$) show significant direct effects while effects of normative commitment ($\beta = -0.04, n.s.$) is insignificant. This highlights the importance of affective (sense of passion and belonging) and calculative (driven by effort and cost) commitments overshadowing normative (sense of obligation) commitment in explaining continuance. Hypothesis 5a posited that entrepreneurial responsiveness would dampen the relationship between affective and normative commitment and continuance. We find partial support for this hypothesis as the moderating influence of entrepreneurial responsiveness shows a negative effect ($\beta = -0.24, p < 0.01$) with affective commitment and an insignificant effect with normative commitment ($\beta = 0.03, n.s.$). Hypothesis 5b posited that entrepreneurial responsiveness would strengthen the relationship between calculative commitment and continuance. Hypothesis 5b is fully supported as we find responsiveness has a positive, significant effect on the relationship between commitment and continuance ($\beta = 0.10, p < 0.05$). Thus, entrepreneurial responsiveness has an important impact on the relationship between commitment and continuance.

Model 4 findings suggest that, entrepreneurs with high affect may subconsciously perceive entrepreneurial responsiveness as being antagonistic to their love and passion for the venture.

Entrepreneurial responsiveness often entails making changes to the venture and its offerings, often creating a sense of distraction and dissonance for entrepreneurs with high affective commitment. For entrepreneurs that seek and respond to opportunities, affective commitment may be perceived as increasing emotional attachment and rigidity and prompt a sense of discontinuance. However, for the same entrepreneurs with high levels of entrepreneurial responsiveness, calculative commitment, because of its focus on returns on investments of time, effort and capital, may be perceived as being as offering more transactional fit, thus increasing continuance intentions.

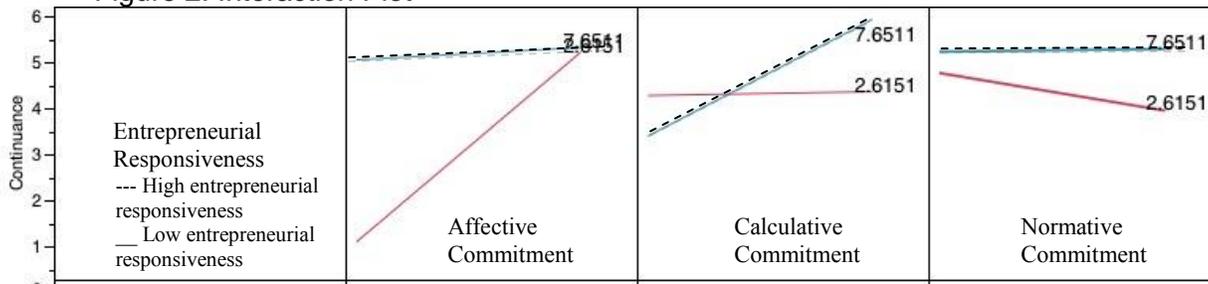
Table 3: Mean Centered OLS Regressions Table on Entrepreneurial Continuance Intentions

Variable	Model 1	Model 2	Model 3	Model 4
Controls				
Intercept	5.07***	1.79***	2.88***	1.36**
Venture Age	-0.05***	-0.03***	-0.05***	-0.02**
No. of Employees	0.038	0.02*	0.03**	0.01
Annual Revenue	.000	.000	.000	.000
Antecedents				
Affective Commitment (AC)		0.47***		0.45***
Normative Commitment (NC)		-0.03		-0.04
Calculative commitment (CC)		0.45***		0.35***
Entrepreneurial Responsiveness (ER)			0.36**	0.17**
Moderation				
AC x ER				-0.24**
NC x ER				0.03
CC x ER				0.10*
<i>Adjusted R-Square</i>	0.182	0.5438	0.353	0.592

* $p < .05$. ** $p < .01$. *** $p < .001$

Interaction plots (figure 2) shows that affective commitment is related to higher continuance intentions for entrepreneurs with low entrepreneurial responsiveness than for entrepreneurs with high entrepreneurial responsiveness. Calculative commitment, however, is related to higher continuance intentions for entrepreneurs with high entrepreneurial responsiveness than for entrepreneurs with low entrepreneurial responsiveness. Normative commitment does not show any interaction effects.

Figure 2. Interaction Plot



DISCUSSION AND CONCLUSIONS

Entrepreneurial ventures employ over half of American workers and create roughly two out of three jobs for the US economy every year (Digitale & Swindell, 2015). Similar effects can be traced globally with positive spillovers from continued entrepreneurial venturing (Fritsch, 2008). While there has been a growing body of research elaborating on the antecedents and consequences of entrepreneurial divestitures as failures and strategic exits (e.g. DeTienne, 2010, DeTienne et al., 2015), this research examines the behavioral calculus that guides entrepreneurs to continue.

How Do Commitment Dimensions Shape Entrepreneurial Continuance?

Findings confirm the importance of commitment as an antecedent to continuance intentions. In an interview with Investor's Business Daily (2007), Christine Comaford-Lynch, a venture capitalist and serial entrepreneur, remarked that entrepreneurs needed to be renegades. To be the renegade, "what it is having an amount of passion and commitment that exceeds the norm". Affective commitment, as hypothesized, shows a strong direct effect on entrepreneurial continuance intentions. Results show a lack of institutional identity but confirm a cognitive interplay and aggregation in support of ECL.

The lack of support of the direct effects of normative commitment on continuance intentions is an interesting departure from our hypothesis. Normative commitment is anchored in mores of what is "right", "obligatory, or "should be done". However, entrepreneurs are often driven by traits such as risk tolerance, need for achievement, need for autonomy, and high self-efficacy (Stewart et al., 1998; Begly, 1995, Vecchio, 2003). In the face of these traits that often underpin entrepreneurial behavior, entrepreneurs are likely to be indifferent, if not antagonistic towards norms. This offers important insights. First, one of the reasons entrepreneurs decide to begin their own venture is because they either feel maligned by organizational responses towards employee loyalty and/or because entrepreneurs do not wish to be encumbered by acculturated obligation rather than passion and psychological attachment.

Calculative commitment, although hypothesized as having a negative influence on continuance, was found to positively impact continuance. The rationale for such a finding may be attributed to two theories, (i) side bet theory (Becker, 1960) and (ii) cognitive dissonance theory (Festinger, 1957) that explain people's continuance behavior as a lock-in behavior under duress. When entrepreneurs' attitudes are cognitively dissonant, instead of discontinuing a losing venture, entrepreneurs may choose to continue the entrepreneurship in order to avoid losing previous investments (side-bets) or by simply ignoring the dissonance. This creates continuation bias (Khanin & Mahto, 2013). Khanin and Mahto (2013) find that venture capitalists continue and escalate their investments even when a venture is failing. Their research supports the cognitive

mechanisms of side-bets and dissonance, leading to irrational deviations in decision-making. A typical example is gambling, where people justify increased loss based on their cumulative prior investment, creating a continuation bias. Then, commitment to a failing course of action may lead to escalation of misplaced commitment and a socio-economic deadweight loss over time. Future research can complement our proposed ECL epistemology under the contextual influence of entrepreneurial biases such as overconfidence, representativeness, similarity, and continuation (refer to Zhang & Cueto, 2015 for a review).

The Curious Entrepreneurial Responsiveness Calculus

Interaction effects of entrepreneurial responsiveness on commitment highlight the complex ECL tensions owing to the unique transactional and relational attributes of affective, normative, and calculative commitment.

Affective and normative commitments are relational in nature. Affective commitment refers to perceived emotional attachment and identification with the entrepreneurial venture. Normative commitment stems from perceptions of socially constructed normative elements resulting in perceived obligation to an organization (Meyer et al., 1991). Calculative commitment is based on perceptions of cost, representing a more transactional perspective of commitment. The transactional natures of entrepreneurial responsiveness and calculative commitment are more cognitively aligned while the relational natures of affective and normative commitment may be misaligned, increasing dissonance.

Affective commitment and entrepreneurial responsiveness, by themselves, show significant and positive effects on entrepreneurial continuance intentions; negative results from the moderation offers an interesting cognitive perspective of entrepreneurial behavior. High affective commitment can engender a level of cognitive rigidity among entrepreneurs, owing to a deep attachment to their ventures. Entrepreneurs with high affect and high entrepreneurial responsiveness may find themselves cognitively dissonant. An entrepreneur with a high proclivity towards sensing and exploiting opportunities will find oneself at cognitive odds if opportunities arise that could change the venture one loves and identifies. Increased leveraging of market activity for profit is at odds with commitment to an entrepreneurial venture due to deep identification and personal attachment. Therefore, individuals will strive to reduce this dissonance may be distancing themselves from an activity, e.g. distancing themselves from the venture. The dissonance logic follows: *I identify with the venture I created and built with my own hands; There are many promising opportunities that I can capitalize; the new opportunities might be incongruent to my venture; I am torn between pursuing these promising opportunities and maintaining my venture in its original form; perhaps I should discontinue.*

The fact that entrepreneurial responsiveness reduces the effect of affective and normative commitments on continuance suggests the transactional behavior of exploiting and leveraging market opportunities is dissonant from affective and normative commitments. However, the fact that entrepreneurial responsiveness strengthens the effect of calculative commitment on entrepreneurial continuance confirms the positive compounding effects of two transactional attitudes.

Limitations and Future Research

Our research has a number of theoretical and methodological limitations. First, while continuance intentions were the focus of this research, it may be argued that actual continuance

and continuance intentions are independent phenomena. While there is support on the strong correlations between entrepreneurial intentions and actions (e.g. Souitaris et al., 2007), our empirical observations capture a single snapshot in time and do not address temporal (longitudinal) dynamics of transactional and relational attitudes in ECL. Future research can offer deep insights into how ECL transactional and relational attitudes evolve over time.

While this research focused on cognitive dissonance reducing entrepreneurial continuance intentions, it would be useful for future research to examine the alternative outcomes suggested by the theory. Instead of distancing themselves from their venture, entrepreneurs sometimes display continuation bias because they feel that they have committed too much time, capital, and effort in the venture and can assume the sunk costs. For example, a user who has trained for years and worked in viticulture (study of grapes) might feel the need to pursue an entrepreneurial venture in viniculture (study of grapes for producing wine) because of a commitment driven by prior training (effort) as well as time and capital. Because calculative commitment refers to an entrepreneur's psychological bond with an entrepreneurial venture due to concerns of costs stemming from discontinued use, the pressures of conforming (due to a perceived sense of uncertainty, learning curve, or sunk costs related to an alternative entrepreneurial venture) may propel entrepreneurs to continue their entrepreneurial venture. Questions arise such as, is there a tipping point in sunk costs where an entrepreneur feels forced to continue a venture even with diminishing returns to calculative commitment?

Moreover, future research can use the theory of cognitive dissonance to further explore the effects of various entrepreneurial attitudes and behavior as entrepreneurs seek to minimize cognitive dissonance. For example, perhaps entrepreneurs with high affective commitment are less likely to seek out opportunities altogether. In the same vein, other variables such as prior experience may lead to varying levels of responsiveness. For example, if an entrepreneur had a negative experience in the past from working with a fabrication vendor in China, the entrepreneur might pass on new opportunities to use other Chinese suppliers. Thus, understanding how commitment and other antecedents affect entrepreneurial responsiveness as entrepreneurs seek to minimize cognitive dissonance is a fruitful area for future research.

Finally, it would be useful to connect the downstream effects of continuance intentions on business performance. While defining the lag between entrepreneurial venturing and business performance, e.g. operational, innovative, financial performance is a difficult task, marked by geographic, industry and sector-specific variances, future research could add to our understanding of the consequential performance effects of the psychological element of continuance.

Conclusion

The past two decades have seen rapid changes in the global economy with feverish levels of innovation and entrepreneurial activities, creating billion-dollar startups. While much attention has been afforded to understand venture creation and venture exit, little is known about the behavioral dynamics of the central cog of entrepreneurial behavior, continuance. The paper contributes to a better understanding of post-startup entrepreneurial behavior in several ways. First, while affective commitment, a relational attitude, still drives continuance intentions, calculative commitment, a transactional attitude, is a significant contender. Interestingly, the nature of contemporary entrepreneurship disregards continuance behavior based on norms. Second, research shows that entrepreneurial responsiveness needs to be cautiously examined in relationship to commitment and continuance. Entrepreneurial responsiveness, a transactional

attitude, positively influences continuance; however, in the presence of a relational attitude such as affective commitment, the interplay reduces continuance intentions. In summary, while affective commitment is a strong predictor of continuance behavior, based on the calculus surfaced by an empirical investigation of the ECL, the greatest likelihood of continuance lies in the choice of entrepreneurs with an optimal mix of high calculative commitment and high entrepreneurial responsiveness.

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