ABSTRACT

This paper provides a first systematic assessment of how entrepreneurs react to firm failure. We use appraisal theory as an overarching theoretical framework and hypothesize that the greater the failure experience is appraised as stressful the greater the feelings of grief. To test this hypothesis we developed a unique, hand collected, database of entrepreneurs who recently filed for firm bankruptcy. 310 telephone interviews were conducted (response rate 31%) directly followed by a mail questionnaire. After a three-wave mailing (i.e. two reminders) 147 valid mail questionnaires were returned (response rate 14.7%). This paper constitutes an important step in advancing empirically valid theory of emotional responses to entrepreneurial failure.

1. INTRODUCTION

Firm failure can be regarded as a stressful life event for the self-employed. It is comparable to other stressful life events such as divorce and illness (Lazarus, 1999). Stressful life events impact over all wellbeing and can threaten role definitions on which the self concept is based (Oatley & Bolton, 1985). Specifically, firm failure has been associated with financial and emotional loss, leading to grief (Shepherd, Wiklund, & Haynie, 2009). Negative emotions can have important implications for motivation to re-enter self-employment (Shepherd, Wiklund, & Haynie, 2009; Ucbasaran, Westhead, & Wright, 2008) and the extent that firm failure is a learning experience, negative emotions can stymie this process (Shepherd, 2003; Shepherd et al., 2009). Although previous literature has acknowledged that there can be variance in the level of felt grief after firm failure (Shepherd, 2003; Shepherd et al. 2009a, 2009b; there has been no systematic investigation into what factors influence this variance. This is the focus of the current paper.

To examine how people vary in their emotional reactions to firm failure we build on appraisal theory. Central to this theory is the idea that people’s emotional reactions depend on their subjective evaluation – appraisal of the event (Griner & Smith, 2000). This theory can therefore help explain why entrepreneurs vary in the extent to which they react negatively to the failure of their businesses. To our knowledge, this is the first application of the theory for studying entrepreneurial failure, but it has been successfully used in a similar context, for example, to understand the implications of job loss (Gowan & Gatewood, 1997; Latack, Kinicki, & Prussia, 1995).

To examine these questions, we develop a unique, hand collected, database of over 300 entrepreneurs who recently experienced firm failure filed for firm bankruptcy. To foreshadow the results, we find support for the idea that entrepreneurs vary in the extent to which they experience grief upon bankruptcy and primary
appraisals of the failure experience significantly contribute to explaining this variance. In this study, we make a number of contributions to the literature. Principally, we contribute to three lines of research. First, a small but growing community of scholars are showing interest in further understanding the implications of entrepreneurial failure. To date, however, systematic empirical study of the topic has been virtually non-existent. Thus, this study represents an important first step in formally examining and testing propositions related to how entrepreneurs react to the failure of their businesses. In doing so we develop and test a set of hypotheses that explain when entrepreneurs are more or less likely to experience grief after exiting a failing firm.

Second, we identify and test a set of appraisal components that help explain when firm failure is an emotionally charged event. Although previous research has acknowledged that entrepreneurs are likely to feel grief when their firms fail and that there is likely to be variance in the level of felt grief, it has only begun to scratch the surface of theory development regarding emotional responses to firm failure. As appraisals are situational specific (Lazarus & Folkman, 1984), a specific exploration of appraisals in the context of firm failure is needed to understand emotional responses to firm failure. We take a first step in this direction by developing a set of context specific appraisals to understand grief reactions to firm failure. In addition, this makes an important contribution to refining measures of appraisal in the context of job loss (Mckee et al, 2005) where firm failure for the self-employed is a specific form of job loss.

Third, there is a substantial literature on the emotional implications of a job loss, some of it relying on appraisal theory (Gowan & Gatewood, 1997; Gowan, Riordan, & Gatewood, 1999). This literature deals with situations where employers and employees are separate people, the former laying off the latter. In our case, we examine individuals that are self-employed. In this context it can be argued that firm failure may be closer to a personal failure than “merely” a job loss and a violation to the entrepreneur’s identity. The entrepreneurial identity and how this is developed and manifested is recognized as an important part of the entrepreneurial process (e.g. Stanworth and Curran, 1976). When the firm fails this identity building process is interrupted. We thus extend the theory of job loss into a new context and test the boundary conditions of it.

The paper proceeds as follows. Drawing on appraisal theory we develop a set of hypotheses to explain when entrepreneurs are more or less likely to feel grief after firm failure. A detailed account of the study is provided in the method section. The results and analysis are then presented. We conclude the paper with our main findings.

2. AN APPRAISAL FRAMEWORK

2.1 Appraisals

In order to understand initial emotional reactions to firm failure we build on appraisal theory (Lazarus, 1991, 1999; Lazarus & Folkman, 1984; Smith & Lazarus, 1993). Central to this theory is the idea that people’s emotional reactions depend on their individual and subjective evaluation - appraisal - of an event, (Lazarus, 1991; Smith & Lazarus, 1993). Appraisal theory has been used to understand how individuals respond to stressful life events, for example job loss (Jacobson, 1987) illness, (Landreville & Vezina, 1994) and difficulties at work (Dewe, 1999). These events act as a stimulus for stress but are not sufficient for an individual to feel stress (Lazarus, 1999). It is the appraisal of the event – how significant the event is for personal well-being – that makes an event stressful (Lazarus, 1999). When appraising a situation, an individual evaluates the relationship he or she has with the environment for personal well-being and this is usually done with a referent goal or standard in mind (Smith & Lazarus, 1993). Put simply, an appraisal is about asking “how bad is it?” (Latack et al., 1995).

As our aim is to understand initial reactions to firm failure and the intensity of emotions in general (rather than specific emotions), the focus is on primary appraisal. Primary appraisals capture whether and how an experience is relevant to an individual’s well-being (Smith & Lazarus, 1993) and are conceptualized as the most proximal variable to emotion (Smith, Haynes, Lazarus, & Pope, 1993; Smith & Lazarus, 1993). The fundamental question when appraising a situation is: “Do I have a goal at stake, or are any of my core
values engaged or threatened” (Lazarus, 1991 p. 76). Prior research has shown that appraisals exhibit a clear, strong and reliable link between the subjective evaluation of an experience and the intensity of the emotional response (Griner & Smith, 2000).

Primary appraisals can be broken down into two components: goal relevance and goal congruency. Goal relevance is an evaluation to the extent to which an event, such as firm failure, touches upon personal commitments and goals. If the encounter is goal relevant emotions are felt (Lazarus, 1991). Goal congruency captures the extent an event is consistent (or inconsistent) with the individuals goals and the implications of what is happening for those goals (Smith and Lazarus, 1993). Goal congruency results in positive emotions being felt, while goal incongruency results in negative emotions being felt. Thus, goal relevance determines whether or not the experience will trigger an emotional response; goal congruency determines whether that emotional response will be positive or negative. Stressful situations are characterized by appraisals that are goal relevant and goal incongruent (Roseman, Antoniou, & Jose, 1996). Thus a situation is stressful only if what has happened defeats or endangers important goal commitments or violates highly valued expectations (Lazarus, 1999). The intensity of the emotional response is then linked to the strength of the goal commitments (Lazarus, 1999). Gowan & Gatewood, 1997).

2.2 Appraisal in the context of firm failure

The failure to continue to keep operating the business and closing it is likely to be highly incongruent with the owner-manager’s goals and therefore trigger strong negative emotions, such as grief (cf. Shepherd, 2003). What exactly is it that influences the strength of this emotional response? Appraisal theory suggests that the extent to which the event (failure) is at odds with important goals is the key factor. In order to identify the goals that are most important for the self-employed and most likely to be incongruent with the failure event, we turn to the literature on motivations for becoming self-employed. In the event of failure it is these motivations that have been jeopardized and thus contribute to making the failure experience stressful.

In their examination of reasons for entering into self-employment, Carter et al. (2003) found that the most important goals were independence, which relates to the individuals desire for flexibility, freedom and the possibility to control one’s own time; financial success, which captures the desire to provide for the family or a desire to increase personal wealth and self-realization which relates to pursuing self-directed goals. Independently and combined, these goals signal the commitment that the entrepreneur has to the firm and thus they determine what is at stake when the firm fails (c.f. Lazarus & Folkman, 1984).

Similar goals and their emotional implications have been examined in the literature on involuntary job loss and work stress. For example, studies have found that the social representation of being unemployed contributes significantly to reduced well-being (Archer & Rhodes, 1993) and to lose one’s job can be linked to decreased self-esteem (Shamir, 1986) and “like losing a leg” (Swinburne, 1983). Further, job loss influences individuals’ conception of themselves and negatively influences aspects of the self-definition (Archer & Rhodes, 1993; Parkes, 1988). It is likely that the social representation of being a failed entrepreneur has a similar influence on well-being. The entrepreneurial identity and how it is constructed fulfils a basic need for being recognized as ‘someone’ (Shepherd and Haynie, 2009) where such an identity building involves a search for recognition by significant others, inside as well as outside the firm (Stanworth and Curran, 1976). When violated, it is reasonable to believe that the entrepreneur is affected negatively.

A meta-analysis confirmed that the financial strain associated with a job loss reduced well-being (McKee-Ryan, Virick, Prussia, Harvey, & Lilly (2009). After a job loss individuals have the same financial obligations but reduced capacity to meet them (Gowan & Gatewood, 1997). In the case of firm failure the owner-manager may even have increased financial obligations if they have personally guaranteed all or part of the financing of the firm, exacerbating the negative consequences of the financial strain. Further, the ‘classical entrepreneur’ notion of profit maximization, is a prominent part of the self-definition of a an entrepreneur (Stanworth and Curran, 1976).
Given the salience of independence, financial success and self-realization as goals for self-employed and loss of identity and financial strain associated with job loss, we focus our study on the loss of recognition, financial strain and loss of independence as the main appraisals that capture goal relevance of the failure for the entrepreneur. All these imply threat and harm to the individual in a firm failure and therefore also indicate negative appraisals. This is a logical reasoning taking into account previous research on negative reactions not only in connection with job loss, but also in connection with major organizational changes (Fugate et al., 2008).

2.3 Appraisal and Grief

Emotions are affective responses to information or experiences in the exchange process between the individual and the environment (Fugate et al., 2008). Appraisal thus precedes emotion causally (Lazarus, 1991; Smith, Hynes, Lazarus, and Pope, 1993) and the exchange itself leads to positive or negative emotions – or both (Larsen, McGraw and Cacioppo, 2001), depending on the individual’s subjective interpretation of the importance of the situation (Cacioppo and Gardner, 1999). The implications of appraising a negative experience as highly relevant for personal goals is that negative emotions are likely to be felt (Lazarus, 1999). This is in line with much of the literature on job loss which has focused on job loss as a negative experience and the implications of this (Leana & Feldman, 1990; McKee et al 2005). Prior research has found that job loss is predominately associated with negative emotions and lowered self-esteem (Latack, Kinicki, & Prussia, 1995). Even when a new job is found relatively quickly, the negative impact of the initial job loss can be substantial (Latack & Dozier, 1986). For example, Leana and Feldman (1990) found that individuals who had high intensity appraisals perceived job loss as the worst thing that happened to them. In describing this experience these individuals used metaphors of death and dying. Archer and Rhodes (1993) also found a grief like reaction in individuals after losing their jobs and this intense emotional response was found to be associated with a loss of self definition that came with being unemployed. In terms of specific negative emotions associated with firm failure, Archer (1999) argues that even though we normally think of grief as occurring in the context of the death of a loved one, a broadly similar reaction can occur when a close relationship is ended through separation, or when a person is forced to give up some aspect of life deemed to be important. It appears that for many entrepreneurs the loss of their business is the loss of something important and this is likely to generate feelings of grief (Shepherd, 2003).

Grief is often conceptualized as a process initially dominated by negative emotions. These include emotions of denial, anger and frustration, sadness, anxiety, guilt and depression and is often felt in response to a loss of something important (Archer, 1999; Shaver et al., 1987; Averill, 1968) such as death of a loved one, divorce or job loss (Blau, 2007). The intensity of the felt grief is dependent on the strength of the relationship between the individual and what has been lost. To have invested time, efforts and one’s self in an entrepreneurial venture indicates such a strong relationship (cf. Pierce et al., 2001; Avey et al., 2009).

In the above we suggested that the extent to which the failure was at odds with specific goals would influence the strength of the negative emotion and also identified loss of recognition, financial strain and loss of independence as the main appraisals that capture goal relevance of the failure and therefore are most likely to influence the amount of grief that the entrepreneur feels post failure. This leads to the following hypothesis:

\[ H1: \text{The more that the failure event is appraised as goal relevant in terms of (a) loss of recognition (b) financial strain and (c) loss of independence the greater the feelings of grief} \]

2.4 Antecedents of Appraisals

In addition to examining how appraisals influence grief, this paper also examines the antecedents of appraisals. In doing so, we heed the call from Cervone et al (2008) as they state: “The link from appraisal to subsequent emotion and action, then, is well established. However, another issue has received less attention: the determinants of appraisal. What causes different people to formulate different appraisals of
the same encounter?” In the shaping of an emotion, knowledge is a distal variable with appraisal as a mediating more proximal variable, directly influencing the emotion (Lazarus & Smith, 1988).

Knowledge is often conceptualized in terms of human capital and is comprised of both general and specific human capital. General human capital is made up of skills that are useful in a variety of work settings. Specific human capital is made up of skills that are more specialized and valuable in a particular context or organization, but less valuable in the general labor market. General human capital is typically operationalized as education (Rauch & Frese, 2000). A person who has substantial general human capital will find it easier to find alternative occupations and would have a lower opportunity cost associated with firm failure. Because of more outside options and lower opportunity cost, people with greater general human capital are likely to appraise firm failure as less stressful. Support for this line of argumentation can be found in the job loss literature where higher levels of general human capital are positively related to reemployment and lower levels of stress after job loss (Prussia, Kinicki & Bracker, 1993) a greater chance of re-employment (McKee-Ryan et al., 2005) and were more optimistic about the likelihood of re-employment (Leana and Feldman, 1984). We therefore hypothesize:

**H2**: The higher the level of general human capital, the less likely the failure experience is appraised as goal relevant.

Entrepreneurs are likely to accumulate specific human capital particularly valuable to self-employment while this experience probably is less useful in the context of wage work and therefore less valued by an employer. Stated differently, the payoff of entrepreneurial experience is likely to be larger in self-employment than in wage work. This is supported by previous empirical research, which has found previous entrepreneurial experience to be a predictor of future engagement in entrepreneurship (Bates, 1995; Davidsson & Honig, 2003). Therefore, relatively speaking people with more entrepreneurial experience lose more if their firm fails because their human capital is specific to the running of a firm and that employment ends. We therefore propose that they will experience firm failure as more stressful. This leads to the following hypothesis:

**H3**: The greater the amount of human capital specific to operating a business, the more likely the failure experience is appraised as goal relevant.

It is possible for entrepreneurs to combine their self-employment with paid employment or the operation of another firm. Combining the arguments concerning general and specific human capital and the opportunity cost associated with a job loss suggests that these people are less likely to appraise firm failure as stressful, because they already exercise outside employment options. Thus:

**H4**: Owner-managers who have the firm as their sole occupation are more likely to appraise the failure as goal relevant.

Lack of financial resources has been shown to have one of the greatest impact on feelings of stress after job loss (DeFrank & Ivancevich, 1986). Leana and Feldman 1992 found that financial problems after job loss positively influenced intensity appraisals. Given that owner-managers are likely to have invested their own money into their firms and personally guaranteed some of their firms financing the level of private debt incurred as a result of the failure is likely to result in the failure experience as being appraised as more stressful and goal relevant. This leads to the following hypothesis:

**H5**: The greater the amount of private debt that the owner-managers incurred due to the failure, the more likely they are to appraise the failure as goal relevant.

Taken together, this suggests a mediated model with grief as the ultimate dependent variable and appraisals as mediators.
3. METHOD

3.1 Research Design and Sample

We side with Shepherd and Wiklund (2006) in defining entrepreneurial failure as occurring when a fall in revenues and/or rise in expenses are of such 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; Shepherd, Douglas and Shanley, 2000). This definition emphasizes that for economic reasons the business is unable to continue its operations That people exit entrepreneurship is not a sufficient criterion for failure because many entrepreneurs exit their businesses for reasons other than failure, e.g., because they sell the business and harvest the value (e.g., Wennberg et al, 2009). Therefore, to define a sample of failed entrepreneurs in order to study emotional reactions we turned to entrepreneurs that had recently filed for firm bankruptcy, where bankruptcy proceedings in most cases were ongoing at the time of contact. Arguably, bankruptcy is a primary representation of business exit due to insolvency.

Using filing for firm bankruptcy as the operationalization of firm failure is particularly relevant in Sweden, where the data collection took place, as it is likely to capture the economic and emotional consequences associated with firm failure that have been identified by Shepherd, (2003). In Sweden, a firm is bankrupt when it can no longer pay its liabilities and that this situation is not temporary. The bankruptcy and insolvency laws are much stricter than the equivalent laws in the USA. There is no homestead exemption in Sweden and debt reconstruction requires the individual to live on the absolute minimum existence wage for five years and all income over this is used to pay creditors. This reconstruction process includes all outstanding tax debt from the company that the owner becomes responsible for at the time of bankruptcy. There is also a substantial stigma associated with failure in Sweden. In a Eurobarometer survey where respondents were asked to state whether they would not order goods from a merchant who had previously failed, Sweden was the country with the highest percentage that stated that they would not order goods – over 65 percent (Armour & Cumming, 2005). Also, studies have shown that in Sweden entrepreneurs who return to paid employment are likely to earn less than their equally qualified employed counterparts (Falkenhall & Wennberg, 2010).

Publically available data in Sweden contains information about all firms that go bankrupt and the identities of all board members of these bankrupt firms. We first constructed a sampling frame consisting of all firms which had filed for bankruptcy in Sweden during September, October and November of 2008. A total of 1451 firms qualified. 451 of these firms went through liquidation prior to the bankruptcy. Contacts with liquidators and receivers indicated that those individuals might be systematically different from those that go straight into bankruptcy. For example, this ‘two-step’ route to bankruptcy likely extends the failing process, which might affect the emotions felt at the time of the interview. Therefore, these 451 firms were excluded from the sampling frame that then consisted of 1000 bankrupt firms.

A key informant approach was adopted (Kumar, Stern, & Anderson, 1993) and we therefore sought to locate the entrepreneurs of these firms. As failed entrepreneurs we define those individuals that were active in running the firm in the time leading up to the bankruptcy and also had an ownership stake in the firm at that point. As owner-managers can not be identified from non-active board members a priori, all board members were first included as potential respondents. Their social security number was used to obtain their current address and this information was then used with the assistance of an online directory to obtain residential and mobile phone numbers. We were able to locate contact numbers of 1,077 board members representing 885 companies. Out of these, 64 individuals were connected to more than one firm. In the cases were there were more than one respondent per firm, we randomly selected the order in which we contacted them and the first relevant respondent was used. In the cases where one respondent owned more than one firm that had gone bankrupt, the respondent was instructed to provide answers for the firm where they had been most active.

All potential respondents were telephoned in March, April or early May, 2009, approximately 5 months after filing for bankruptcy. In most cases bankruptcy proceedings were ongoing at the time of contact. The screening questions (1) “Were you actively running the company at the time of bankruptcy” and (2) “Did you have an ownership stake in the company at the time of bankruptcy” were used to identify the suitability of the respondents. If they responded positively to both these questions they were asked whether
they would be willing to participate in a telephone interview and on conclusion of the telephone interview whether they would accept a mail questionnaire.

The telephone interview consisted of approximately 50 questions and took on average 8 minutes. The telephone interview and mail questionnaire were pre-tested in November 2008 on a random sample of 50 owner-managers who had filed for bankruptcy four months prior to being contacted. Minor adjustments were made based on the results from the pilot study.

In total, 333 telephone interviews were conducted representative of 310 companies. We received double respondents from 23 companies. These responses were used to validate questions from the telephone interview. 294 respondents accepted to receive the mail questionnaire and after a three-wave mailing (i.e. two reminders) 161 valid mail questionnaires were returned, 147 of which were from unique firms. This gave a 31 percent response rate to the telephone interview and an overall response rate to the mail questionnaire of 14.7%. If just the cases where a working telephone number to the respondent was found, the response rate to the telephone interview was 65.8 percent and the mail questionnaire 31 percent. Given the sample population these response rates are exceptionally high.

The average age of the respondents was 48 years old, 85 percent were male and 62 percent had been involved in more than one start-up. The average age of the business at the time of bankruptcy was 8.5 years and the average number of full time equivalent employees was 6.

3.2. Dependent Variable Grief

Grief was measured using items adapted from (Blau, 2007) who investigated the grief process associated with work site closure. This measure was chosen as it had been tested in an empirical setting similar to ours and it was a parsimonious measure. Slight adaptations were made to the items to make them relevant for firm bankruptcy rather than unemployment. This was done to increase the face validity of the items. The specific emotions included were denial, anger, bargaining, sadness, acceptance and personal growth. Respondents indicated on a 7 point Likert scale (1= does not apply at all to me; 7 = completely applies to me) the extent to which each emotion statement applied to how they are currently feeling about the bankruptcy.

A principal components analysis revealed four components with eigenvalues over 1, accounting for 64 percent of the variance. The results are shown in Table 1. The first factor was much larger than the others and consisted of negative emotions associated with grief: denial, anger and depression, labeled grief. Combined, this factor gives an indication of the intensity of felt grief (Archer, 1999; Archer & Rhodes, 1993) and captures the affective distress component of grief (Archer & Rhodes, 1995). It is not unexpected that these items would load together on one factor as the grief emotions are usually found to be highly correlated (Archer, 1999). Even in studies were anger and sadness are found on distinct factors, the factors are highly correlated. As the present analysis focuses on initial emotional responses to firm failure, only the grief factor is used in the current analysis. When combined into an index, the Cronbach’s Alpha value of the grief index was 0.88. Bargain, personal growth, and acceptance made up the other factors. Bargain can be viewed as a specific response style to firm failure.

3.3 Primary Appraisal Variables

When measuring primary appraisal there is a general choice between choosing macro-level global items which can be applied to a variety of situations or micro level items that provide richer descriptions and are context specific (Folkman et al; Dewe, 1991). As it has been shown that in work settings context specific questions provide greater predictive value (Dewe, 1999) and that individuals in general display more variability than consistency with their reactions to stressful situations (Latack et al, 1995), context specific questions were used to assess primary appraisals in the current study. Where possible, the items developed by Folkman, Lazarus, Dunkel-Schetter, Delongis, & Gruen, (1986) to assess how individuals appraise stressful situations in general, were adapted to the specific context of firm failure. The items developed by Birley & Westhead (1994), reasons for business start-up, were also adapted to capture the specific implications of firm failure. In doing we operationalized the three identified components of primary appraisal that are likely to make firm failure particularly stressful for entrepreneurs. Respondents indicated
on a 7 point Likert scale (1 = does not apply at all to me; 7 = completely applies to me) the extent to which each item was relevant to them. A principle components analysis revealed the three factors accounting for 65.90 percent of the variance. The three factors were labeled: loss of recognition, financial strain and loss of independence. The results are shown in table 1.

3.4 Antecedents of Primary Appraisal

*Human capital specific to operating a business* was measured by asking the respondents if they had started any other business in their life, and if so, to specify the total number.

*General Human Capital* was tapped by asking respondents to state their highest completed education. These educations were then converted into total number of years of schooling.

*Sole Occupation* was measured by asking respondents if they also had some other occupation at the time of the failure. 10 percent (32 individuals) had paid employment; 21 percent (66 individuals) operated another company and 4 percent (16 individuals) had both paid employment and another company at the time of the bankruptcy.

*Financial Loss* was measured by asking the respondents to estimate how much debt they had incurred as a result of the bankruptcy. Respondents were asked: “have you today private debts caused by the bankruptcy?” if yes, they were then asked “Approximately how large are these debts?” The average amount of private debt was 281 495 SEK and the standard deviation was SEK 625 264. As the distribution of this variable was positively skewed, we relied on a Windsor adjustment to account for the outliers. This means that for observations with debt values higher than the 95th percentile we imputed instead the value of the 95th percentile. This resulted in a variable with a distribution much closer to the normal.

3.5. Control variables

A number of control variables were included in the analysis. As the sample was all firms that had filed for bankruptcy over a three month period and the survey took place approximately 5 months later, there was potential for substantial variance in the time between filing for bankruptcy, when the respondent was interviewed and when the mail questionnaire was received. For this reason the time between filing for bankruptcy and the time when the mail questionnaire was returned was controlled for. On average the mail questionnaire was returned 6.5 months after filing for bankruptcy with a standard deviation of one month.. Sex and age of the respondent and firm size (number of full time equivalent employees) were also included as control variables.

3.6 Potential biases and their alleviation

Previous research has noted that it is very difficult to conduct unbiased studies of the role of failure in entrepreneurship because the willingness of failed entrepreneurs to respond is much lower than the willingness of successful entrepreneurs (cf. Shepherd & Wiklund, 2006). Our response rate of 31% among failed entrepreneurs is higher than that typically reported for random samples of entrepreneurs in general. Thus, despite the fact that the study deals with failure, the general risk of non-response bias is no larger than in most other published entrepreneurship research. Potential bias likely derives from three main sources. First, entrepreneurs with very large outstanding debt might go underground to avoid paying them. Thus, we would be unable to reach them and our results would not generalize to this sub-sample. Second, individuals under the age of 30 were more difficult to reach, potentially because they are less likely to have permanent phone numbers. We control for age in our models to help alleviate this potential bias. Third, it is possible that some people who grieve substantially would decline to take part in the study because the bankruptcy brings up memories that they prefer not to think about. This would reduce the variance in the dependent variable.

This study deals with emotions and self-appraisal of individuals. Thus, the variables of main interest are self-perceptive in nature. This introduces the potential for common method bias. In order to alleviate this problem, we followed recommendations by Podsakoff et al, (2003) assuring that the independent and
dependent variables were collected at two different points in time, using different means of data collection and different response formats.

4. ANALYSIS AND RESULTS

Results from a correlations analysis showed moderate to low correlations among variables, suggesting that multicollinearity should not be a main issue. The correlations among the appraisal variables range from .40 and .53.

We used hierarchical regression analysis to test our hypotheses. We started out by testing Hypotheses 2 to 5, i.e., the explanation of individual differences in appraisals. These results are provided in Table 2. Neither the General Human Capital variable, nor the Specific Human Capital variable had an influence on any of the appraisal variables. Thus, we find no support for hypotheses 3 or 4. The variable Sole Occupation had a positive influence on appraisals of loss of recognition ($\beta = .277, p < 0.01$) and loss of independence ($\beta = .310, p < 0.001$) but not on financial strain, providing partial support for hypothesis 4. Financial Capital had a positive influence on each component of primary appraisal: loss of recognition ($\beta = .186, p < 0.05$), financial strain ($\beta = .487, p < 0.001$) and loss of independence ($\beta = .142, p < 0.10$) providing full support for hypothesis 5.

Regression results for the relationship between appraisal and grief are provided in Table 3. We first tested a base model including the study’s control variables and the antecedents of appraisal. These results are displayed in column two of the table. The amount of private debt and the firm being the sole occupation of the owner-manager had a positive influence on felt grief ($\beta = .245, p < 0.05$ and $\beta = .188, p < 0.05$ respectively) and females were more likely to feel grief ($\beta = .171, p < 0.10$). Because of their moderately high inter-correlations, in columns three to six, we enter each of the appraisal variables separately to examine their unique influence on grief. Each variable has a positive and statistically significant influence on grief. This provides preliminary support for hypotheses 1a, 1b and 1c. In the rightmost column of the table, we then test the full model. This model explains 28% of the variance in felt grief. Loss of recognition has a positive and statistically significant influence on grief ($\beta = .425, p < 0.001$). This supports Hypothesis 1a stating that the more that the failure event is appraised as personally relevant in terms of loss of recognition, the greater the feelings of grief. Financial strain has a positive and statistically significant influence on grief ($\beta = .192, p < 0.10$). This finding supports Hypothesis 1b stating that the more that the failure event is appraised as personally relevant in terms of financial strain, the greater the feelings of grief. We find no influence of the variable loss of independence ($\beta = -0.107, p > 0.10$). Thus, Hypothesis 1c is not supported. We also find support for our research model in that none of the antecedents of primary appraisal have a statistically significant influence on grief in the full model. As we propose, this suggests that appraisals fully mediate the relationships.

5. DISCUSSION

5.1 Main Findings

In this paper we set out to examine how people vary in their emotional reactions to firm failure within the framework of primary appraisal. Our study makes a set of important contributions. First, we advance the notion that an entrepreneur’s emotional response to the failure event is dependent on their subjective appraisal of the failure event. Prior research has proposed that entrepreneurs are likely to feel grief when their firms fail. We took this as our starting point and investigated the role of primary appraisals in explaining individual differences in felt grief.

Building on previous research applying appraisal theory to the study of job loss paired with the literature on reasons for becoming an entrepreneur, we identified three specific appraisals that would be particularly important to failed entrepreneurs. These were loss of recognition, financial strain, and loss of independence. We found that the more the bankruptcy was associated with loss of recognition for the entrepreneur, the higher the amount of grief felt. Similarly, the more the entrepreneur felt that the bankruptcy was associated with financial strain, the more grief the entrepreneur feels. Moreover, our
results suggest that these variables related to the entrepreneur’s appraisal of the failure event were more important to the amount of grief felt than more distal variables related to human capital and financial capital. Similar findings have been found in the job loss literature where the perceived financial strain from the loss of employment has been found to have a stronger influence on well-being than objective financial resources (McKee et al 2005). These findings support our use of appraisal theory for understanding emotional reactions to firm failure as it is the appraisal of stressors that is more important for well-being than the existence of stressors when responding to significant life events (Lazarus and Folkman 1984). Our results also suggest that we were able to identify a set of relevant appraisals that influenced the grief of failed entrepreneurs in our empirical tests. This is an important contribution because to our knowledge prior research has not established the factors associated with entrepreneurs’ felt grief after failure.

Earlier work on entrepreneurial failure has highlighted that it is likely that entrepreneurs feel grief post failure (Shepherd, 2003). In this paper, we add to this literature by showing the factors that influence the amount of grief felt, thus explaining variance in grief across entrepreneurs. We found support for the notion that loss of recognition and the amount of financial strain imposed by the entrepreneurial failure indeed influenced the amount of grief felt. Prior research has suggested that entrepreneurial failure has negative emotional and financial implications (Shepherd et al., 2009). Thus, our study represents empirical corroboration of these arguments. We indeed find that these are two important aspects of failure that make the experience stressful. Our results also qualify those propositions by showing how the financial and emotional consequences are related.

Our finding that entrepreneurial failure is associated with the loss of recognition is of great interest. In the limited literature that exists on entrepreneurial failure and on bankruptcy, there is some suggestion that many managers accept rather than deny responsibility for the bankruptcy (Sutton & Calahan, 1987), which can explain why some people feel more grief than others. Recent entrepreneurship research invoking identity and social identity theory (e.g. Hoang & Gimeno, 2010) has suggested that being an entrepreneur represents a strong identity. Stanworth and Curran (1976) argue in a similar way when they introduce the concept latent social identity, especially applicable on the small and/or newly started business. Such an identity primarily involves the ‘artisan’ and the ‘manager’ identity. The former meets the entrepreneurs intrinsic satisfaction and the status of being in charge and is noticed most often among the early phases of the start-up. The latter entrepreneurial latent identity relates specifically to the entrepreneur’s recognition among significant others and is more accentuated when the firm is in a possible perceived growth phase. The loss of recognition that is felt when the firm fails is thus likely to be tied to the entrepreneur’s identity and commitment to the firm. The loss of identity that comes with the loss of the firm may therefore play an important role influencing feelings of grief. Our results are suggestive of that the loss of a business represents a loss of the respect that goes along with that identity. And not only that, a firm failure puts an end to an ongoing process of identity building. Such a cessation involves the entrepreneur’s life style and possibly that of others – in and around the firm or in the family – in turn possibly increasing the loss of recognition. To interrupt an ongoing identity building process may have far-reaching implications and opens up for future research. For example, there is a growing interest in examining national variance in the stigma of failure and its implications for entrepreneurship. Our findings are suggestive of a potentially important mechanism that transmits that stigma into individual reactions and behavior. It seems that the higher the stigma of failure, the more entrepreneurs are likely to feel that their failure is associated with the loss of recognition and with increased grief.

We did not find any support for our hypothesis that the more the failure event is appraised as goal relevant in terms of loss of independence the greater the feelings of grief. Our result is contradicting the scarce results that indicate that the personal autonomy is a basic driver for intrinsic satisfaction (Stanworth and Curren, 1976) in early stages of entrepreneurship. Stanworth and Curren (1976) argue that such autonomy is more important than income, however they also argue that such a posture is seldom committed to growth aspirations. Therein and speculatively, we may find the explanation, namely that lack of growth aspirations, and thereby the loss of autonomy, may not affect the grief as much as loss of finance and loss of recognition. Both of these (finance and recognition) are namely found to be more prominent at later stages in the entrepreneurial venture life cycle where growth aspirations are present and the entrepreneurial identity is more established (Stanworth and Curren, 1976).
The appraisal literature notes that the relationships between appraisal and emotions are far more researched than examinations of the antecedents of appraisal and it has been suggested that knowledge influences appraisal. Building on these observations, we examined how human capital and financial capital influenced appraisal. Admittedly, our support for this approach was limited. As anticipated, we found that appraisals fully mediated the relationships between these variables and grief, providing full support for the structure of the overall model, but we only found weak relationships between these variables and appraisals. The job loss literature has found some support for the notion that the greater outside options and smaller opportunity costs associated with general human capital has some effect on appraisals and negative emotions (McKee et al 2005). We were not able to replicate this finding in the context of the self-employed. One reason for this may be that general human capital and specific human capital are variables distal from the actual failure event and there are many intervening factors. Our variables related to the amount of money lost and their access to other occupations indeed influenced their appraisals.

5.2 Future Research

Our research serves to establish boundary conditions of theories used in the job loss literature. To date, this literature has been concerned with situations where a superior decides that subordinates will no longer be employed. We have studied self-employed individuals and their job losses due to their failure to continue operating their own businesses. Thus, our context is quite different from that usually employed in the job loss literature. Our findings of how appraisal influences grief is largely in line with prior studies of the implications of job loss. Thus, it appears that this branch of the job loss literature is relevant also for the study of the self-employed. It would be interesting to further examine other theories commonly applied in this literature to see the extent to which they can explain the implications of entrepreneurial failure.

In this paper we limited our focus to grief, an evaluative emotion (Liu & Perrewé, 2005) or past oriented emotion (Ortony et al., 1988). It is likely, however, that there are anticipatory emotions associated with failure such as worry and fear about what will happen after the firm exits (c.f. Liu & Perrewé, 2005). While more work is needed to understand the complexity of emotional responses to firm failure, appraisal theory could be extended to a more fine grained analysis of the emotions felt during the failure process. For example, regret is likely to be felt when the entrepreneur feels that they were responsible for some aspect of the failure (Roseman et al., 1996). In contrast, disappointment is likely to be felt if the entrepreneur feels that their goals have not been met (Zeelenberg, Van Dijk, & Van der Pligt, 1998). One way to do this could be to also investigate the owner-manager’s secondary appraisals, for example who or what they thought was to blame for the failure.

We also limited our focus to initial reactions to firm failure; however, as emotions are likely to change overtime in response to stressful events (Liu & Perrewé, 2005), an extension of this study would to look at how the reactions of the owner-managers evolve overtime and the role that coping plays in this process. Due to the potentially sensitive nature of the research we also used parsimonious operalizations of appraisal and grief. However both constructs are quite complex in nature. For example grief is a complex emotions that can involve psychological and as well as behavioural implications such as restlessness, loss of appetite and difficulties sleeping (Archer & Rhodes, 1993) and we did not include these aspects of grief. Thus while our findings show initial support for the idea that some entrepreneurs are likely to feel grief when their firms fail, future research could focus on additional aspects of the grief process.

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REFERENCES


Table 1: Emotions and Primary Appraisal: Varimax Principal Components Analysis

<table>
<thead>
<tr>
<th>Items (Cronbach’s alfa)</th>
<th>Factor Loading (Variance Explained)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Emotions</strong></td>
<td></td>
</tr>
<tr>
<td>1. Grief (.881)</td>
<td>(27.67)</td>
</tr>
<tr>
<td>I feel depressed about the bankruptcy</td>
<td>.792</td>
</tr>
<tr>
<td>Sometimes I want to cry because of the bankruptcy</td>
<td>.782</td>
</tr>
<tr>
<td>I cannot believe that the company went bankrupt</td>
<td>.753</td>
</tr>
<tr>
<td>I am furious that this could have happened to me</td>
<td>.734</td>
</tr>
<tr>
<td>I am angry that the company went bankrupt</td>
<td>.715</td>
</tr>
<tr>
<td>I am very sad because of the bankruptcy</td>
<td>.702</td>
</tr>
<tr>
<td>I can barely believe I no longer run the company</td>
<td>.631</td>
</tr>
<tr>
<td>I cannot believe that this has happened to me</td>
<td>.601</td>
</tr>
<tr>
<td>I feel a lot of hostility towards the people who were involve in the bankruptcy</td>
<td>.508</td>
</tr>
<tr>
<td><strong>Primary Appraisal</strong></td>
<td></td>
</tr>
<tr>
<td>1. Loss of recognition (.852)</td>
<td>(29.00)</td>
</tr>
<tr>
<td>I have lost an important persons approval or respect</td>
<td>.781</td>
</tr>
<tr>
<td>I have lost recognition or status</td>
<td>.727</td>
</tr>
<tr>
<td>I feel that I have lost my good reputation</td>
<td>.725</td>
</tr>
<tr>
<td>I have lost my self respect</td>
<td>(19.59)</td>
</tr>
<tr>
<td>2. Financial Strain (8.24)</td>
<td>.868</td>
</tr>
<tr>
<td>My finances are strained</td>
<td>.807</td>
</tr>
<tr>
<td>My or my family’s financial security has been jeopardized</td>
<td>(17.31)</td>
</tr>
<tr>
<td>3. Loss of independence (6.99)</td>
<td>.800</td>
</tr>
<tr>
<td>I have lost the opportunity to develop my company</td>
<td>.673</td>
</tr>
<tr>
<td>I have lost the independence that comes with running a company</td>
<td>.638</td>
</tr>
<tr>
<td>I failed to reach an important goal</td>
<td></td>
</tr>
</tbody>
</table>

Table 2: Human Capital, Financial Capital and Appraisal

<table>
<thead>
<tr>
<th>Variable</th>
<th>Loss of Recognition</th>
<th>Financial Strain</th>
<th>Lose of Independence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>-.049</td>
<td>-.090</td>
<td>.008</td>
</tr>
<tr>
<td>Sex</td>
<td>-.026</td>
<td>.061</td>
<td>.123</td>
</tr>
<tr>
<td>Time since filling</td>
<td>-.050</td>
<td>-.017</td>
<td>.171+</td>
</tr>
<tr>
<td>Number of years as owner</td>
<td>-.046</td>
<td>-.057</td>
<td>.121</td>
</tr>
<tr>
<td>General Human Capital</td>
<td>.070</td>
<td>-.104</td>
<td>-.250</td>
</tr>
<tr>
<td>Specific Human Capital</td>
<td>-.025</td>
<td>-.028</td>
<td>.007</td>
</tr>
<tr>
<td>Sole Occupation</td>
<td>.277**</td>
<td>.130</td>
<td>.310**</td>
</tr>
<tr>
<td>Financial Capital</td>
<td>.186*</td>
<td>.487***</td>
<td>.142+</td>
</tr>
</tbody>
</table>

F 2.306* 6.380*** 3.125**
R squared .133 .298 .172

+P<0.10; *P<0.05; **P<0.01; ***P<0.001
Table 3: Regression results: Appraisal and grief

<table>
<thead>
<tr>
<th>Variable</th>
<th>M.1</th>
<th>M.2 H1a</th>
<th>M.3 H1b</th>
<th>M.4 H1c</th>
<th>M.5 H1a,b &amp;c</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>.003</td>
<td>.028</td>
<td>.028</td>
<td>.002</td>
<td>.041</td>
</tr>
<tr>
<td>Sex</td>
<td>.171+</td>
<td>.182*</td>
<td>.150+</td>
<td>.143+</td>
<td>.179*</td>
</tr>
<tr>
<td>Time since filling</td>
<td>-.017</td>
<td>.007</td>
<td>-.012</td>
<td>-.054</td>
<td>.020</td>
</tr>
<tr>
<td>General Human Capital</td>
<td>.027</td>
<td>-.005</td>
<td>.066</td>
<td>.031</td>
<td>.018</td>
</tr>
<tr>
<td>Specific Human Capital</td>
<td>-.048</td>
<td>-.037</td>
<td>.037</td>
<td>-.049</td>
<td>-.032</td>
</tr>
<tr>
<td>Number of years as owner</td>
<td>-.027</td>
<td>-.011</td>
<td>-.006</td>
<td>-.056</td>
<td>-.016</td>
</tr>
<tr>
<td>Sole occupation</td>
<td>.188**</td>
<td>.062</td>
<td>.141</td>
<td>.121</td>
<td>.066</td>
</tr>
<tr>
<td>Private debt</td>
<td>.245**</td>
<td>.160*</td>
<td>.077</td>
<td>.214*</td>
<td>.080</td>
</tr>
<tr>
<td>Loss of Recognition</td>
<td>.458***</td>
<td>.349***</td>
<td>.218*</td>
<td>.425***</td>
<td>.198*</td>
</tr>
<tr>
<td>Financial strain</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Loss of Independence</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>-.070</td>
</tr>
<tr>
<td>F</td>
<td>2.389*</td>
<td>6.124***</td>
<td>3.776***</td>
<td>2.839**</td>
<td>5.530***</td>
</tr>
<tr>
<td>R squared</td>
<td>.080</td>
<td>.268</td>
<td>.163</td>
<td>.114</td>
<td>.280</td>
</tr>
<tr>
<td>AR-square</td>
<td>.182</td>
<td>.085</td>
<td>.039</td>
<td>.205</td>
<td></td>
</tr>
</tbody>
</table>

+P<0.10; *P<0.05; **P<0.01; ***P<0.001