

Uncovering the unseen passion: a fire to foster ambition toward innovation

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Abstract

Purpose – The purpose of this paper is to uncover the role of entrepreneurial passion and resources on innovativeness. The research also tested the moderating role of entrepreneurial commitment and environmental unpredictability.

Design/methodology/approach – A sample of 112 small firm owners/managers was selected from central Ethiopia using two level multi-stage sampling. The data collected were analyzed using descriptive analysis and hierarchical regression analysis.

Findings – The owners/managers who are passionate and have adequate human and financial capital are involved more on discovering and exploitation of promising business opportunities that lead to innovativeness. The commitment among passionate and resourceful owners/managers raises a fire on the individuals to be more innovative, but the strong entrepreneurial passion and resources faced challenges in the unpredictable environment to change the ambition to actions.

Research limitations/implications – The future research should also include the financial measures or financial resources and other variables such as entrepreneurial intention and entrepreneurial background in a cross-country study.

Practical implications – The policy makers should develop sustainable strategies that encourage passionate firms toward innovativeness.

Originality/value – The study brings a new insight on the relationship between entrepreneurial passion, entrepreneurial resources, and innovativeness. The study also contributes to entrepreneurship literature by investigating the moderating role of entrepreneurial commitment and environmental unpredictability in relating entrepreneurial passion and entrepreneurial resource to innovativeness. In addition, by exploring the contribution of entrepreneurial passion and resources toward innovativeness, it helps to bring the discussion forward on the subject matter.

Keywords Innovativeness, Unpredictability, Commitment, Passion, Resource

Paper type Research paper

1. Introduction

Carland *et al.* (1984) suggest that the most important element of an entrepreneurial personality is innovativeness, because innovation is not only about construct representing the creation of new ventures, but also growth of current enterprises (Gozukara and Colakoglu, 2016). Innovativeness is the firm's propensity to engage in new idea generation, experimentation, and research and development activities (Lumpkin and Dess, 1996). Scholars have recently focused on the role affect and emotion play in entrepreneurship (Baron, 2008), and in particular have noted that entrepreneurial passion may be an important construct in need of more careful study (Cardon, 2008). A growing volume of research indicates that entrepreneurial passion – which involves intense positive emotions and a meaningful identity connection – is central to the entrepreneurial experience and venture-related outcomes (Huyghe *et al.*, 2016). Passion research is burgeoning as more and more studies emerge that investigate the role of this construct in entrepreneurship (Murnieks *et al.*, 2016).

The core argument of Biraglia and Kadile (2017) work is built on the premise that the passion for entrepreneurial activities, such as exploring new market ideas, sourcing



founding capital, and establishing and developing new products (Cardon *et al.*, 2009, 2013), can lead individuals to become entrepreneurs. As a result, interest in entrepreneurial passion is growing because passion has been demonstrated to drive tenacious pursuit of goals and to inspire stakeholders to support ventures (Murnieks *et al.*, 2016). Moreover, passion can foster creativity and the recognition of new information patterns critical to the discovery and exploitation of promising opportunities (Baron, 2008; Sundararajan and Peters, 2007).

The aim of this paper is to uncover the level of entrepreneurial passion influence on small firm's owners/managers innovativeness with consideration of their commitment level and unpredictable environment, and also the influence of entrepreneurial resources on innovativeness under the above circumstances. The innovativeness practice of small firms depends on their passion, resources, commitment and the environment in which the business is operated. Many authors measured entrepreneurial passion and innovativeness for individuals who are not started their business. Therefore, this paper is among the first to measure the entrepreneurial passion and innovativeness for firm owners/managers of established firms.

The study makes many contributions to the fields of innovativeness, entrepreneurial passion, and resources. By uncovering the influence of passion and resources on innovativeness, the study brings a new insight on the relationship between entrepreneurial passion, entrepreneurial resources, and innovativeness. It also aimed to advance the study toward identifying the contribution of entrepreneurial commitment and environmental unpredictability in fostering/hindering the influence of entrepreneurial passion and resources toward innovativeness. As a result, the study contributes to entrepreneurship literature by investigating the moderating role of entrepreneurial commitment and environmental unpredictability in relating entrepreneurial passion and entrepreneurial resource to innovativeness. In addition, by exploring the contribution of entrepreneurial passion and resources toward innovativeness, it helps to bring the discussion forward on the subject matter. Generally, the study focused on testing the relationship between entrepreneurial passion and innovativeness under different commitment level, entrepreneurial resources, and environments.

2. Theory and hypotheses

2.1 Innovativeness

Schilling (2013) defines innovation as the act of introducing a new device, method, or material for application to commercial or practical objectives. It is the ability to do something in a creative and improved way. In entrepreneurial context, innovativeness means the ability to exploit business opportunities (Gozukara and Colakoglu, 2016). The study by Carland *et al.* (1984) found that entrepreneurs with high innovativeness mainly aimed at profit and development because, entrepreneurs have the desire to seek innovative resources, environmental changes and the signs suggestive of opportunities for innovation (Gozukara and Colakoglu, 2016). Innovation becomes increasingly important to many industries because it includes the development and enhancement of products and services and new administrative techniques and technologies for performing organizational functions (Okhomiya, 2010). Covin and Miles (1999) agree that without innovativeness, entrepreneurship cannot exist and that innovativeness is a crucial part of entrepreneurship survival strategies (Omisakin *et al.*, 2016).

2.2 Passion

A number of perception-based elements may be attributed to entrepreneurs, perhaps the most widely noted and readily visible element is passion (Davis *et al.*, 2017), because it indicated that entrepreneurial behavior is passionate, full of emotional energy, drive, and spirit (Huyghe *et al.*, 2016). Passion is more than the experience of strong emotions: it specifically concerns intense positive feelings for activities that are central and

meaningful to an individual's self-identity (Cardon *et al.*, 2009). Entrepreneurial passion, acting through its components of intense positive feelings tied to salient identities, is a key motivational driver of entrepreneurial behavior (Cardon *et al.*, 2009; Huyghe *et al.*, 2016). As such, the study used Cardon *et al.* (2009) definition of entrepreneurial passion as "consciously accessible intense positive feelings experienced by engagement in entrepreneurial activities associated with roles that are meaningful and salient to the self-identity of the entrepreneur."

2.3 Entrepreneurial resource

Enterprises which wish to develop and be innovative, must increase the resources of knowledge and capabilities of their employees and, at the same time, enrich the resources of human capital. Given the scarcity of these valuable resources, firms must find ways of acquiring and efficiently deploying resources (Massis *et al.*, 2017). Most SMEs, due to limited resources, need to access bundles of resources, including knowledge-based resources (Wiklund *et al.*, 2009). Investment in the development of employees ought to be treated by employers equally on a par with investments in research and development (Kuraś and Łęgowik-Świącik, 2014). The interconnectedness of household and business leads to flexibility in resource availability, as households can release resources from other household activities and make them available for business development when needed – or decided (Alsos *et al.*, 2003). Opportunity business owners are significantly more likely to be wealthier in terms of household income and to have a higher preference for business ownership vs paid employment (Zwan *et al.*, 2016).

2.4 Innovativeness and entrepreneurial passion

Entrepreneurial passion has gained credence in recent years in explaining entrepreneurial efforts (Drnovsek *et al.*, 2016). The burgeoning body of research is beginning to shed light on the various constructs linked to passion in entrepreneurship (Murnieks *et al.*, 2016) and indicates that passion plays a critical role in new venture creation processes and outcomes (Huyghe *et al.*, 2016). In addition, passion can foster creativity and the recognition of new information patterns critical to the discovery and exploitation of promising opportunities (Baron, 2008; Sundararajan and Peters, 2007; Cardon *et al.*, 2013) and it is the "fire of desire" that fuels entrepreneurs' daily efforts and creativity (Cardon *et al.*, 2009). Accordingly, scholars have pressed for a deeper understanding of passion as a central element of entrepreneurial efforts (Cardon *et al.*, 2009, 2013).

Entrepreneurial passion is a valuable characteristic that will unequivocally yield positive outcomes (Ho and Pollack, 2014) and a desire to produce creative and innovative solutions (Gozukara and Colakoglu, 2016). Authors reported a positive correlation between entrepreneurial intention and innovativeness (Gozukara and Colakoglu, 2016). Cardon *et al.* (2009) back up this relationship by proposing that if the individual's identity is dominantly the one of an inventor, his or her passion will affect the creative problem-solving and hence the effectiveness of recognizing opportunities. A similar finding was made by Baron and Tang (2011) whose study resulted in recognizing a connection between the positive affect of the entrepreneur and the radicalness of innovations:

H1. There is a positive influence of entrepreneurial passion on innovativeness.

2.5 Innovativeness and entrepreneurial resource

The absence of substantial resource endowments restricts the ability of most new firms to innovate (Senyard *et al.*, 2014). Compared to large corporations, SMEs are generally more resource constrained in their ability to develop and commercialize new products and

services (Massis *et al.*, 2017). Individuals developed sufficient human capital to better identify entrepreneurial opportunities and efficiently exploit them (Shirokova *et al.*, 2016).

Very little is known about the patterns of behavior that permit some resource-constrained firms to innovate while so many other similarly situated firms languish (Senyard *et al.*, 2014). Researchers still know little about how firms efficiently manage their resources to innovate (Massis *et al.*, 2017). Recent studies point to the importance of effective and efficient resource deployment to achieve innovation (Duran *et al.*, 2016; Sirmon *et al.*, 2011; Massis *et al.*, 2017). People with low income or limited education tend to encounter significant obstacles to identifying and seizing entrepreneurial opportunities (Lim *et al.*, 2016). Therefore, both human and financial resource contributes for the innovativeness of small firm managers/owners:

H2. There is positive influence of entrepreneurial resource on innovativeness.

2.6 The moderating role of entrepreneurial commitment

Commitment can influences future behaviors and imply a succession of decisions and actions toward effectively carrying out the behavior (Fayolle and Liñán, 2014). In an organizational context, passion and affective commitment are both motivational constructs with emotional underpinnings. Employees' perceptions of their supervisors' passion for inventing, founding, and developing differentially impact commitment. While perceptions of entrepreneurs' passion for inventing and developing enhance commitment, passion for founding reduces it (Breugst *et al.*, 2012). Therefore:

H3. Entrepreneurial commitment moderates the relationship between entrepreneurial passion and innovativeness.

The role commitment plays in entrepreneurship is widely supported (Tasnim and Singh, 2016), but they need resources to improve the role they play in entrepreneurial activity. Successful entrepreneurs have a strong competency in totally committing, determining and dedicating, as well as taking proactive actions (Li, 2009). Entrepreneurial commitment is the force that binds and directs the entrepreneur to perform entrepreneurially (Tasnim and Singh, 2016). The entrepreneur's commitment and determination are critical when looking for successful entrepreneurs (Cardon *et al.*, 2009). One characteristic, namely a firm's commitment to long-term objectives, might be especially important to the effectiveness of EO (Covin *et al.*, 2006), including innovativeness (Tasnim and Singh, 2016). Therefore, the hypothesis is:

H4. Entrepreneurial commitment moderates the relationship between entrepreneurial resources and innovativeness.

2.7 The moderating role of environmental unpredictability

The environment plays a much more prominent role in the discovery perspective (Edelman and Yli-Renko, 2010). In the discovery perspective, cognition impacts the probability that particular people will identify and exploit an opportunity – opportunity identification (Shane, 2000; Shane and Venkataraman, 2000). Environmental uncertainty restricts the entrepreneurs from taking entrepreneurial actions such as new product development, entry into new market, etc. (McMullen and Shepherd, 2006). Scholars suggest that highly activated and positive emotional states such as passion foster creativity and recognition of new patterns that are critical in opportunity exploration and exploitation in uncertain and risky environments (Baron, 2008). Therefore:

H5. Environmental unpredictability moderates the relationship between entrepreneurial passion and innovativeness.

Resource scarcity constitutes an objective constraint on entrepreneurial action and outcomes. Complexity encourages a segmentation of the environment (Pellissier, 2012). Duncan segmented environment based on the relevance of the social and physical factors comprising it (Ghosh *et al.*, 2014). This allows for the impact of the environmental factors on resources and resource flows to be examined, which helps determine resource predictability and the environmental locus of control with regards to resource flows (Pellissier, 2012). For example, knowledge-based resources allow the organization to respond and adapt to challenges and are closely connected to the ability to innovate (Hadjimanolis, 2000):

H6. Environmental unpredictability moderates the relationship between entrepreneurial resources and innovativeness.

Generally, by taking into consideration the above theoretical review and hypotheses, we developed the following conceptual model (Figure 1).

3. Methodology

3.1 Research and sample design

The design of the study that was used is descriptive and explanatory in nature. The study employed descriptive research design to discover the current situation in the firm as it exists and explanatory study to discover the impact of entrepreneurial passion and entrepreneurial resource on the owners/managers innovativeness, with an aim of estimating the integrated influence of these factors. To address this, the primary data were obtained using questionnaire from selected small firm owners/managers using multi-stage sampling technique. In the first stage central part of Ethiopia is selected judgmentally since many of the small firms operated in this region. In the second stage, a sample of five cities which have a large number of firms were selected. The selected owners/managers were from small enterprises that are registered, licensed formally and currently operating under Trade and Transport Bureau. A questionnaire was distributed to a total sample of 125 firms and 112 were returned. The articles published in the area were also highlighted to review theoretical issues and to look consistency in order to make the study fruitful and provide appropriate additional information.

3.2 Measures

The measure of innovativeness is mostly included as a dimension of entrepreneurial orientation. Prior research on entrepreneurship suggests that entrepreneurial orientation (includes innovativeness) is a unidimensional construct (Lyon *et al.*, 2000). Later Lumpkin and Dess (1996) conceptualized EO as a multi-dimensional construct. Later, Hughes and Morgan (2007) improve and used three items questionnaire for innovativeness that is

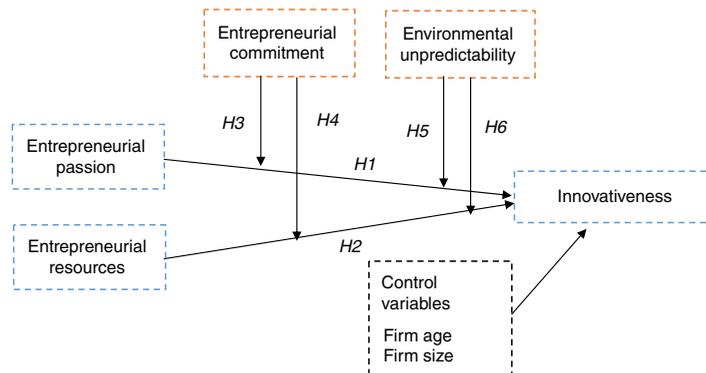


Figure 1.
Conceptual model

measured on seven-point Likert scale. For this study these three items of innovativeness is adopted to capture the measure of innovativeness.

Vallerand *et al.* (2003) introduced the concept of The Dualistic Model of Passion which suggested that individual may experience passion in two ways: the obsessive or the harmonious passion. In their study Esmail *et al.* (2016) used harmonious passion to explain entrepreneurial passion which is hypothesized by Vallerand's "emerge from autonomous internalization" as compared to obsessive passion. Cardon *et al.* (2009) operationalized this construct into passion for inventing-searching for a new business opportunity in new markets, founding-establishing a new business, and developing an already existing one. Passion for founding is not included in this research because the respondents are the owners/managers of established firms. Therefore, to measure a passion scale we adopt a nine-item instrument that concerns passion for inventing and passion for developing from Cardon *et al.* (2013) and measured on seven-point Likert scale.

Lim *et al.* (2016) and Autio and Acs (2010) focus on financial capital (household income) and human capital (level of education) as two key resources. We also employed household income and level of education to measure financial resource and human resource, respectively. To measure household income we use a five-point Likert scale ranging from very less (1) to substantial (5). For individuals educational level, we measure by providing five alternatives, including illiterate, primary school, secondary school, technical and vocational education, and graduated.

The commitment measure consists of four items adopted from Cardon *et al.* (2009) and Sirmon *et al.* (2011). The first three items are modified and presented to owners/managers of small firms from Cardon *et al.* (2009), while one item was modified from Sirmon *et al.* (2011) commitment to long term objectives items. To measure this item, owners/managers responded on the scale of 1 to 7 ranging from strongly disagree to strongly agree to all items. The items includes: I am willing to do whatever it takes; I have developed strong social networks based on the quality of management team and advisors; I have stated he/she uses the product/service; and I am absolutely committed to the achievement of our long-term objectives.

Miller and Shamsie (1996) distinguish between property-based and knowledge-based resources, the latter are of greater utility in uncertain i.e. changing and unpredictable environments. According to Durandand Coeurderoy (2001) environmental unpredictability is assessed as the mean of three scale items; these include market foreseeability, strategic planning vision and the perception of skill changes. We used a three-item scale developed by Durandand Coeurderoy (2001) to measure environmental unpredictability.

In 2006, the Ethiopian Government developed a strategy for the development of micro and small scale enterprises and many firms established after this year. Therefore, the number of firms established after 2006 were taken as younger firms, while the firms established before 2006 were categorized under older firms. In Ethiopia, the classification of firms as micro, small and large is different from the other countries. For instance, the maximum number of employees should be 30 including permanent and temporary workers. For this research, the size of the firm is determined only by the number of permanent workers. Then, we take ten workers as a baseline to state smaller and larger small firms.

3.3 Data analysis techniques

The measurement instruments are tested for validity and reliability before analysis was made for completeness and compatibility with the purpose of the study. Pre-tests of a questionnaire were conducted with 20 firms of varying sizes and belonging to different sectors for getting feedback regarding the clarity of the survey items and to evaluate new questionnaire items developed for the research. The same instrument is used for pre-test and post-test measures to ascertain the data quality and reliability. To measure the reliability Cronbach' α test of reliability has been used. The data gathered through questionnaires were analyzed and

presented by quantitative methods of data analysis. For quantitative analysis descriptive statistics, correlation analysis and multiple linear regression analysis was applied. The results were interpreted using the values from the mean, standard deviation, and coefficients and presented quantitatively through tables and figures to give a condensed picture of the data.

4. Results and analysis

4.1 Results of descriptive statistics analysis

From the mean value, we identified that the firms are moderately innovative. Regarding the age and size of the firm, less than half of firms are above ten years in existence and less than half of firms have more than ten workers. From this, we can understand that more firms have less experience in the market since they are recently established and these firms size is also small. Small firm’s owners/managers are moderately passionate toward their job. Most of the firms faced scarcity of entrepreneurial resources that used (both financial and human capital) to run their business (Table I).

4.2 Results of regression analysis

According to Cooper and Schindler (2009), multicollinearity problem should be corrected when the correlation extent to be above 0.8. In our case, there is no value that exceeds 0.8. All tolerance values are also less than 0.10. As a result, collinearity is not a problem. The result of regression analysis shows that in the first model, only control variables were included and the main effects are added in the second model. Later moderating variables are included and finally, the interaction variables added. The control variables include firm age and firm size. Entrepreneurial commitment and environmental unpredictability used as moderating variables. The outcome of the analysis reveals that, our results were statistically significant because $F = 5.509, p = 0.005$ for model 1, $F = 71.350, p = 0.000$ for model 2, $F = 71.435, p = 0.000$ for model 3, $F = 53.845, p = 0.000$ for model 4. The control variables alone explain entrepreneurial engagement 9.2 percent, and with main effects it explains 72.7 percent. In model 3 after moderators are added it explains about 80.3 percent and it reaches 84.2 percent after interaction variables (Table II).

The result of model 1 indicates firm size positively influences innovativeness in the first model only, while it is insignificant in the rest of models. The research finds a positive direct impact of passion and entrepreneurial resource on innovativeness. The moderator’s entrepreneurial commitment and environmental unpredictability also moderate the relationship between entrepreneurial passion and innovativeness, as well as entrepreneurial resources and innovativeness. Regarding the interaction variables, the joint influence of entrepreneurial passion and commitment positively influences the innovativeness. The interaction of resource and unpredictability also influences innovativeness negatively.

	Mean	SD
Innovativeness	3.1696	1.27970
AGE	0.4554	0.53505
SIZE	0.4375	0.49831
Passion	3.1250	1.33643
Resource	2.5268	1.01307
Commitment	3.0268	1.46712
Unpredictability	3.0714	0.97458
Passion_commitment	10.9911	8.90439
Passion_unpredictability	8.9196	3.49037
Resource_commitment	8.6339	6.21245
Resource_unpredictability	7.3750	3.18817

Table I.
Descriptive
statistics result

Variables	Model 1	Model 2	Model 3	Model 4
AGE	0.233(1.065)	0.177 (1.460)	0.056 (0.531)	0.124 (1.237)
SIZE	-0.726*** (-3.093)	-0.184 (-1.368)	-0.121 (-1.048)	0.007 (0.066)
Passion	-	0.568*** (8.712)	0.252*** (3.368)	0.572** (2.554)
Resource	-	0.385*** (-4.549)	0.247 (3.241)	0.578** (2.280)
Commitment	-	-	0.332*** (5.031)	0.824*** (5.896)
Unpredictability	-	-	-0.254*** (-3.640)	0.050 (0.305)
Passion_commitment	-	-	-	0.125*** (3.350)
Passion_unpredictability	-	-	-	0.055 (1.221)
Resource_commitment	-	-	-	-0.031 (-0.593)
Resource_unpredictability	-	-	-	-0.186** (-2.447)
Constant	3.381***	0.424*	1.559***	0.272*
R ²	0.092	0.727	0.803	0.842
Adjusted R ²	0.075	0.717	0.792	0.826
F	5.509	71.350	71.435	53.845

Notes: * $p < 0.1$; ** $p < 0.05$; *** $p < 0.01$

Table II.
Multi-level
regression result

5. Discussion

Since innovativeness is the engagement in new ideas, new products, new technology, new processes, and new markets that exploit business opportunities, it improves the overall performance of a given firm. But the current practice is not sufficient among small firms. That is the level of control is high, the involvement in new product and market is not sufficient. The strong desire and drive to discover new business opportunity, the existence of emotional energy and strong spirit to exploit a new opportunity, and the owners/managers intense affect contribute to the involvement in entrepreneurial activity among owners/managers is moderately practiced. In addition, the insufficiency of both human capital and financial capital hinders the innovativeness level of small firm owners/managers.

Passion is a driving force for entrepreneurial activity because small firm owners/managers who are passionate were more innovative. Passionate firms are involved more on discovering and exploitation of promising business opportunities in existed firms, which includes entering a new market, developing a new product, and introducing new technology. This is the internal driving force, emotional energy, and strong spirit that influence the owners/managers of small firms to be more innovative. When firms are enjoyable and motivated to new ideas and market need, when they are excited in scanning their environment and inventing new solutions for the problems they faced, they tend to innovate more. This is because the internal positive affective force and drive that makes them be motivated and excited in innovating new products/services, new markets, technologies, and processes by scanning their environment and searching new solutions for their problems. In general, entrepreneurial passion encourages the involvement of individuals on searching for new ideas and contributes to searching of new products/services by scanning the environment in which the firms were involved.

No firms can survive, compete against large corporations, and grow without having resources required to involve in entrepreneurial activity such as innovativeness. It is widely discussed that entrepreneurial resources are essential for managers to involve in innovativeness. That is innovativeness is dependent on the availability of both human and financial capitals since they are success factors of firms. The appropriate educational level and sufficient household income encourage individuals to involve in innovative practices. Individuals and firms who have adequate human and financial capital tend to exploit opportunities easily because they develop the required skill to identify promising business opportunities, and tends to have a financial capacity needed to exploit the discovered opportunities.

When passionate firms are devoted their time, effort, and energy, individuals become successful in innovation. That is the commitment from different factors including financial, emotional, intellectual, and behavioral acts raises a fire on the individuals to be more innovative. Therefore, commitment influences innovativeness by raising the driving internal emotions and energy toward involvement in new product/service and processes development. Directly commitment affects the individual's passion that makes them stronger in innovating new processes and products/services because their commitment leads them to change their ambition to action. Not only passion, the commitment of owners/manager also intensifies the relationship between entrepreneurial resources and innovativeness. Managers that are committed exploit their resources more effectively toward innovating new products/services and technologies. The desire and drive of innovativeness were not more successful without committed human power and sufficient capital. These are the fires that change the ambition of individuals to innovative action.

The unpredictability and uncertainty of the environment is the factor that hinders the relationship between entrepreneurial passion and innovativeness. The passion in the unpredictable environment faced a challenge in changing the desire to actions. The uncertainty in the environment increases complexity, which brings difficulty in controlling the environment. The development of new product/services and new systems were also weak when the environment is unpredictable. It is known that entrepreneurial resources encourage entrepreneurs toward innovativeness, but the unpredictable environment can bring fear and worry that hinders these entrepreneurs in engaging in entrepreneurial activity of innovativeness. Many small firms failed at the early stage because they lack both skilled human capital and financial resource that breakthrough the unpredictable environment. In general, the environment which includes social, regulatory, and physical influences the relationship between entrepreneurial resources and innovativeness of owners/managers.

6. Conclusions and implications

6.1 Conclusions

The study highlights the current practice of innovativeness, the level of owners/manager passion, and entrepreneurial resources, as well as the influence of entrepreneurial passion and resources on innovativeness under different environment and commitment level. The finding of the study indicates that the innovativeness practice among small firm's owners/managers is moderate. The available resource is not sufficient while the entrepreneurial passion level is moderate. The model combines the dimensions of entrepreneurial passion and entrepreneurial resource in influencing innovativeness under different entrepreneurial commitment level and dynamic environment. Drawing on the previous literature, the study identified the personal drives as well as resources positively influence innovativeness. In addition, the positive influences of entrepreneurial passion and resources on innovativeness intensified by the commitment of owners/managers, while the influence of entrepreneurial passion and resources on innovativeness is weakened because of the unpredictable environment.

6.2 Practical implications

The finding of the study will be used to guide the policy makers and provides implication for the owners/managers. The policy makers should develop sustainable strategies that encourage passionate firms toward innovativeness. The policy should also include the strategies of discovering and exploiting business opportunities and resources to encourage owners/managers of small firms toward innovativeness. The paper also provides implication for owners/managers of small firms in different ways. First, the owner/managers who are passionate should be committed in order to be innovative. The commitment is also required to

exploit financial and human resources to be innovative. Second, the owners/managers should be ready to take risks in an unpredictable environment since opportunities were discovered and exploited from the uncertain environment.

6.3 Limitations and future implication

This research is not exempt from some limitations. To specify the limitation that we faced, first our research concerns the subjective measure of financial capital while it has more importance when both financial and non-financial measures are combined. Therefore the future research should include the financial measures in addition to non-financial measures. Second, the study is limited to central Ethiopia, while it has a paramount importance if it covers a large geographical area that represents the continent or the world. As a result, a cross-country study is recommended for future researchers for generalization. Finally, there are also other factors that influence innovativeness such as entrepreneurial intention and entrepreneurial background. Therefore, the future research may improve the relationship by adding these and other variables in the relationship between entrepreneurial passion, entrepreneurial resources and innovativeness.

References

- Alsos, G.A., Sara, C.S. and Ljunggren, E. (2003), "Entrepreneurial families and households", Research Paper No. 10, ERC, Birmingham.
- Autio, E. and Acs, Z. (2010), "Intellectual property protection and the formation of entrepreneurial growth aspirations", *Strategic Entrepreneurship Journal*, Vol. 4 No. 3, pp. 234-251.
- Baron, R. and Tang, J. (2011), "The role of entrepreneurs in firm-level innovation: joint effects of positive affect, creativity, and environmental dynamism", *Journal of Business Venturing*, Vol. 26 No. 1, pp. 49-60.
- Baron, R.A. (2008), "The role of affect in the entrepreneurial process", *Academy of Management Review*, Vol. 33 No. 2, pp. 328-340.
- Biraglia, A. and Kadile, V. (2017), "The role of entrepreneurial passion and creativity in developing entrepreneurial intentions: insights from American homebrewers", *Journal of Small Business Management*, Vol. 55 No. 1, pp. 170-188.
- Breugst, N., Domurath, A., Patzelt, H. and Klaukien, A. (2012), "Perceptions of entrepreneurial passion and employees' commitment to entrepreneurial ventures", *Entrepreneurship Theory and Practice*, Vol. 36 No. 1, pp. 171-192.
- Cardon, M. (2008), "The discriminant validity of entrepreneurial passion (summary)", *Frontiers of Entrepreneurship Research*, Vol. 28 No. 4, Article No. 3, available at: <https://digitalknowledge.babson.edu/fer/vol28/iss4/3/>
- Cardon, M.S., Gregoire, D., Stevens, C.E. and Patel, P.C. (2013), "Measuring entrepreneurial passion: conceptual development and scale validation", *Journal of Business Venturing*, Vol. 28 No. 3, pp. 373-396.
- Cardon, M.S., Wincent, J., Singh, J. and Drnovsek, M. (2009), "The nature and experience of entrepreneurial passion", *Academy of Management Review*, Vol. 34 No. 3, pp. 511-532.
- Carland, J.W., Hoy, F., Boulton, W.R. and Carland, J.C. (1984), "Differentiating entrepreneurs from small business owners: a conceptualization", *Academy of Management Review*, Vol. 9 No. 2, pp. 354-359.
- Cooper, D.R. and Schindler, P.S. (2009), *Business Research Methods*, 9th ed., McGraw-Hill Irwin, New York, NY.
- Covin, J. and Miles, M. (1999), "Corporate entrepreneurship and the pursuit of competitive advantage", *Entrepreneurship: Theory & Practice*, Vol. 23 No. 3, pp. 47-63.
- Covin, J.G., Green, K.M. and Slevin, D.P. (2006), "Strategic process effects on the entrepreneurial orientation – sales growth rate relationship", *Entrepreneurship Theory and Practice*, Vol. 30 No. 1, pp. 57-81.
- Davis, B.C., Hmieleski, K.M., Webb, J.W. and Coombs, J.E. (2017), "Funders' positive affective reactions to entrepreneurs' crowd funding pitches: the influence of perceived product creativity and entrepreneurial passion", *Journal of Business Venturing*, Vol. 32 No. 1, pp. 90-106.

- Drnovsek, M., Cardon, M.S. and Patel, P.C. (2016), "Direct and indirect effects of passion on growing technology ventures", *Strategic Entrepreneurship Journal*, Vol. 10 No. 2, pp. 194-213.
- Duran, P., Kammerlander, N., van Essen, M. and Zellweger, T. (2016), "Doing more with less: Innovation input and output in family firms", *Academy of Management Journal*, Vol. 59 No. 4, pp. 1224-1264.
- Durand, R. and Coeurderoy, R. (2001), "Age, order of entry, strategic orientation, and organizational performance", *Journal of Business Venturing*, Vol. 16 No. 5, pp. 471-494.
- Edelman, L. and Yli-Renko, H. (2010), "The impact of environment and entrepreneurial perceptions on venture-creation efforts: bridging the discovery and creation views of entrepreneurship", *Entrepreneurship Theory and Practice*, Vol. 34 No. 5, pp. 833-856.
- Fayolle, A. and Liñán, F. (2014), "The future of research on entrepreneurial intentions", *Journal of Business Research*, Vol. 67 No. 5, pp. 663-666.
- Ghosh, S., Bhowmick, B. and Guin, K.K. (2014), "Perceived environmental uncertainty for startups: a note on entrepreneurship research from an Indian perspective", *Technology Innovation Management Review*, Vol. 4 No. 8, pp. 27-35.
- Gozukara, I. and Colakoglu, N. (2016), "Enhancing entrepreneurial intention and innovativeness of university students: the mediating role of entrepreneurial alertness", *International Business Research*, Vol. 9 No. 2, Article No. 34.
- Hadjimanolis, A. (2000), "A resource-based view of innovativeness in small firms", *Technology Analysis & Strategic Management*, Vol. 12 No. 2, pp. 263-281.
- Ho, V.T. and Pollack, J.M. (2014), "Passion isn't always a good thing: examining entrepreneurs' network centrality and financial performance with a dualistic model of passion", *Journal of Management Studies*, Vol. 51 No. 3, pp. 433-459.
- Hughes, M. and Morgan, R.E. (2007), "Deconstructing the relationship between entrepreneurial orientation and business performance at the embryonic stage of firm growth", *Industrial Marketing Management*, Vol. 36 No. 5, pp. 651-661.
- Huyghe, A., Knockaert, M. and Obschonka, M. (2016), "Unraveling the 'passion orchestra' in academia", *Journal of Business Venturing*, Vol. 31 No. 3, pp. 344-364.
- Ismail, I., Husin, N., Abdul Rahim, N., Kamal, M.H. and Che Ma, R. (2016), "Entrepreneurial success among single mothers: the role of motivation and passion", *Procedia Economics and Finance*, Vol. 37, pp. 121-128, available at: [https://doi.org/10.1016/S2212-5671\(16\)30102-2](https://doi.org/10.1016/S2212-5671(16)30102-2)
- Kuraś, M. and Łęgowik-Świącik, S. (2014), "Investments in human capital and innovativeness of enterprises", *Proceedings of FIKUSZ '14 Symposium for Young Researchers*, pp. 161-170.
- Li, X. (2009), "Entrepreneurial competencies as an entrepreneurial distinctive: an examination of the competency approach in defining entrepreneurs", dissertations and theses collection (open access), Singapore, available at: http://ink.library.smu.edu.sg/etd_coll/14/
- Lim, D.S.K., Oh, C.H. and Clercq, D.D. (2016), "Engagement in entrepreneurship in emerging economies: interactive effects of individual-level factors and institutional conditions", *International Business Review*, Vol. 25 No. 4, pp. 933-945.
- Lyon, D.W., Lumpkin, G.T. and Dess, G.G. (2000), "Enhancing entrepreneurial orientation research: operationalizing and measuring a key strategic decision making process", *Journal of Management*, Vol. 26 No. 5, pp. 1055-1085.
- Lumpkin, G.T. and Dess, G.G. (1996), "Clarifying the entrepreneurial orientation construct and linking it to performance", *The Academy of Management Review*, Vol. 21 No. 1, pp. 135-172.
- McMullen, J.S. and Shepherd, D.A. (2006), "Entrepreneurial action and the role of uncertainty in the theory of the entrepreneur", *Academy of Management Review*, Vol. 31 No. 1, pp. 132-152.
- Massis, A.D., Audretsch, D., Uhlaner, L. and Kammerlander, N. (2017), "Perspective innovation with limited resources: management lessons from the German Mittelstand", *Journal of Product Innovation Management*, doi: 10.1111/jpim.12373.

- Miller, D. and Shamsie, J. (1996), "The resource-based view of the firm in two environments: the Hollywood film studios from 1936 to 1965", *Academy of Management Journal*, Vol. 39 No. 3, pp. 519-543.
- Murnieks, C.Y., Cardon, M.S., Sudek, R., White, T.D. and Brooks, W.T. (2016), "Drawn to the fire: the role of passion, tenacity and inspirational leadership in angel investing", *Journal of Business Venturing*, Vol. 31 No. 4, pp. 468-484.
- Okhomina, D. (2010), "Entrepreneurial postures and psychological traits: The sociological influences of education and environment", *Research in Higher Education Journal*, Vol. 8 No. 20, pp. 1-20.
- Omisakin, O.M. *et al.* (2016), "Entrepreneurial orientation among migrants and small and medium enterprises", *Journal of Business Administration Research*, Vol. 5 No. 1, pp. 7-22, available at: <https://doi.org/10.5430/jbar.v5n1p7>
- Pellissier, R. (2012), "Innovation in a complex environment", *South African Journal of Information Management*, Vol. 14 No. 1, Article No. 499.
- Schilling, M.A. (2013), *Strategic Management of Technological Innovation*, 4th ed., McGraw-Hill, New York, NY.
- Senyard, J., Baker, T., Steffens, P. and Davidsson, P. (2014), "Bricolage as a path to innovativeness for resource-constrained new firms", *Journal of Product Innovation Management*, Vol. 31 No. 2, pp. 211-230.
- Shane, S. (2000), "Prior knowledge and the discovery of entrepreneurial opportunities", *Organization Science*, Vol. 11 No. 4, pp. 448-469.
- Shane, S. and Venkataraman, S. (2000), "The promise of entrepreneurship as a field of research", *Academy of Management Review*, Vol. 25 No. 1, pp. 217-226.
- Shirokova, G., Osiyevskyy, O. and Bogatyreva, K. (2016), "Exploring the intention-behavior link in student entrepreneurship: moderating effects of individual and environmental characteristics", *European Management Journal*, Vol. 34 No. 4, pp. 386-399.
- Sirmon, D., Hitt, M., Ireland, R. and Gilbert, B. (2011), "Resource orchestration to create competitive advantage breadth, depth, and life cycle effects", *Journal of Management*, Vol. 37 No. 5, pp. 1390-1412.
- Sundararajan, M. and Peters, L. (2007), "Role of emotions in the entrepreneur's opportunity recognition process", paper presented at the annual meeting of the Academy of Management, Philadelphia, PA.
- Tasnim, R. and Singh, H. (2016), "What, exactly, is entrepreneurial commitment? Modelling the commitment of successful entrepreneurs", *The Journal of Applied Management and Entrepreneurship*, Vol. 21 No. 3, pp. 6-35.
- Vallerand, R.J., Mageau, G.A., Ratelle, C., Leonard, M., Blanchard, C., Koestner, R., Gagne, N. and Marsolais, J. (2003), "Lespassions de l'ame: on obsessive and harmonious passion", *Journal of Personality and Social Psychology*, Vol. 85 No. 4, pp. 756-767.
- Wiklund, J., Patzelt, H. and Shepherd, D.A. (2009), "Building an integrative model of small business growth", *Small Business Economics*, Vol. 32 No. 4, pp. 351-374.
- Zwan, P., Thurik, R., Verheul, I. and Hessels, J. (2016), "Factors influencing the entrepreneurial engagement of opportunity and necessity entrepreneurs", *Eurasian Business Review*, Vol. 6 No. 3, pp. 273-295.

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