

# Entrepreneurial Learning Through Failure

Adam Shore  
Swansea University

## Summary

In this paper, the literature of entrepreneurial learning is examined, with particular focus on critical events, namely failure of the business as defined by the cessation of company due to the company becoming insolvent. Business failure occurs when “*a fall in revenues and/or a rise in expenses are of such a magnitude that the firm becomes insolvent and is unable to attract new debt or equity funding; consequently, it cannot continue to operate under the current ownership and management*” (Shepherd, 2003, p. 318).

We draw upon the theories and hypotheses that have been proposed by the leading authors in the field over the past 15 years, to build a new conceptual model of entrepreneurial learning through failure. The main contribution of the model presented is the identification of the key constructs of entrepreneurial self-efficacy, entrepreneurial preparedness, grief, and distance from failure as significant influencing factors of learning through failure.

**Track: Entrepreneurship**

**Word count: 6663**

## 1 Introduction

Previous studies into entrepreneurial learning have focused on pedagogical approaches to be emulated (or simulated) in the classroom (Rae 2000, 2003, 2004 Pittaway & Cope 2007), where others have sought to provide conceptual models to the theory of entrepreneurial learning (Minniti & Bygrave 2001, Ardichvilia *et al* 2003, Shepherd 2003, Cope 2005, 2007, Corbett 2005, 2007, Politis 2005, Rerup 2005, Pittaway & Thorpe 2011, Tseng 2013). Despite the development of such models, few studies have attempted to empirically test any overarching model of entrepreneurial learning. A systematic literature review carried out by Ucbassaran *et al* (2013) listed only four articles that consisted of an empirical investigation related to entrepreneurial learning. Of these four studies, two were classified as qualitative, using a small number of case studies (Huovinen & Tihula 2008, Cope 2011) and two were quantitative (Politis & Gabrielson 2009, Ucbassaran *et al* 2010).

It is clear that further empirical testing of the conceptual models developed over the last fifteen years is needed. The following section provides an overview of the development of the models; bringing together the common constructs to provide a conceptual model of entrepreneurial learning that incorporates all of the key theories of the field.

## 2 Methodology

A blended approach has been taken to produce this literature review, using a focused systematic review to build the initial review, but also including key papers from within the initial papers following a more narrative approach. The review is restricted to journal titles ranked at 3 and 4 stars in the ABS list. Where appropriate, articles

were included outside of this restriction if there is repetitive reference to the article across more than one other article included in the review. The review uses the systematic literature reviews of Ucbassaran *et al* (2013) and Tseng (2013) as a starting point for gathering relevant articles for review. Following this start point, an evolving list of articles was drawn upon dating back to 1998 (15 years). Articles older than this were read for information purposes if they were seen as being fundamental to the development of the field – for example Bandura’s (1974) paper on self-efficacy.

Papers were read in alphabetical order with notes made on key contributions to concepts, models, propositions, hypothesis, methodology, and findings.

Once all papers had been read, study notes were then analysed for thematic content. Themes were listed in a separate document and then grouped as appropriate. From the themes and conceptual models already published, a process of mapping concepts and theories was carried out using a common base model found in three papers (Politis 2005, Huovinen & Tihula 2008, Tseng 2013). These papers were chosen because they were consistent with one another and cognisant with Kolb’s Experiential Learning Theory, which was found to be an underlying reference in many of the articles reviewed. Using this process model as a base, other key conceptual models (Dutta & Crossan 2005, Cope 2005a) were mapped using the themes previously identified.

### **3 An overarching theory of entrepreneurial learning**

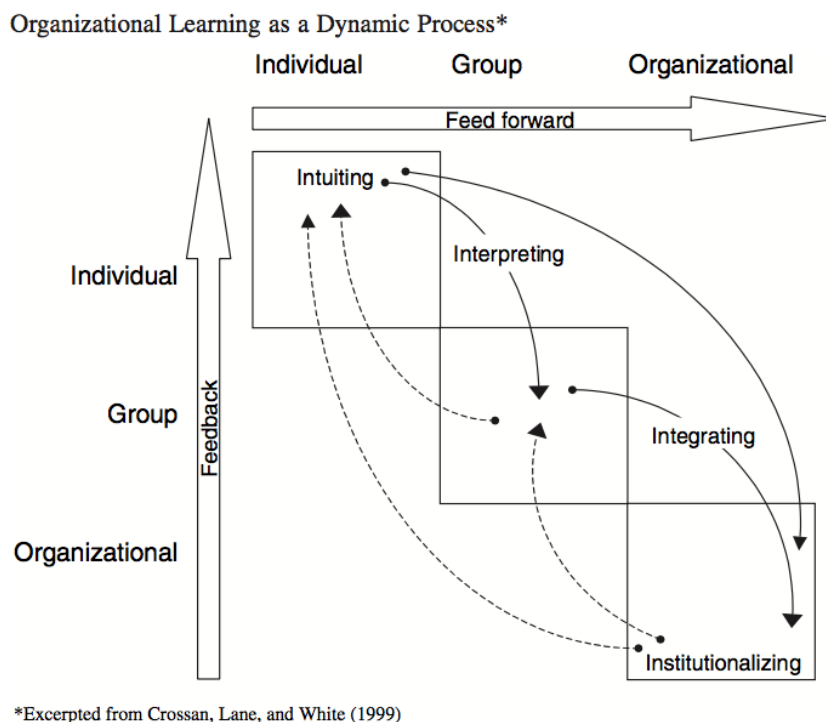
#### **3.1 The learning process**

The founding premise of this model of learning refers back to Kolb (1984) and Dewey (1938) who describe learning as the “*social process whereby knowledge is created*

## Entrepreneurial Learning Through Failure

*through the transformation of experience*” (Deakins & Freel (1998), Cope 2005a, 2011, Cobett 2005, 2007, Politis 2005).

It is clear that the unit of analysis for this study is the individual, however it is important to draw upon the theories of organisational learning when discussing the entrepreneur due to the fuzzy boundary between the individual and the company. For many small/micro start-ups, the individual ‘is’ the organisation, and as such, when discussing the learning that takes place, it is important to be cognizant of the organisational learning, whilst keeping focus on the individual. Taking the development of the individual as a starting point of the learning process, it is possible to draw upon the ‘4I’ framework as a model for learning, as shown in Figure 1.



**Figure 1** The 4I Framework of Learning

As the individual develops through a process of experience and reflection, their intuition becomes an important aspect of the decision making process with respect to business opportunity. Recognition of patterns, through information gathered and experienced, is used to interpret and make sense of data in order to act on an idea or

an insight. Through a process of social reflection, articulating the idea and gaining feedback, especially with critical individuals – a business partner, or senior employee for example – the ideas and ability to interpret data can start to become cultural norm: other people within the company also recognise the patterns, and informal structures begin to become more formal structures that are integrated and institutionalised.

Here, we can relate to the three stages of learning as highlighted in Kolb (1984, Ch.7 p.256): the move from interpreting to integration occurs through social reflection in order to develop the idea. If an entrepreneur fails to move to the integrated stage, then the opportunity will not succeed and, therefore, they may require a further iteration of the process.

It could be interpreted that the stage of integration can be mapped to where the entrepreneur has learnt from a process and developed as an individual, meaning that they are less likely to fail again in the future, since they recognise the patterns of insights and can therefore formulate structured processes that can be followed by others, rather than relying on the intuition of the individual entrepreneur. This stage would be both the end of the current process of learning, and the beginning of a new process of learning (inputs versus outcomes).

The development of the individual through this process of learning from experience better prepares the entrepreneur for future ventures and experiences. As such, it is important that in trying to understand how the entrepreneur learns, that there is a measure of how well that entrepreneur might be prepared at the input stage of the investigation – a nominal time zero (see Figure 2).

## The transformative process of learning development

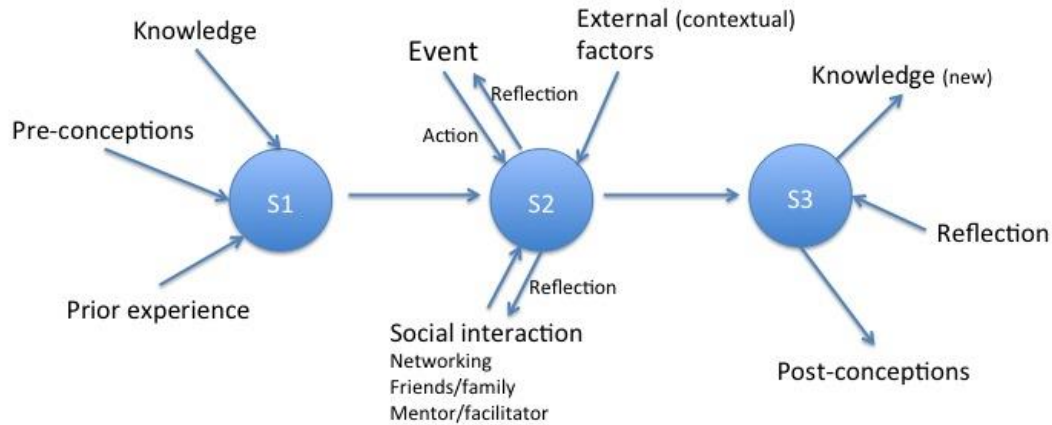


Figure 2 The transformative process of learning development

### 3.2 Entrepreneurial preparedness

Cope (2005a, 2011) combines the conceptual models of learning from Schön and Agyris (1978) referring to double and single loop learning, Kolb (1984) and Mezirow (1991), referring to transformative learning and Gibb's (1997) generative learning (Gibb 1997), which refers to the application of new learning on a future event. This is what Kolb (1984) refers to in his learning spiral. From this Cope (2005a, 2011) puts forward a conceptual framework of entrepreneurial learning. This framework takes experience and entrepreneurial preparedness as both input and output parameters, suggesting that there is a continuum of learning. Indeed, it would suggest that the learning that takes place through the discontinuous event of failure, could count towards entrepreneurial preparedness for the next venture.

Karataş-Özkan, M. (2011) suggests that Copes (2005a) approach to conceptualising entrepreneurial learning is more comprehensive than other studies and use this,

combined with a social constructionist methodology to explore a case of a team of five individual entrepreneurs. The case explores the biographies, choices, motivation and the ‘capitals’ (Bourdieu 1986) of the individuals in order to provide some insight into the “multi-dimensional phenomenon of entrepreneurial learning” (Karataş-Özkan, M., 2011, p.881) calling for further work to be carried out in exploring how entrepreneurial teams learn across the multiple layers in a dynamic sense.

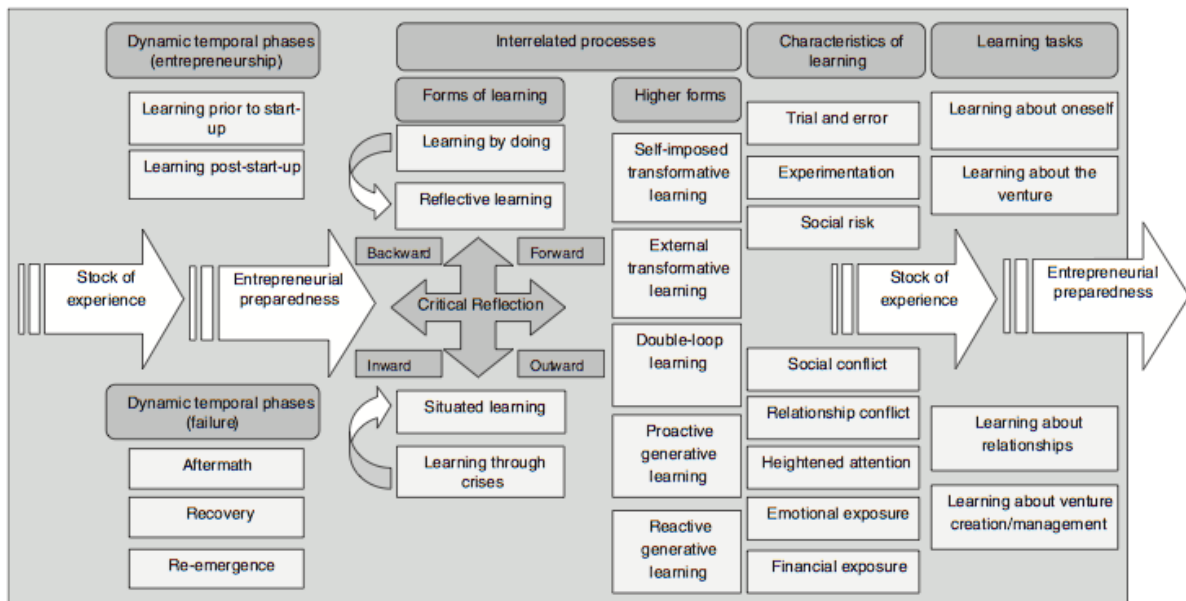


Figure 3 Cope's (2005a) Framework of Entrepreneurial Learning: developed in Pittaway and Thorpe 2013

Parker (2006) refers to entrepreneur alertness, as a contributory factor to entrepreneurial learning. It is suggested that young, less experienced entrepreneurs update their beliefs more readily than more experienced: “*younger entrepreneurs respond significantly more sensitively to new information than older entrepreneurs do, with adjustment rates of 21% compared with 14%, respectively*” (Parker, 2006, p.1). This would seem consistent with other literature on learning in general.

Entrepreneurial preparedness could be referred to simply as ‘experience’. This is

## Entrepreneurial Learning Through Failure

separate to the idea of ‘an experience’. Here, experience could be defined as either general – the life experience of the individual, or specific – either to the industry, or having prior experience of starting a similar type of business. It can be assumed that prior knowledge is a product of prior experience, since knowledge is the end result (output) of prior learning processes (Ardichivilla *et al*, 2003). Corbett (2007) carries out an empirical study in order to further assess the relationship between “*how individuals acquire and transform information and experience (i.e., learning) in order to identify opportunities.*” (Corbett 2007: 101)

A.C. Corbett / *Journal of Business Venturing* 22 (2007) 97–118

101

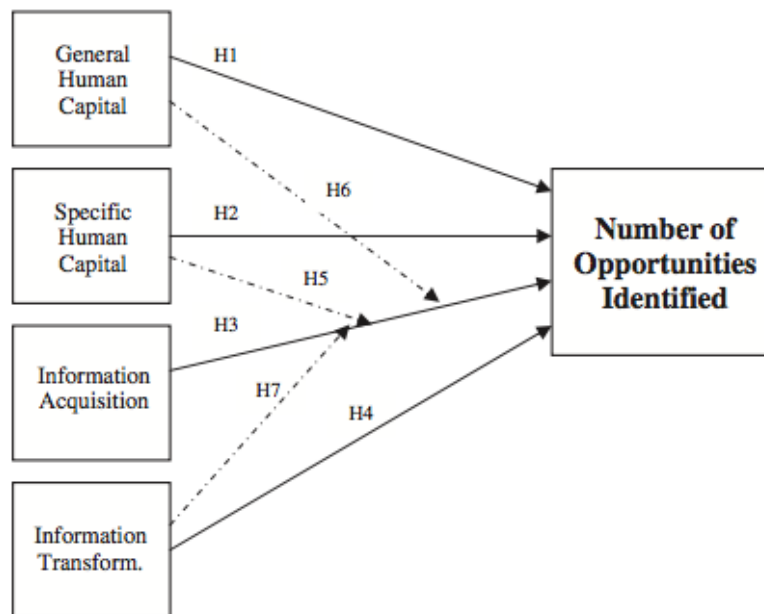


Figure 4 Corbett (2007) Process of learning & discovery of opportunities

What is apparent from reviewing all of the papers included in this review is that ‘learning’ is a difficult construct to measure and evaluate. As such, most studies use a proxy for learning, such is the case in Corbett (2007) where the number of opportunities being identified is the dependent variable of study.

In terms of entrepreneurial learning and development, the fundamental idea of



entrepreneurial preparedness is that of experience, and learning from experience. As such, if an entrepreneur has successfully started one business, they are “*more successful and effective in starting up and managing their second and third organizations*” (Politis 2005, p. 399). Previous research has compared venture growth and performance as a dependant variable, with the hope to explain part of any difference with differences in level of experience. As with any model attempting to explain the physical and psychological world, there are too many other contributory factors that could have an impact on the new venture growth, and therefore isolating learning, or experience, as having a direct relationship to performance is indeed very difficult.

The question posed here, is that of “*how* entrepreneurs develop entrepreneurial knowledge that indirectly may have a positive impact on subsequent venture performance.” (Politis 2005, p. 400). The paper refers to Reuber & Fischer (1994) “to draw a distinction between the experience of an entrepreneur and the knowledge thereby acquired” in order to construct the model given in Figure 5.

## Entrepreneurial Learning Through Failure

A conceptual framework of entrepreneurial learning as an experiential process

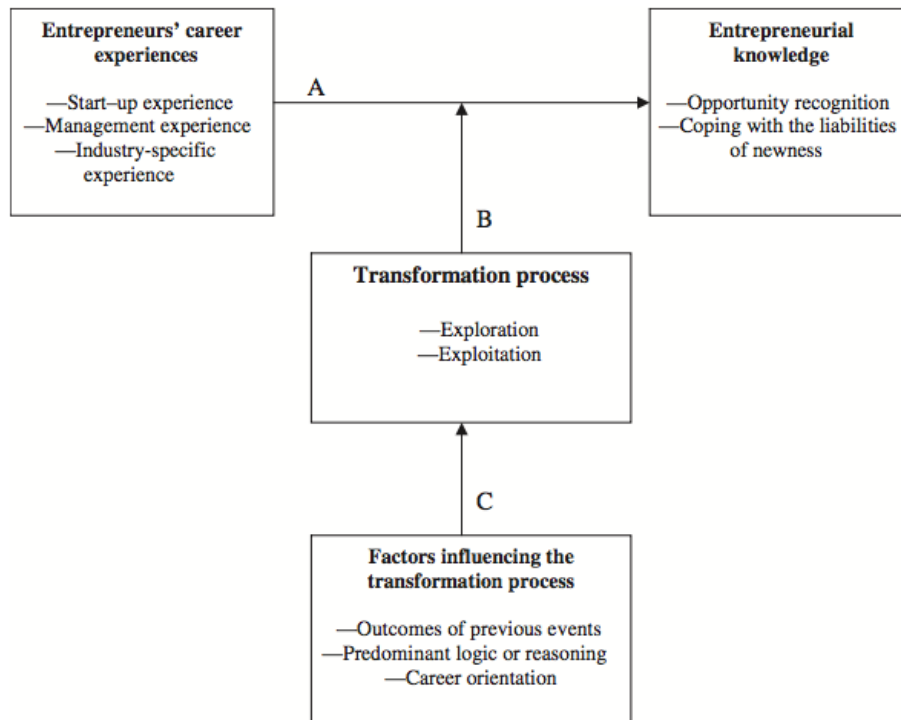


Figure 5 Politis' (2005) Framework of entrepreneurial learning

The conceptual framework here suggests that knowledge is an output of experience. This is in line with Kolb's experiential learning theory: *"the process whereby knowledge is created through the transformation of experience. Knowledge results from the combination of grasping and transforming experience"* (Kolb, 1984, p. 41).

Karataş-Özkan, M. (2011) describes the process of learning as dynamic, and criticises previous attempts to model the process of entrepreneurship as a static event. The author focuses on Bourdieu's (1986) concept of capital, and how this is transformed, whilst referring to Politis (2005) as a good example of emphasising the role of experience in developing entrepreneurial knowledge. Four types of capital are described: economic, cultural, social, and symbolic. Each of these might be considered as the general human capital being referred to by Corbett (2007), with each of these concepts possibly being considered as both inputs and outputs of the

entrepreneurial learning process.

In discussing “liability of newness” (Politis, 2005) it is suggested that experienced entrepreneurs may be better equipped to cope with the obstacles that often restrict the growth of a new business – such as lack of appropriate funding and lack of marketing. This may be a fair assumption to make for an entrepreneur that has a previously successful record of starting and growing businesses, but what about that of the unsuccessful entrepreneur? Surely failure is as much, if not more rich in experiences and therefore better preparing the entrepreneur for a future business? Politis (2005) argues that the entrepreneur’s career experience is positively related to their effectiveness in recognising and acting on entrepreneurial opportunities, coping with the liability of newness, and the development of entrepreneurial knowledge.

There is a train of thought that business survival could be modelled probabilistically based upon simple decision made by entrepreneurs (Minitti & Bygrave 2001). Depending on the size of the step change (or significance of the decision), entrepreneurs may focus on sub-optimal choice patterns, which could stifle the process of learning. This suggests that entrepreneurs do not necessarily choose the most optimal option when making decisions. If previous decisions happened to turn out to be successful, by chance, then this would have a positive reinforcement on choice of decision in the future. The same could be true for negative actions. This can result in decision patterns becoming embedded in expectations and beliefs. This might further add substance to the concept that younger, less experience entrepreneurs are better placed to modify their behaviour as a result of a learning experience. As Parker (2006) notes, younger entrepreneurs may be more responsive to new information, the suggestion that older entrepreneurs may be ‘stuck in their ways’, implying that older

## Entrepreneurial Learning Through Failure

entrepreneur is less likely to transform their behaviour based on an experience. This point could be misconstrued from assuming that age and experience are positively correlated. Or that 'life' experience is as important as specific venture start-up experience. As such, it will be important that any study control for both age and the amount of start-up experience.

Further to the overarching concept of experience or entrepreneurial preparedness, it must not be overlooked that the fundamental basis of this study of entrepreneurial learning uses the term 'social' (Kolb 1984). Social capital is a construct included in many of the models conceptualised within this review, either as a contributor to overall experience (Ardichvilia 2003, Rae 2006, Politis & Gabrielsson 2009), or as a process of learning (Dutta & Crossan 2005, Wing Yan Man 2006, Baron & Tang 2009). It is proposed that the lack of an extended social network: weak ties, action set, partnerships, inner circle; reduces the probability for success.

Finally, the construct of entrepreneurial preparedness might include entrepreneurial competencies. Mullins (1996) focuses on the competency of the firm literature to develop hypotheses that predict growth-oriented market response decisions, using the typology of market response decisions developed by Ansoff (1975). Contrastingly, Wing Yan Man (2006) carried out a 'critical incidents' methodology of interviewing 12 entrepreneurs using a competency framework to measure potential learning. Wing Yan Man (2006) sets out two other defined 'approaches' to entrepreneurial learning in addition to 'experiential', being the 'cognitive/affective' approach and the 'networking' approach. Interestingly, both these approaches refer to a social context.

Other studies into entrepreneurial competencies focus on the traits of the entrepreneur, possibly of most interest is the work on entrepreneurial orientation. As

with the 4I framework, this work has focused mostly on that of the firm, or organization, rather than the individual. Originally focusing on the three concepts of risk, innovation, and proactiveness (Miller, 1983), developments have since added competitive aggressiveness, and independence (Lumpkin and Dess, 1996), and proclivity toward becoming an entrepreneur (Hermansen-Kobulinicky and Moss, 2004).

In developing an understanding of entrepreneurial learning, it is clear that entrepreneurial preparedness can act as both a predictor and measure of both success (in economical terms), but also of learning. Entrepreneurial preparedness then, is an important construct to include in any empirical study. The construct contains many sub-constructs of start-up experience, time spent within the industry, failure experience, family (business) history, educational experience, social links (weak and strong ties), as well as general experience (general capital).

### **3.3 Entrepreneurial Self-efficacy**

The concept of self-efficacy is used throughout the articles included in this review, be it as an indicator of entrepreneurial intentions (Krueger *et al* 2000, Douglas & Shepherd 2002, Drnovsek *et al* 2010), or as a measure of entrepreneurial learning (Shepherd 2003, Markman *et al* 2005, Parker 2006, Hmieleski & Corbett 2008, Hmieleski & Baron 2009). Drnovsek *et al* (2010) build on Bandura's (1977) work to propose their multidimensional construct for entrepreneurial self-efficacy (ESE). Whilst there is some debate over the exact measure of self-efficacy (Ucbassaran 2000), there is a common use of the construct that is designed to be specific (McGee *et al* 2003) and is used as a common construct of empirical testing within the papers

## Entrepreneurial Learning Through Failure

reviewed here (McGee *et al* 2009). Baum & Locke (2004) measure self-efficacy more generally, eliciting responses about the individual's confidence to perform various tasks that are not specific to the tasks of an entrepreneur. Bandura (1977, 1997) argues that any measure of self-efficacy needs to be specific to the tasks that are being measured. This is the proposition followed by McGee *et al* (2009) in their updated measure of entrepreneurial self-efficacy. There is a discussion within the field about how specific this measure should be, in that the differing stages of the entrepreneurial process, namely start-up and growth, require different skill-sets that should be measured on a competing entrepreneurial self-efficacy scale (Drnovsek *et al* 2010).

Currently, there has been minimal study and use of a validated measure of entrepreneurial self-efficacy in the latter part of the entrepreneurial process (growth). It is clear that further research in the field could be focused on the development of an entrepreneurial self-efficacy construct that is validated for the growth stage of the entrepreneurial process (Corbett 2007), and this would be an interesting area for future research.

Notwithstanding the arguments put forward above, entrepreneurial self-efficacy is a key component to any model of entrepreneurial learning and whilst the majority of the models included in this review place it as an input to the learning process, there are examples of the construct being used as a process moderator (Ardichvilia *et al* 2003, Baum & Locke 2004) and as an output, since it is expected that the loss of a business will result in a lower level of self-efficacy due to demotivation (Shepherd 2003).

Parker (2006) makes reference to work effort (measured in number of hours) and is measured separately to self-efficacy. They use data from the British Household Panel Survey to take a sample of self-employed people and number of hours worked as a

proxy to the basis of what has been learned. In other words, the entrepreneur will change the total “effort” input depending on what they have learnt. The suggestion is that by changing behavioural patterns, means that the entrepreneur has updated their behaviour based on learning achieved. It could be argued that such a proxy of effort does not measure behaviour or the extent to which new opportunities are explored, but could be an additional interesting factor to include in any survey instrument, for example: “how many hours per week do you spend working on the business?”

For the purpose of developing a model of entrepreneurial learning, the construct of entrepreneurial self-efficacy could be designated as either start-up or growth, since the process of learning may take effect at either stage of the entrepreneurial process. What is important is to ascertain self-efficacy is a contributory factor to learning, with specific focus on the entrepreneur.

Karataş-Özkan, M. (2011) suggests an alternative proposition to the widely endorsed view that entrepreneurs are action-orientated, whereby much of their learning is done experientially. Indeed the exploratory analysis of the cases studied suggests that nascent entrepreneurs actively seek out learning opportunities in order to equip themselves with the required “entrepreneurial knowledge, which is defined as the ability to obtain information (and other resources) and how to deploy them” (Karataş-Özkan, M., 2011, p.880). It might be helpful to consider an example of an individual entrepreneur learning a new skill such as basic website development, or gaining an understanding of employment law. Such active learning could be captured within the concept of self-efficacy, since this touches on the entrepreneurs perceived ability to acquire necessary resource (McGee, 2009).

### **3.4 Critical setbacks & failure**

## Entrepreneurial Learning Through Failure

Experiential learning literature focuses on the development of the individual through a process of social reflection on the experience of an event (Dewey 1933, Lewin 1946, Kolb 1994, Schon & Agyris 1974). For the entrepreneur, such events present themselves as critical setbacks (Rae 2000, 2003, 2006, Cope 2003, 2005a, Shepherd 2003, 2009, Pittaway & Cope 2007, Politis & Gabrielsson 2009). For Cope (2005a) and Politis & Gabrielsson (2009), critical setbacks are a constituent part of the construct of entrepreneurial preparedness, for others (Shepherd 2003, Ucbassaran *et al* 2009) however, critical setbacks are the focus of the event which triggers the modification or transformation of behaviour through the process of social reflection (learning).

### 3.5 Attitude

Cope *et al* (2004) highlights that “VCs often discuss the ‘chemistry’ between themselves and the entrepreneur. The deal often falls through if the chemistry is not right. Such intuitive, or ‘gut feel’ decision-making is difficult to quantify or objectively analyse” (Zacharakis and Meyer 1998: 63, in Cope *et al* 2004).

This would add weight to the idea that the important link in assessing the future success of an enterprise is the entrepreneur herself or himself. What is apparent from the study is that with venture capitalists, there is a more human aspect to the understanding of the experience. It is apparent that the venture capitalists are interested to know how the entrepreneur views the event, if they have reflected on the process, and what they have learnt from it. Here it can be seen that prior experience is regarded as beneficial for a potential start-up, regardless of the form of that experience. There are clearly very delicate nuances, and this experience will be examined, with entrepreneurs needing to show that they have reflected, acknowledged,



and learned from any mistakes. This adds to the concept that failure does not necessarily equate to learning. Learning can only be demonstrated if the entrepreneur is willing to analyse and critically reflect on prior experiences, in order to modify behaviour for future experiences.

It is interesting to note that there is a divide between the UK and US participants in the study, and whilst all participants recognised that failure is not necessarily a negative or 'black-mark', the UK participants did agree with the idea that there is a negative stigma with failure in the UK (as compared to the US). It seems clear that further study into the idea of stigma and attitudes towards failure is required and the contextual element to any empirical study is essential.

The discussion on attitude towards failure is not restricted to external views, but also focus on the personal attitude towards failure of the entrepreneurs themselves. Politis & Gabriellson (2009) found that there is a significant positive relationship between those that have experienced business closure and a more positive attitude towards failure by comparing those who have experienced business closure against those who have not. This does not necessarily mean that their attitude to failure has altered due to the experience, and it would seem intuitive that any survey instrument should specifically ask the participant a question along the lines of "As a result of business closure, my attitude towards failure has a) improved, b) declined, c) remained the same" in order to establish any change of view.

The authors also suggest that their study demonstrates learning. As discussed above, this is not necessarily the case, since there is simply an association between current attitude and prior experiences. These two correlations do not necessarily demonstrate causal effect, and any study would need to endeavour to take this into account.

## Entrepreneurial Learning Through Failure

The literature supports the development of concepts and theories that are to be explored in this thesis. Of particular interest is “*the time frame in which repeated failures may occur may have an impact on entrepreneurs’ attitude toward failure and their ability to cope with a failure situation*” and “*the contingencies that influence entrepreneurs’ ability to persevere and remain motivated through repeated failures*” Politis and Gabrielsson (2009, p. 378). Such constructs of motivation, and distance from failure are interesting components that deserve further attention. Entrepreneurial self-efficacy has already been discussed, and motivation will be further explored through the concept of optimism.

### 3.6 Distance from failure

This idea of distance from failure is one that is not restricted to a single study. Indeed Shepherd (2003) focuses on the emotional fall-out of any failure setback and the time required to grieve the loss of a business in order to improve learning. Shepherd (2003) draws on literature to suggest that there is a strong emotional bond between the entrepreneur and their business. As such, he posits that, should a business fail, the entrepreneur will suffer emotional stress – grief. The business here is analogous to a living part of the ‘family’ of the entrepreneur, and when it fails, it can be considered to have died.

Shepherd (2003) posits that entrepreneurs may use ‘feedback information’ to update their ‘self-employment knowledge’. In other words, the entrepreneur revises their current state of beliefs/assumptions through a process of reflection in order to alter the consequences of future decisions.

## Grief

Shepherd (2003) posits that, should a business fail, the entrepreneur will suffer emotional stress – grief. The business here, is analogous to a living part of the ‘family’ of the entrepreneur, and when it fails, it can be considered to have died. Given that grief is a negative emotional response, it is suggested that this can hinder the process of reflection, and thus stifle any learning from the failure event (Shepherd, 2003).

Previous research has also referred to a business as a living entity, with the suggestion that the loss of a business is akin to losing a child, where the parent is the entrepreneur (Shepherd *et al.* 2000, Cope *et al.* 2004). The idea that the business is an organic product of the entrepreneur, provides a strong link to social and emotional loss. Connecting the contextual elements of the full picture of such a loss would indeed highlight the pain that could be caused by a loss of a business. Notwithstanding the associated trauma of loss of income and assets, loss of [self] respect, the impact of relationships with friends and family, there is the need to come to terms with the loss of all the effort – physically, mentally, and emotionally (Cope 2005a), that went into creating a business that became an entity in its own right – albeit a corporate one. Such loss, would undoubtedly cause grief and sorrow, a concept that has been considered as a concept by Shepherd (2003) and was explored through case interviews by Cope (2011). In both cases, the authors highlighted the need for further investigation into the impact that grief has on the recovery process of an entrepreneur who has ‘lost’ a business.

It is posited that high levels of grief, will inhibit the learning process, and could even prevent the entrepreneur from moving on when necessary. Individuals with high levels of grief are less able to reflect on the loss of a business than individuals with

## Entrepreneurial Learning Through Failure

low levels of grief. Yet high levels of grief are likely to provide more learning opportunities, but the longer it takes to deal with the grief, the less likely the individual is to learn from the event. Therefore individuals with high levels of grief, that are able to reflect, share, and move on quickly will be better able to learn through the process and bring that experience to bear. If there is a large distance from failure and still high levels of grief, then the individual is unlikely to have learnt from the experience, and therefore, such experience is less likely to be beneficial. Similarly high levels of grief and low distance from failure are unlikely to have allowed the acceptance stage to be reached, but the entrepreneur will still be able to learn from the event in the future. Cope (2011) suggested that action-learning sets that promote social reflection would facilitate the entrepreneurs learning through the grief process.

### 3.7 Recovery

Shepherd (2009) refers to Stroebe & Schut's (1999) loss, and, restoration orientation to create a "dual process of grief recovery". This concept is further explored in Cope (2011) who refers to an "intertwined construct" of rehabilitation and grief-recovery. In order to be able to move on, entrepreneurs need to learn to live with failure and learn from their mistakes. Reflective action focuses on enabling the entrepreneur to "*take positive steps in light of failure that help bring an end to the negative emotional response characteristic of grief recovery*" (Cope, 2011, pp.611-615).

In developing the concept of recovery, Shepherd *et al.* (2011) operationalize three constructs of recovery in order to assess how individuals learn from project failure. This develops the concepts of Shepherd *et al.* (2009) to produce scales for loss orientation, restoration orientation, and oscillation orientation. The authors also include a negative emotion construct with subscales of disorganisation, and

detachment and despair. The authors found that simply focusing on ‘moving on’ from failure as a process of learning was likely to ignore the nuances associated with time (as a healer), and the benefits of restoration through reflection (Shepherd *et al.* 2011, p.1250)

### 3.8 Size of failure

Whilst much of the literature suggests that entrepreneurs learn from failure (Hmieleski & Corbett 2008, Hmieleski & Baron 2009, Drnovsek *et al* 2010, Tseng 2013) we note “*however, not all failures are equally adept at facilitating learning*” (Politis, 2005 p. 411). Politis refers to Sitkin (1992) and the discussion of ‘intelligent failures’: failures that have sufficient ambiguity in any possible outcome to enable learning yet do not result in catastrophic failure thus avoiding negative responses.

This idea of small ‘experimental’ failures is a useful one, and has been discussed in other studies (Shepherd 2009, Cope 2010). It also gives rise to the question of how big is big? As such, any conceptual model will need to take into account the contextual factors surrounding the failure including the size of the financial, social, and emotional loss.

### 3.9 Optimism

It has been argued that entrepreneurial self-efficacy is an important construct that should be included in any conceptual model that attempts to describe the entrepreneurial learning process, and how this may be included as both an input and output of the process. It has also been noted that efficacy and motivation are explicitly linked and may be effected by business failure (Shepherd 2003). This concept has been further explored through the construct of optimism and how an entrepreneur

## Entrepreneurial Learning Through Failure

might moderate their optimism (Hmieleski & Baron, 2009). As was discussed earlier, the overly optimistic entrepreneur is often distracted, or overstretched, finding new opportunities to develop, rather than focusing on a small number of current opportunities that are being developed. The ability to either moderate one's optimism (or indeed simply an inherent level of moderation) can help to focus the entrepreneur on a reduced number of goals. It is therefore posited that entrepreneurs who have previously been through failure will have a reduced level of optimism compared to those that do not. It is also posited, that entrepreneurs who have not recovered from their failure, or who have suffered significant emotional and personal cost will have too low a level of optimism (Hmieleski & Baron, 2009)

This adds some additional evidence to the theory that entrepreneurs may not learn from their mistakes. Entrepreneurs may 'feel' that they did everything right, and that it was simply external factors that resulted in failure. The suggestion is that entrepreneurs who have prior experience of success tend to report higher levels of comparative optimism than new entrepreneurs: *"some experienced repeat entrepreneurs appear to be prone to the liabilities of success (McGrath, 1999)"* (Ucbassaran *et al*, 2009).

Hmieleski & Baron (2009) show that there is a negative relationship between optimism and performance with entrepreneurs that have prior experience of venture start-ups. It could be taken that those entrepreneurs that have learnt from their prior experience have moderated their behaviour, and are now less optimistic. It is perhaps, not the level of optimism that effects the performance of the business, but instead, what this lower level of optimism represents: 'I am less optimistic, because I am aware of what can go wrong and I have learnt from earlier experience.' Indeed *"entrepreneurs who are highly optimistic are likely to learn less from their*

*experience than ones who are moderate in optimism, given the tendency of the first group to focus primarily on positive, belief-confirming information” (Hmieleski & Baron, 2009, p. 483). This concept is supported by previous research (Corbett, 2005, 2007) with a further suggestion “that entrepreneurs who are moderate optimists might be more effective at learning from their past experiences than those who are very high in optimism” (Hmieleski & Baron, 2009, p. 483).*

Of further interest is the difference between portfolio entrepreneurs and sequential entrepreneurs, with the former showing lower levels of comparative optimism following business failure (compared to new entrepreneurs), and the latter showing no significant difference (Ucbassaran *et al*, 2009). This subtle distinction is an important one, and suggests a different contextual alignment to that which is posited by Shepherd (2003) that entrepreneurs who have experienced business failure are likely to have lower levels of entrepreneurial self-efficacy.

An additional factor to include within the construct of optimism is the concept of control. In particular, the control over the level of optimism being exuded, or the moderation of negative thoughts has been a focus of several authors including McGrath (1999), Cardon and McGrath (1999), Shepherd (2003), and Drnovsek *et al* (2010).

### **3.10 Gender**

Studies have highlighted the significance of the gender effect. In this study, the instrument shows that Women tend to have a more positive attitude towards failure. This seems to be in-line with Theory 2: Men are more restoration-oriented whilst women are more loss-oriented and willing to confront their emotions of grief (Stroebe 1998), however Ringdal *et al.*, (2001), Chen *et al.*, (1999) and Cope (2011) identify

## Entrepreneurial Learning Through Failure

that females can experience higher levels of grief, anxiety and depression than men (Cope, 2011). This doesn't seem to be a clear understanding of how failure impacts differently to males and females. It does offer an interesting dimension that should be included in any conceptual model for empirical study.

### 3.11 Formal training

Politis & Gabrielsson (2009) note that those who have had some form of formal Entrepreneurship education tend to have a more positive attitude towards failure. This might suggest that education on failure provides greater information and awareness of why failure is a 'necessary' part of entrepreneurship. This could, however, also indicate that formal education surrounding failure, paints only a positive view of failure, hence the lower perceived significance of failure surrounding these individuals. This comment would make an interesting local/focused study: Does entrepreneurship education provide too glamorous a view of what might be significant, negative, life-altering experiences?

## 4 A framework of entrepreneurial learning

The previous section has provided a review of the key constructs that have been included within a range of conceptual models of entrepreneurial learning throughout the past fifteen years. There has been a review of the development of the field and a meta-view of how similar hypotheses have been reached by multiple authors. There has also been an exploration of the [few] empirical studies that have sought to evaluate the propositions posed therein. This review and discussion has provided a thorough exploration of the field and has attempted to provide a conceptual



framework that is exhaustive in its combination of all the models previously constructed.

Figure 6 provides a description of a conceptual framework of entrepreneurial learning that can be used as a benchmark for future study and analysis of the constituent and complex relationships of the contained constructs.

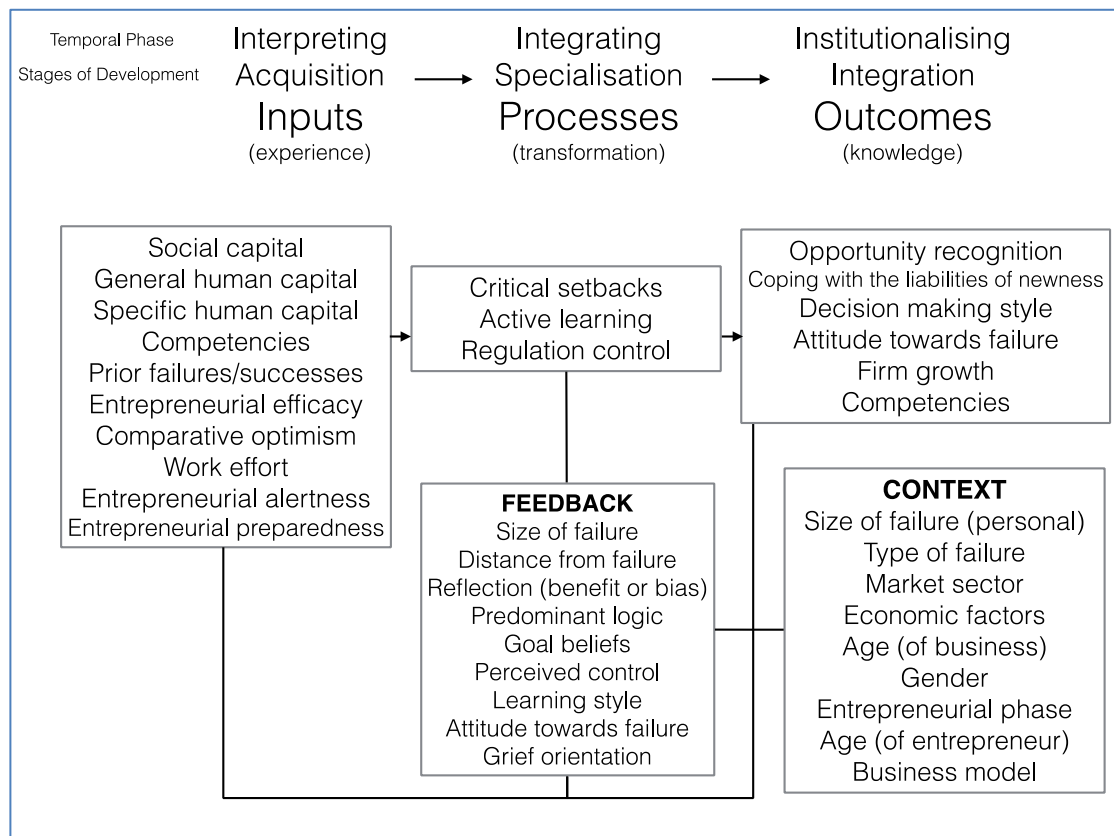


Figure 6 A conceptual framework of entrepreneurial learning

The framework builds on the concept of three stages of development (Figure 2), apparent in the experiential learning literature (Dewey 1933, Lewin 1946, Kolb 1994, Schon & Agyris 1974), and clearly depicted in the models explored within the reviewed articles (Figure 3, 4, and 5). Knowledge is the transformation of experience (Kolb 1984), and the experience is defined explicitly here as an input variable. Whilst the framework shows a discrete process with defined outcomes, it should be looked at

## Entrepreneurial Learning Through Failure

as a cyclical process, with the feedback loop operating both forwards and backwards. For example, an individual that enters the process with a given level of entrepreneurial preparedness may experience a critical setback where a process of transformation is facilitated through the feedback of reflection. This could result in an output of firm growth, or an increased ability to deal with the liabilities of newness, but equally could result in changed input variables for a new process (comparative optimism may be lower as a result).

The major contribution of the framework is the provision of an overview of the field of entrepreneurial learning. The overview maps all constructs that have been theoretically hypothesised as well as empirically tested and positions these in a conceptual framework that emphasises how each of these constructs maps to the stages of development of acquisition, specialisation, and integration (Kolb, 1984). Importantly, the framework brings together other conceptual models such as Ardichvilia, Cardozo & Ray (2003), Cope (2005a), Corbett (2005), Dutta & Crossan (2005), Politis (2005), Tseng (2013), and Huovinen & Tihula (2008). The similarities in these models allows for a clarity of mapping, and allows for gaps to be identified, and then filled. For example, the combination of Pekka Sivonen's model (in Huovinen & Tihula, 2008) with that of Tseng (2013), highlights the need for a feedback loop, and also the contextual factors that may influence the process.

The provision of such a framework is an important contribution to the literature, providing a fuller picture of the field of entrepreneurial learning, that allows for more informed research and investigation to be carried out.

## **5 Impact: Implications for entrepreneurial research**

The literature that has been reviewed here has allowed for a full picture of the field of entrepreneurial learning. By bringing together a set of research that is focused by theme and publication location, it has been possible to describe a framework that overlays the research that has been undertaken in the past two decades, but also highlights gaps for future research. The next section considers the impact of the framework depicted in Figure 6 in terms of the implications for future research, and also the potential implications on policy and educational practice for entrepreneurial preparedness.

### **5.1 Future research**

Having mapped the conceptual models of the entrepreneurial learning literature to wider pedagogical frameworks such as Argyris & Schon, and Kolb, this conceptual framework of entrepreneurial learning has attempted to capture an exhaustive list of constructs within the field, and depict their relationship within the context of learning at the individual level of the entrepreneur. The implications of such mapping, suggests that there are gaps in previous research studies that can be considered for future study. The framework also highlights areas of interesting constructs that may not have been previously considered for empirical study, as well as highlighting potential relationships between such constructs. Such a framework allows for future empirical studies to be more focused in their objectives, and provides a grounded theory base from which to explore. This review has highlighted that critical setbacks are central to the learning process, and as such, studies of concepts such as opportunity recognition, or firm growth, should not be undertaken without considering this pivotal construct. Cope (2011) highlights the seminal work of Shepherd (2003) and the need for future research into failure as a pivotal construct in

## Entrepreneurial Learning Through Failure

entrepreneurial learning and the experiential learning cycle. The framework highlights the contextual factors that need to be considered in any research, and importantly the transformational feedback, often referenced only as reflection, but now clearly identifying time (distance from failure) and individual traits such as learning style, attitude toward failure, grief orientation, and goal beliefs. Indeed, focus needs to be applied to these nuances of the individual and the process of dealing with critical set-backs, sense making, and reflection, in order to understand the complex personal, and social, development of the individual.

### 5.2 Educating entrepreneurs

It is important that those involved in entrepreneurship education consider the impact of such research when designing a programme (Pittaway & Thorpe, 2012). Moreover, this consideration needs to extend beyond formal educational programmes, to support programmes, and development agencies. As highlighted by Cope “failure warrants a much more prominent position in discussions of entrepreneurship at academic, policymaker and adviser levels” (Cope 2010, 620). Since entrepreneurship and business growth are key drivers for the economic growth (Fritsch and Wyrwich), much attention has been given to the development of leadership and development programmes (Macpherson *et al* 2010, Jones *et al* 2010), business incubators (Bruneel *et al* 2012), and business advice networks (Mole *et al* 2015). It can be seen though, that such programmes focus on the development of the individual from a positivist perspective, a view through the learning lens of success, increased turnover, and jobs growth. What is still missing from many educational programmes, both in higher education, and from a practitioner point of view, is any training, support, or development for entrepreneurs that experience failure. Given the pivotal nature of critical set-backs within the framework of learning, and the evidence from the

literature that those individuals who are able to recover from failure and enter the cycle once more, can feasibly enter with a higher ability to deal with ambiguity, and the liability of newness. Without a focus on recovering from failure though, and without support, it is possible that many failed entrepreneurs never recover from the deep negative response that failure can elicit through a lack of social, and emotional support.

## 6 Conclusion

Whilst business failure may be seen as a way of life for developing entrepreneurs, an individual's ability to learn from failure may not necessarily be as certain as the failure itself. The developed framework of entrepreneurial learning theorises that critical setbacks are at the centre of the learning process, however, there are many contributory factors that may affect an individual's ability to learn from such an experience. The framework contributes to theory by detailing the hypothesised and empirically tested constructs of entrepreneurial learning, demonstrating how they may interlink and map to an overarching theory of learning, founded in the constructivist theories of Argyris and Schon (1978), Kolb (1984), and Mezirow (1990, 1991). Furthermore, the framework provides a clearer understanding of the field of entrepreneurial learning, and allows future research to be carried out in a more systematic manner, through the exploitation of highlighted gaps.

## 7 References

- Ardichvili, A., Cardozo, R., & Ray, S. (2003). A theory of entrepreneurial opportunity identification and development. *Journal of Business venturing*, 18(1), 105-123
- Argyris, C., & Schon, D.A. (1978). *Organizational learning: A theory of action*

## Entrepreneurial Learning Through Failure

*perspective.*

Reading, MA: Addison-Wesley Publishing Co.

Bandura, A. (1994). *Self-efficacy*. John Wiley & Sons, Inc.

Baron, R. A., Mueller, B. A., & Wolfe, M. T. (2016). Self-efficacy and entrepreneurs' adoption of unattainable goals: The restraining effects of self-control. *Journal of Business Venturing*, 31(1), 55-71.

Baron, R. A., & Tang, J. (2008). Entrepreneurs Social Skills and New Venture Performance: Mediating Mechanisms and Cultural Generality. *Journal of Management*.

Baum, J. R., & Locke, E. A. (2004). The relationship of entrepreneurial traits, skill, and motivation to subsequent venture growth. *Journal of applied psychology*, 89(4), 587.

Bruneel, J., Ratinho, T., Clarysse, B., & Groen, A. (2012). The Evolution of Business Incubators: Comparing demand and supply of business incubation services across different incubator generations. *Technovation*, 32(2), 110-121.

Cope, J. (2003). Entrepreneurial learning and critical reflection: Discontinuous events as triggers for 'higher-level' learning. *Management Learning*, 34(4), 429–50.

Cope, J. (2005a). Toward a dynamic learning perspective of entrepreneurship. *Entrepreneurship Theory and Practice* 29(4), 373–97.

Cope, J. (2005b). Researching entrepreneurship through phenomenological inquiry: Philosophical and methodological issues. *International Small Business Journal* 23(2), 159–83.

Cope, J. (2011). Entrepreneurial learning from failure: An interpretative phenomenological analysis. *Journal of Business Venturing* 26(6), 604–23.

Cope, J., Cave, F., & Eccles, S. (2004). Attitudes of venture capital investors towards entrepreneurs with previous business failure. *Venture Capital*, 6(2-3), 147-172.

Cope, J., & Watts, G. (2000). Learning by doing: An exploration of experience, critical incidents and reflection in entrepreneurial learning. *International Journal of Entrepreneurial Behaviour and Research*, 6(3), 104–24.

Corbett, A. C. (2007). Learning asymmetries and the discovery of entrepreneurial opportunities. *Journal of Business Venturing*, 22(1), 97-118.

Deakins, D., & Freel, M. (1998). Entrepreneurial learning and the growth process in SMEs. *The Learning Organization*, 5(3), 144-155.

Dewey, J. (1933). *How we think: A restatement of the relation of reflective thinking to the educative process*. Boston: D.C. Heath and Company.

Drnovšek, M., Wincent, J., & Cardon, M. S. (2010). Entrepreneurial self-efficacy and business start-up: developing a multi-dimensional definition. *International journal of entrepreneurial behavior & research*, 16(4), 329-348.

Dutta, D. K., & Crossan, M. M. (2005). The nature of entrepreneurial opportunities: understanding the process using the 4I organizational learning framework. *Entrepreneurship Theory and Practice*, 29(4), 425-449.

Gibb, A. A. (1997). Small firms' training and competitiveness. Building upon the small business as a learning organisation. *International small business journal*, 15(3), 13-29.

Harrison, R. T., & Leitch, C. M. (2005). Entrepreneurial learning: Researching the interface between learning and the entrepreneurial context. *Entrepreneurship Theory and Practice*, 29(4), 351-371.

Hmieleski, K. M., & Baron, R. A. (2009). Entrepreneurs' optimism and new venture performance: A social cognitive perspective. *Academy of management Journal*, 52(3), 473-488.

Hmieleski, K. M., & Corbett, A. C. (2008). The contrasting interaction effects of improvisational behavior with entrepreneurial self-efficacy on new venture performance and entrepreneur work satisfaction. *Journal of business venturing*, 23(4), 482-496.

Jones, O., Macpherson, A., & Thorpe, R. (2010). Learning in owner-managed small firms: Mediating artefacts and strategic space. *Entrepreneurship and Regional Development*, 22(7-8), 649-673.

Karataş-Özkan, M. (2011). Understanding relational qualities of entrepreneurial learning: Towards a multi-layered approach. *Entrepreneurship & Regional Development*, 23(9/10), 877-906.

Kolb, D. (1984). *Experiential learning*. Englewood Cliffs, NJ: Prentice-Hall.

Lewin, K. (1946). Action research and minority problems. *Journal of social issues*, 2(4), 34-46.

Macpherson, A., Kofinas, A., Jones, O., & Thorpe, R. (2010). Making sense of mediated learning: Cases from small firms. *Management Learning*.

Markman, G. D., Baron, R. A., & Balkin, D. B. (2005). Are perseverance and self-efficacy costless? Assessing entrepreneurs' regretful thinking. *Journal of Organizational Behavior*, 26(1), 1-19.

McGee, J. E., Peterson, M., Mueller, S. L., & Sequeira, J. M. (2009). Entrepreneurial self-efficacy: refining the measure. *Entrepreneurship theory and Practice*, 33(4), 965-988.

Mezirow, J. (1990). *Fostering critical reflection in adulthood*. San Francisco: Jossey-

## Entrepreneurial Learning Through Failure

Bass.

Mezirow, J. (1991). *Transformative dimensions of adult learning*. San Francisco: Jossey-Bass.

Minniti, M., and W. Bygrave. 2001. A dynamic model of entrepreneurial learning. *Entrepreneurship Theory and Practice*, 25, 5–17.

Mole, K. F., Baldock, R., & North, D. (2015, January). Informality, Advice and Concerns: Business Advice as an Uncertainty Reduction Strategy. In *Academy of Management Proceedings* (Vol. 2015, No. 1, p. 13548). Academy of Management.

Mullins, J. W. (1996). Early growth decisions of entrepreneurs: the influence of competency and prior performance under changing market conditions. *Journal of Business Venturing*, 11(2), 89-105.

Parker, S. C. (2006). Learning about the unknown: How fast do entrepreneurs adjust their beliefs?. *Journal of Business Venturing*, 21(1), 1-26.

Pittaway, L., & Cope, J. (2007). Simulating entrepreneurial learning integrating experiential and collaborative approaches to learning. *Management Learning*, 38(2), 211-233.

Pittaway, L., & Thorpe, R. (2012). A framework for entrepreneurial learning: A tribute to Jason Cope. *Entrepreneurship & Regional Development*, 24(9-10), 837-859.

Politis, D. (2005). The process of entrepreneurial learning: A conceptual framework. *Entrepreneurship theory and practice*, 29(4), 399-424.

Politis, D., & Gabrielsson, J. (2009). Entrepreneurs' attitudes towards failure: An experiential learning approach. *International Journal of Entrepreneurial Behavior & Research*, 15(4), 364-383.

Rae, D. (2000). Understanding entrepreneurial learning: a question of how?. *International Journal of Entrepreneurial Behavior & Research*, 6(3), 145-159.

Rae, D. (2004). Entrepreneurial learning: a practical model from the creative industries. *Education+ training*, 46(8/9), 492-500.

Rae, D. (2006). Entrepreneurial learning: A conceptual framework for technology-based enterprise. *Technology Analysis & Strategic Management*, 18(1), 39-56.

Rae, D., & Carswell, M. (2000). Using a life-story approach in researching entrepreneurial learning: the development of a conceptual model and its implications in the design of learning experiences. *Education+ Training*, 42(4/5), 220-228.

Rerup, C. (2005). Learning from past experience: Footnotes on mindfulness and habitual entrepreneurship. *Scandinavian Journal of Management*, 21(4), 451-472.



Shane, S., (2000). Prior knowledge and the discovery of entrepreneurial opportunities. *Organization Science*, 11(4), 448 – 469.

Shepherd, D. A. (2003). Learning from business failure: Propositions of grief recovery for the self-employed. *Academy of management Review*, 28(2), 318-328.

Stoltz, P. G. (1997). *Adversity quotient: Turning obstacles into opportunities*. John Wiley & Sons.

Tseng, C. C. (2013). Connecting self-directed learning with entrepreneurial learning to entrepreneurial performance. *International Journal of Entrepreneurial Behavior & Research*, 19(4), 425-446.

Ucbasaran, D., Westhead, P., Wright, M., & Flores, M. (2010). The nature of entrepreneurial experience, business failure and comparative optimism. *Journal of Business Venturing*, 25(6), 541-555.

Ucbasaran, D., Shepherd, D. A., Lockett, A., & Lyon, S. J. (2013). Life after business failure the process and consequences of business failure for entrepreneurs. *Journal of Management*, 39(1), 163-202.

Wang, C. L. (2008). Entrepreneurial orientation, learning orientation, and firm performance. *Entrepreneurship theory and practice*, 32(4), 635-657.

Wing Yan Man, T. (2006). Exploring the behavioural patterns of entrepreneurial learning: A competency approach. *Education+ Training*, 48(5), 309-321.