

The Importance of Competencies for Entrepreneurship: A View from Entrepreneurs and Scholars' Perspective

Edgar Izquierdo, University of Ghent (UGent)

Dirk Deschoolmeester, University of Ghent (UGent)

Danny Salazar, ESPOL

Abstract¹

This article explores entrepreneurs' competencies in order to rank them according to their level of importance for entrepreneurship. Specifically, it explores what entrepreneurs within the Ecuadorian context and scholars from different countries say about relevant competencies that entrepreneurs are expected to manifest when facing a business startup. An examination of relevant entrepreneurs' competencies is legitimized by the importance of considering entrepreneurs' and experts' opinions. Two surveys, conducted among Ecuadorian entrepreneurs and scholars from several countries, aimed to identify the most relevant competencies for entrepreneurship. A list of entrepreneurs' competencies was developed based on entrepreneurship literature. This list was presented to respondents to rank the competencies according to their perceived level of importance. Entrepreneurs, on the one hand, consider that decision making is the most important competency when embarking on an entrepreneurial venture, whereas scholars are in favor of identifying business opportunities. We posit that the outcomes of these surveys provide valuable information for educators and policy makers. For the former, it can help them adapt their courses and curricula in order to better prepare students and to increase their confidence for a successful business startup. For the latter, information provided in this paper can help them design effective programs to foster entrepreneurship. A discussion of the findings and implications for future research are presented.

Keywords: Competencies; entrepreneurship; entrepreneurs; scholars.

¹ Este artículo fue presentado en el IntEnt 2005, julio 11 de 2005, Surrey - Reino Unido.

INTRODUCTION

Over the last decade, great attention has been given to competence-based education, and it is currently booming in several countries (Stoof, 2005). The term competence has been credited as crucial in the field of psychology (Barret & Depinet, 1991). McClelland (1973), considered to be the initiator of the competency movement in psychology (Barret & Depinet, 1991), proposed that testing for competence is more effective than testing for intelligence in predicting job performance and reducing biases against minorities, women, and people from lower socioeconomic strata. The concept of competence has mainly been applied in the world of business, and more specifically in the field of recruiting and selecting new employees (Stoof, 2005). In the domain of entrepreneurship, previous research has studied models of competency in order to examine entrepreneurs' competencies regarding the importance of initiating and succeeding in new businesses (Bird, 2002). Likewise, Onstenk (2003) maintains that proper entrepreneurial competencies are required to successfully start, operate and ensure the survival of a new business in the marketplace. From an educational perspective, scholars are primarily concerned with the development of individual-level competencies for entrepreneurship (Bird, 2002). So, the following question arises: what competencies for entrepreneurship should individuals be able to manifest when facing an entrepreneurial venture? More specifically, from educational and public policy perspectives, the questions should be: what competencies for entrepreneurship should universities and colleges address in their curricula for undergraduate and graduate programs? And what competencies should policy makers, educators and other stakeholders address in their policies in order to predict venture outcomes? Prior research has acknowledged these questions by recognizing the importance of examining entrepreneurs' competencies and their expected causal relationship with venture initiation and success (Bird, 1995). Under the assumption that the relationship exists, identifying relevant competencies for entrepreneurship can help educators and policy makers design appropriate mechanisms to foster entrepreneurial activity in their communities. The former can adapt their courses and curricula to better prepare students and possibly increase their confidence and motivation for successful business startups and the survival of profitable enterprises. Accordingly, competence-based education and training can be designed to promote entrepreneurial activity among university students. Policy makers, on the other hand, can reorient their practices and policies to stimulate the diffusion and development of entrepreneurship. However, we first need more rigorous qualitative studies to reach a better understanding in this field, since the application of competency concepts has received rather minor attention (Bird, 1995).

For the field of entrepreneurship, one of the important contributions is that of Mansfield, McClelland, Spencer, & Santiago (1987). They sustain that the identification of relevant entrepreneurial competencies should provide insight into the field of entrepreneurship, and such competencies might predict business formation and success within and across cultures. Other studies on entrepreneurial competency have been conducted by Chandler & Jansen (1992), Chandler & Hanks (1994), and Man & Lau (2002) in order to identify which competencies are crucial in starting and maintaining a business. According to Chandler and Jansen (1992), for example, one of the primary roles of business founders is related to scanning their environments, choosing potential opportunities, and taking advantages of those opportunities by formulating the required strategies. Also, evidence of direct relationships between founders' entrepreneurial and managerial competencies and firm performance has been found (Chandler and Hanks, 1994). These studies were important because they demonstrated that a competency approach seems to be a more effective tool in predicting firm performance than entrepreneurial experience alone (Bird, 2002). In spite of such important contributions, a follow-up examination of competencies for entrepreneurship is worthwhile given its relevance to the context of education and public policy. Hence, knowing which competencies students should acquire is of great importance for educational purposes, since educators can design their entrepreneurship courses accordingly. Even if it might not be

possible to turn students into entrepreneurs, we contend that possessing entrepreneurial competencies can give them confidence in creating new ventures. This, in turn, might go some way towards stimulating the development of an entrepreneurial activity among students.

This article presents the outcomes of two surveys, one conducted among entrepreneurs in the Ecuadorian context and the other among scholars from several countries. Specifically, these surveys examine those competencies that entrepreneurs are expected to manifest when facing the creation of a new venture. This article then advocates the need to instill in university students, by way of a proper entrepreneurship training program, the development of the most relevant entrepreneurial competencies. As competencies are demonstrated by a person's behavior and actions, they can be observable and possibly changed in a shorter term than personality traits (Bird, 1995; Man et. al., 2002). This belief provides us with the possibility of educational intervention. Thus, students who are exposed to such training are expected to be better prepared for a business startup than those who are not. This proposition to some extent presumes that students who possess entrepreneurial competencies will be more likely to eventually start their own businesses later on in their future career.

The objective of the present paper is to answer the following questions: What is the validity of the relevant competencies of entrepreneurs, provided by the existing literature on entrepreneurship, within the Ecuadorian small and medium business sector? What is the degree of importance of relevant entrepreneurial competencies according to scholars' opinions? What are the entrepreneurial competencies most frequently cited as of high importance by both parties?

This research seeks to make the following contributions to the field of entrepreneurship: (1) we build upon previous research and explore the validity of entrepreneurs' competencies. For this part of the study, a contrast between entrepreneurs' and scholars' opinions is given; (2) we attempt to shed some light on the ongoing debate over what should be taught in an entrepreneurship course; (3) we provide valuable information for entrepreneurship educators to help them adjust their course content and curricula in order to instill in students the development of relevant entrepreneurial competencies. The following sections will firstly present a brief discussion of the definition of competence. Secondly, a set of entrepreneurs' competencies is identified based on the existing entrepreneurship literature. Finally, the analysis and results are presented along with the implications for further research.

WHAT IS COMPETENCE?

It is often believed that competence is a combination of knowledge, skills and attitudes which are required by employees in their jobs or tasks (Stoof, 2005). Gibb (1990, 21), for example, defines competence as "an ability to perform certain tasks for which knowledge, skills, attitudes and motivations are necessary". Bird (1995) maintains that the definition of competence is most clearly described by Boyatzis (1982) in his model of managerial competency. According to Boyatzis (1982, 21) "a job competency is an underlying characteristic of a person in that it may be a motive, trait, skill, aspect of one's self-image or social role, or a body of knowledge which he or she uses". Figure 1 exemplifies the interaction of the conceptual model presented by (Boyatzis, 1982). Similarly, Spencer & Spencer (1993, 9) define a competency as "an underlying characteristic of an individual that is causally related to criterion-referenced effective and/or superior performance in a job or situation. Underlying characteristic means the competency is a fairly deep and enduring part of a person's personality and can predict behavior in a wide variety of situations and job tasks. Causally-related means that a competency causes or predicts behavior and performance. Criterion-referenced means that the competency actually predicts who does something well or poorly, as measured on a specific criterion or standard". Continuing with

Spencer & Spencer (1993), the characteristics of a person can be seen as an iceberg split up into two parts: one is visible and includes knowledge and skills, and the other is hidden and comprises self-concept, trait or motive (see Fig. 2). According to Spencer & Spencer (1993, 12), “behavior without intent does not define a competency”. Thus, the causal relationship in the definition of a competency involves an intent, which is the motive or trait force that pushes an action towards an outcome (Spencer & Spencer, 1993).

From the above discussion, we realize that there is no single definition of competence. It is even argued that the definition of competence is still lacking a theoretical framework, although it has been recognized as an important concept in human resources and development (HRD) and in education (Stoof, 2005). Despite the relative differences in the definitions, we can observe that the term competence is a broad concept that consistently associates knowledge, skills, attitudes and motivations as dimensions that competent entrepreneurs must be able to use in order to deal with the tasks and problems related to their entrepreneurial actions (Onstenk, 2003). Thus, the definition of competence acknowledges that the presence of suitable attitudes might lead to the adoption of good practices. In other words, individuals who show positive attitudes towards the creation of a new venture and who have the required knowledge and skills are able to deploy the necessary competencies to face the challenges and uncertainties involved in a business start-up and/or early growth stage. Onstenk (2003, 78) sustains that “a competent entrepreneur must be able to use knowledge, attitudes and skills in such a way as to be able to deal effectively with tasks, problems, dilemmas and contradictions...”

COMPETENCIES OF ENTREPRENEURS

Previous research has focused attention on identifying areas of development for entrepreneurship and competencies to succeed in businesses. For example, Ronstad (1985) suggested a set of fourteen skills to be developed through entrepreneurship education. Some of these skills included creativity, ambiguity tolerance, opportunity identification and venture evaluation, career assessment, deal making, networking, and ethical assessment. By examining six European entrepreneurship education and training programs, Garavan and O’Cinneide (1994b) indicated that there were some specific elements which formed part of the content of all programs. These elements included reality-testing skills, creativity, ambiguity tolerance and stress-coping mechanisms. They argued that the consideration of these elements recognizes the unique situations faced by entrepreneurs. According to Bird (1988), entrepreneurs who have networking and team building skills are more successful than entrepreneurs who do not possess these skills. Hood & Young (1993) maintain that four primary areas must be developed for entrepreneurial success. These areas focus on content, skills and behavior, mentality and personality. By asking 100 leading entrepreneurs and chief executive officers (CEOs) in America’s fastest-growing entrepreneurial firms, Hood & Young (1993) found that content areas of knowledge are those mainly addressed on business education, such as finance, cash management, accounting, and marketing. Leadership, oral and written communication, and human relations are the most important skills for successful entrepreneurship (Hood & Young, 1993). Moreover, mentality factors include creativity, opportunistic thinking, and vision. The fourth area refers to personality traits, which are usually believed to be more stable and, therefore, less likely to be changed (Hood & Young, 1993).

Two other important contributions are those of Chandler & Jansen (1992) and Chandler & Hanks (1994). According to Chandler & Jansen (1992), business founders must assume three predominant roles in their businesses. These are the entrepreneurial, managerial and technical-functional roles. The entrepreneurial role requires entrepreneurs to scan their environments, choose potential opportunities and take advantage of those opportunities by

setting the necessary strategies. These abilities are identified as entrepreneurial competencies (Chandler & Hanks, 1994). The managerial role demands the interaction of the business founders with their environment for the acquisition and use of resources. The technical-functional role requires the founder to function effectively in tasks related to the technical field within a certain industry. Chandler & Jansen (1992) studied the relationship between business founders' self-perceived competencies and venture performance, and identified five competency areas associated with successful business founders. These include human and conceptual competencies, ability to recognize opportunities, drive to see venture through to fruition, technical-functional competencies, and political competencies. Other studies also support previous research by providing evidence of direct relationships between founders' entrepreneurial and managerial competencies and firm performance (Chandler & Hanks, 1994).

Previous research has also identified a set of entrepreneurial competencies. One example is a study that links entrepreneurial competencies of SME owner/managers in the Hong Kong services sector to firm performance (Man & Lau, 2000). Another example is the work of Man, Lau, & Chan (2002). These include the opportunity, relationship, conceptual, organizing, strategic, and commitment competencies. The opportunity competencies are related to identifying, assessing and seeking market opportunities. The relationship competencies embrace the ability to build, keep, and use networks with all the firm's stakeholders. The conceptual competencies refer to the abilities that are reflected in the behavior of the entrepreneur associated with intuitive thinking, innovative behavior, assessment of risk, and the need to have a different view of the market. The organizing competencies are related to managerial functions such as planning, organizing, leading, motivating, delegating, and controlling. The strategic competencies deal with setting, evaluating, and implementing the strategies of the firm. The commitment competencies are the abilities that drive the entrepreneur to work hard and face the difficulties involved in sustaining the business. Moreover, findings of previous studies indicate that communication ability is one of the relevant competencies for entrepreneurship (Onstenk, 2003; Hood & Young, 1993). Onstenk (2003) maintains that an entrepreneur has to be able to persuade and discuss with various stakeholders such as customers, clients, suppliers, competitors, service providers and the like. Also, the study conducted by Hood & Young (1993) among entrepreneurs and CEOs reported that the ability to communicate both in written form and orally was one of the most frequently mentioned as essential for entrepreneurial success.

Bird (1995) has provided a more complete working list of entrepreneurial competencies through a summary of much of the entrepreneurship literature. This list has considered those competencies that have had empirical support and those that are theoretical and speculative. As we see from the above discussion, business founders are expected to possess a variety of competencies if they are to succeed. However, entrepreneurs might not have all the competencies at all times and in all situations.

METHODOLOGY

What follows is a description of the process followed in order to examine the importance of competencies for entrepreneurship. We reviewed the opinions from the entrepreneurs' and scholars' perspectives. We were first interested in validating the competencies proposed by the entrepreneurship literature among entrepreneurs in the Ecuadorian context and scholars from several countries. Secondly, we sought to confront the two parties' opinions with the aim of exploring possible differences. We also had to consider difficulties encountered by research staff gathering data from entrepreneurs, since we perceived a lack of willingness on the part of entrepreneurs to cooperate with this research study.

Research framework

The framework for this study consisted of three stages, as shown in Fig. 3.

Stage one: Validity of relevant entrepreneurs' competencies

Based on the existing literature, a list of competencies for entrepreneurship was developed. This list was presented to 60 entrepreneurs within the Ecuadorian context and 53 scholars from different countries worldwide with the purpose of contrasting their opinions. Responses from 25 entrepreneurs and 43 scholars were received, yielding a response rate of 41.7% and 81.1% respectively.

Stage two: Review of entrepreneurs' and scholars' opinions

Respondents were asked to rate the importance of each of the entrepreneurs' competencies from the list provided in the survey instrument. Based on the data given by respondents, we chose the number of answers rated with high importance and calculated the percentage for each of the competencies. Next, we ordered the competencies according to the frequencies of high importance answers. Finally, we performed the Chi-square test to find evidence of significant differences between the low and high importance answers (see Table 1).

Stage three: Selecting competencies according to both parties' opinions

In this stage of the study, we sought to confront the opinions of both groups of respondents in order to select the most relevant competencies according to the entrepreneurs' and scholars' perspectives. From the results of performing the Chi-square test among each group of competencies and the t test among respondents, we selected those competencies that demonstrated significant differences. Moreover, we highlighted those that showed differences among respondents. Finally, we built a new list of competencies by selecting only those that were significant and common in both groups (see Tables 2 and 3).

RESULTS

As shown in Table 1, results indicate relative differences in responses among entrepreneurs' and scholars' opinions. Entrepreneurs, on the one hand, consider that decision making is the most important competency when embarking on an entrepreneurial venture, whereas scholars are in favor of identifying business opportunities. Innovating thinking, identifying and solving problems, and identifying business opportunities are the next three most important competencies for entrepreneurship according to the entrepreneurs' perspective. On the other hand, evaluating business opportunities, decision making, and networking are regarded by scholars as the next most frequently cited as important to success. When the Chi-square test was run on the data from the entrepreneurs' opinions, twelve competencies were significant at the 0.001 level, one at the 0.01, and two at the 0.05 level. These competencies were: decision making, innovative thinking, identifying and solving problems, identifying and evaluating business opportunities, oral communication, team working, team building, networking, deal making and negotiation, intuitive thinking, having a different view of the market, dealing with failure, coping with stress, and analytical thinking. Similarly, when performing the Chi-square test on the data based on the scholars' opinions, nine competencies were significant at the 0.001 level. Out of them, eight were demonstrated to be of high importance (identifying and evaluating business opportunities, decision making, networking, identifying and solving problems, oral communication, coping with uncertainties, and innovative thinking). The ninth competency, language learning ability, was regarded as of low importance for entrepreneurship.

Table 1 Importance of Entrepreneurs' Competencies

Competencies	Scholars ^a		Entrepreneurs ^b	
	%	X ² (1)	%	X ² (1)
Identifying business opportunities	97.7*	39.1	96*	21.16
Evaluating business opportunities	90.7*	28.5	92*	17.64
Decision making	88.4*	25.3	100*	25
Identifying and solving problems	88.4*	25.3	100*	25
Networking	88.4*	25.3	84*	11.56
Oral communication abilities	79.1*	14.5	92*	17.64
Coping with uncertainties	79.1*	14.5	68	3.24
Innovative thinking	76.7*	12.3	100*	25
Team building abilities	72.1	8.4	88*	14.44
Deal making and negotiation	69.8	6.7	92*	17.64
Dealing with failure	65.1	3.9	80**	9
Coping with stress	65.1	3.9	72***	4.84
Calculated risk taking	65.1	3.9	64	1.96
Intuitive thinking	62.8	2.8	84*	11.56
Having a different view of the market	60.5	1.9	84*	11.56
Team working abilities	58.1	1.1	92*	17.64
Analytical thinking	37.2	2.8	72***	4.84
Writing communication abilities	34.9	3.9	68	3.24
Language learning abilities	18.6*	17.0	44	0.36

^a n=43 scholars; * p<0.001

^b n=25 entrepreneurs; **p<0.01, *** p<0.05

By following the process explained above, we ended up with seven entrepreneurial competencies as shown in Table 2.

Table 2 Most Relevant Entrepreneurial Competencies

Competencies	Scholars ^a	Entrepreneurs ^b
	%	%
Identifying business opportunities	97.7	96
Evaluating business opportunities	90.7	92
Decision making	88.4	100
Networking	88.4	84
Identifying and solving problems	88.4	100
Oral communication abilities	79.1	92
Innovative thinking	76.7	100

^a n=43 scholars

P<0.001

^b n=25 entrepreneurs

Finally, to examine whether statistical differences may exist among respondents on each of the competencies listed in Table 2, the t test was performed. By doing so, five of the seven competencies were significant at the 0.05 level (see Table 3).

Table 3 Final List of Most Relevant Entrepreneurial Competencies

Competencies	Scholars ^a	Entrepreneurs ^b
	%	%
Identifying business opportunities	97.7	96
Evaluating business opportunities	90.7	92
*Decision making	88.4	100
*Networking	88.4	84
*Identifying and solving problems	88.4	100
*Oral communication abilities	79.1	92
*Innovative thinking	76.7	100

^a n=43 scholars

P < 0.05

^b n=25 entrepreneurs

DISCUSSION AND IMPLICATIONS

This research study makes three major contributions to the field of entrepreneurship. Firstly, it validated entrepreneurial competencies identified by previous research as relevant for success. The findings indicate relative differences between entrepreneurs' and scholars' opinions. Decision making competency is what entrepreneurs most frequently cited as important when facing the creation of a new venture, whereas scholars chose identifying business opportunities. There are possible explanations as to why the two parties' opinions differ. Firstly, entrepreneurs simply consider that decision making is highly important for success in business due to contextual factors that may affect the creation and running of businesses. That is, the atmosphere in which Ecuadorian entrepreneurs develop their business activities may not be as favorable as expected. For example, the unstable economic and political situation that Ecuador has experienced during the last decade may present great difficulties for enterprising people when creating new businesses. Another difficulty may be that the judicial system in the country is not completely reliable and entrepreneurs may feel that their investments are not well supported by adequate laws. Therefore, they may frequently be forced to make decisions under difficult circumstances.

Another contribution of this study is that we shed some light on the ongoing debate over what should be taught in an entrepreneurship course. Results indicate that some competencies for entrepreneurship are more relevant than others according to the two parties' opinions. Thus, the findings suggest that emphasis should be placed on those competencies that were more frequently cited as important for success by the two groups of respondents. Finally, we posit that the findings provide valuable information for entrepreneurship educators and policy makers. Taking into consideration these research findings, educators can design and include in their courses in and out-of-class activities with the aim of instilling in students the development of relevant competencies for successful business startups and the survival of profitable enterprises. Moreover, by knowing which entrepreneurial competencies are most conducive to succeeding in businesses, students can orient their efforts to developing them in the course of an academic term and later on in life. Thus, students can pick several competencies by means of a learning contract in which they agree to develop them within a course as suggested by Bird (2002). Policy makers, on the other hand, could use the present findings in order to reorient their practices and policies to enhance entrepreneurial activity in their communities. We argue that crucial for the success of any public policy is an examination of the competencies that characterize successful entrepreneurs. So, recognizing these competencies can help policy makers design effective programs to foster entrepreneurship. According to Bird (1995), entrepreneurial competency provides policy makers, educators and other stakeholders with an important predictor of venture outcomes.

This research study has some limitations. The sample size for the group of entrepreneurs is rather small ($n = 25$), so the results should be treated with caution when making generalizations. A greater sample size is clearly needed for more accurate and better interpretations of the findings. Another limitation is that the entrepreneurs surveyed in this study were not necessarily successful in their businesses. Thus, further studies should focus on entrepreneurs who have succeeded in their entrepreneurial endeavors.

Although the findings presented in this study require further validation, these preliminary results suggest which competencies would-be entrepreneurs should develop for a successful entrepreneurial career. These findings also offer cues that may be used to differentiate entrepreneurs from non-entrepreneurs.

REFERENCES

- Barret, G. V., & Depinet, R. L. (1991). A Reconsideration of Testing for Competence rather than for Intelligence, *American Psychologist*, 46, 1012-1024.
- Bird, B. (2002). Learning Entrepreneurship Competencies: The Self-Directed Learning Approach, *International Journal of Entrepreneurship Education*, 1, 203-227.
- Bird, B. (1995). Toward a Theory of Entrepreneurial Competency. *Advances in Entrepreneurship, Firm Emergence, and Growth*, JAI Press, 2, 51-72.
- Bird, B. (1988). Implementing Entrepreneurial Ideas: The Case for Intention, *Academy of Management Review*, 13, 442-453.
- Boyatzis, R. E. (1982), *The Competent Manager: a model for effective performance*, New York: Wiley.
- Chandler G. N. & Jansen E. (1992). The Founder's Self-assessed Competence and Venture Performance, *Journal of Business venturing*, 7, 223-236.
- Chandler, G. N. & Hanks, S. H. (1994). Founder Competence, the Environment, and Venture Performance, *Entrepreneurship Theory and Practice*, 18, 77-89.
- Garavan, T.N. and O'Conneide, B. (1994b), Entrepreneurship Education and Training Programmes: A Review and Evaluation – Part 2, *Journal of European Industrial Training*, 18, 13-21.
- Gibb, A. (1990). Training the trainers of small business. *Journal of European Industrial Training*, 14, 17-25.
- Hood, J. N. & Young, J. E. (1993). Entrepreneurship's Requisite Areas of Development: a Survey of Top Executives in Successful Entrepreneurial Firms, *Journal of Business Venturing*, 8, 115-135.
- McClelland, D. C. (1973). Testing for Competence rather than for Intelligence, *American Psychologist*, 28, 1-14.
- Man T. W. Y., Lau T., Chan K. F. (2002), The Competitiveness of Small and Medium enterprises: A conceptualization with Focus on Entrepreneurial Competencies, *Journal of Business Venturing*, 17, 123-142.
- Man T. W. Y. & Lau T. (2000). Entrepreneurial Competencies of SME Owner/Manager in the Hong Kong Services Sector: A Qualitative Analysis, *Journal of Enterprising Culture*, 8, 235-254.
- Mansfield, R. S., McClelland, D.C., Spencer, L. M., & Santiago, J. (1987). The identification and assessment of competencies and other personal characteristics of entrepreneurs in developing countries, Final Report: Project No. 936-5314, *Entrepreneurship and Small Enterprise Development*, Contract No. DAN-5314-C-00-3065-00. Washington, DC: United States Agency for International Development: Boston: McBer.
- Onstenk J. (2003). Entrepreneurship and Vocational Education, *European Educational Research Journal*, 2, 74-89.

Ronstad, R. (1985). The Educated Entrepreneurs: A New Era of Entrepreneurial Education is Beginning, *American Journal of Small Business*, 10, 7-23.

Spencer, L. M., & Spencer, S. M. (1993). *Competence at work: models for superior performance*. New York[etc.]: John Wiley.

Stoof, A. (2005). Tools for the Identification and Description of Competencies, *Thesis Dissertation*, Open University of Nederland.

Fig. 1 Framework of the Study

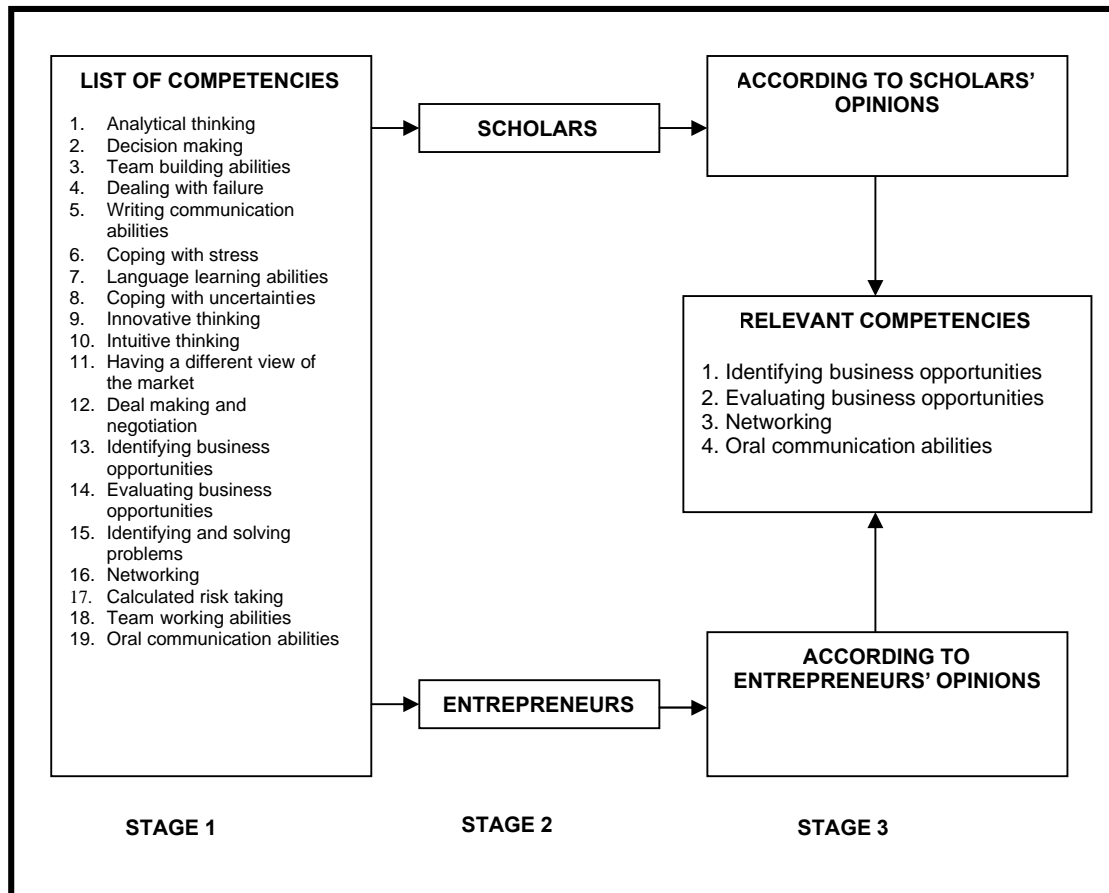
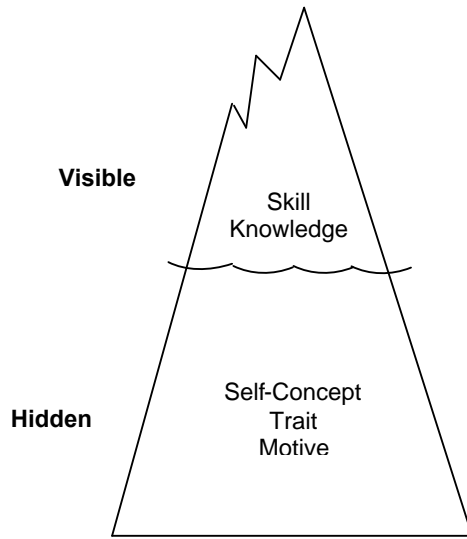
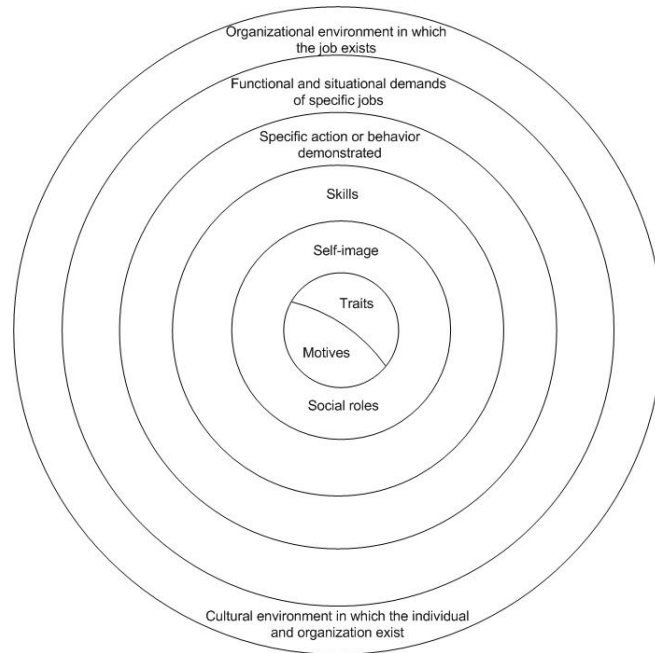


Fig. 2 The Iceberg Model



Source: Spencer, L. M. & Spencer, S. M., 1993. Competence at Work, Models for Superior Performance

Fig. 3 Dynamic Interaction of Job Components



Source: Boyatzis R. E., 1993. The Competent Manager, a Model for Effective Performance