

## **Enterprising Behavior in an Integral Competence Framework**

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## **Enterprising Behavior in an Integral Competence Framework**

***Abstract:** We present insights from literature on enterprising behavior and competence followed by an application of the competence perspective. Data collection is based on the Critical Incident Technique among 205 entrepreneurs. The study shows how entrepreneurial behavior benefits from an Integral competence perspective, underlining that entrepreneurs do need different competences related to different outcomes in their entrepreneurial endeavors. An additional study was done to test a survey on competence dimensions that were developed based on the findings of the CIT. The survey shows five competence dimensions. Entrepreneurial behavior is not about learning a single set of competences, it is rather an integral system of competences. Some of them can be taught, while others need to be experienced and tried out.*

**Keywords:** Enterprising behavior, Competences, Integral View

### **1. Introduction**

One of the elements that have attracted researchers on the topic of entrepreneurship is behavior, more specific enterprising or entrepreneurial behavior. Either seen from an individual (person) perspective or as (organizational) corporate entrepreneurship, entrepreneurial behavior is linked to the Schumpeterian conception of an entrepreneur (Audretsch, 2012) who creates new combinations of resources either as a founder or a manager, Kizner's concept of alertness as a key entrepreneurial attribute, Knight's concept of risk taker, or McClelland's concept of the need for achievement as main characteristic of a successful entrepreneur (Nandram and Samsom, 2006). Enterprising or entrepreneurial behavior has so far been defined as "...a set of activities and practices by which individuals at multiple levels, autonomously generate and use innovative resource combinations to identify and pursue opportunities.... (Mair, 2002, p. 1)". It has been defined as a more generic

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behavior that involves recognizing, taking advantage and acting upon these opportunities (van Dam *et al.* 2010). Kearny adds to the idea of generic behavior by broadening it to almost a full range of domains of our functioning. He says “enterprising is about having ideas and using initiative, resourcefulness and determination to generate something of value even when things may be difficult and uncertain. It is taking advantage of what might be, rather than accepting what will be. In a business setting it is called entrepreneurialism but you also need enterprise to run a club, a household, a good classroom or to help yourself and others” (Kearney, 1999). Entrepreneurial behavior or enterprising thus can be considered as a way of tracing and organizing available resources to add value both at the workplace (commercial or not for profit) or at the non-workplace areas. Certain competences will enable the processes of tracing and organizing. However the research on entrepreneurial behavior is mainly influenced by the trait approach that puts a central focus on the personal disposition (Aldrich and Zimmer, 1986; Begley and Boyd, 1987; Chell and Brearly, 1991; Gartner, 1988, Low and MacMillan, 1998; Bird and Jelinek, 1988; Timmons, 1978; McClelland, 1961, 1965 and Miner 1999, Zhao and Seibert 2006). So far less attention has been given to understanding what competences enable entrepreneurial behavior while we see a growing importance of competence in many fields such as occupational psychology, human resource management and education. Competences are seen as more trainable compared to traits. An understanding of these processes and the role of competences in entrepreneurship has recently been fuelled by the fact that entrepreneurship has been defined as a key competence for life by the European Commission (2010). Literature on entrepreneurial competence can be traced as originating from both the literature on competences as well as literature on entrepreneurship (Mitchelmore and Rowley, 2010), leading to formulations and descriptions in the works of authors such as Man *et al* (2002) and Bird (1995). Research so far has focused on the use of one-dimensional frameworks to study entrepreneurial competence. This has left a lot of room

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for investigation from a multidimensional perspective. Our research wants to fill this gap by exploring the entrepreneurial competence from a multidimensional and integrative perspective. However, still these competences are perceived as abstract rather than as context specific (Lans *et al* 2008). What is more, the exploration of entrepreneurship and enterprising as competence is still in an infancy stage, both from a one-dimensional or holistic perspective.

With this paper we enrich the state of knowledge by producing empirical findings based on a context specific framework by applying the critical incident technique, a qualitative approach of data collection considering specific critical incidents as core to trace behaviors, and the development of a survey to measure the several dimensions of enterprising competence. Furthermore we build on the holistic view by proposing enterprising and entrepreneurship as an integral phenomenon. In the following sections we will focus on the relevance of enterprising, views on competences, empirical data collection and analysis and we will conclude with defining the ingredients of enterprising as an integral phenomenon.

### **2. Enterprising behavior: Towards a competence view**

As an individual perspective, the behaviorist approach towards entrepreneurship evolves the recognition of opportunities and the pursuit of those opportunities (Alvarez *et al.*, 2010, Venkataraman, 1997). Authors studying the concept of competence, like Boyatzis (1982), McClelland (1973) or Spencer and Spencer (1993) have considered competence as a concept applied at an individual level (Chen and Chang, 2010, p. 678). As the interest has grown, the concept of competence was considered also from an organizational perspective (Barney, 1991; Prahalad and Hamel, 1990). The organizational approach of competence came to be known as the competency based approach, an approach emerging as a tangent view to the already existing resource based approach of the company. As the knowledge economy and globalization have forced companies to look at intangible factors and human resources as

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(competitive) advantage (Ogreaan, *et al.* 2009) so came the switch from the jobs' focus to the focus on people who fulfilled them (Shirazi and Mortazavi, 2009). In this context of a more personal oriented approach, we propose another look at the individual who performs jobs or creates venture (in the large sense), from what literature considers a multidimensional perspective (holistic) approach to individual competence. By this approach, we take the entrepreneurial competence out of a specific context and domain and focus on the concept and its link to enterprising as a generic concept.

### *Perspectives on competence*

The first approach in describing competence has been as personality traits or characteristics, personal qualities - *what people are like* (Boyatzis, 1982; Mansfield, 2004). Strongly linked to this view is the idea of delivering performance (Boyatzis, 1982; Woodroffe, 1991; Moyer, 2001; Schofield and McDonald, 2004). Some consider this type of research in entrepreneurship leading to a dead end and proposes alternatives such as the focus on entrepreneurial attitudes (Robinson et al, 1991), entrepreneurial actions (Westhead and Wright, 1998), effectual expertise (Sarasvathy, 2004), entrepreneurial mindset (McGrath and MacMillan, 2000) or entrepreneurial cognitions (Baron, 1998).

Competence can be also described as a function, more specific *what is needed to be done*. The difference with defining competence as behavior is that the focus is on what a person is able to do, having a competence implies being able to perform a task. This view is concentrated on the work, not on the worker and it's based on "the value of occupationally defined standards and their applicability to the workplace" (Winterton and Delamare-Le, 2005, p. 40). The source of this perspective is the 'functional-analysis' of the job and job specific outcomes which are defined in different levels, key roles, units of competence and elements of competence (Cheetham and Chivers, 1996). Another one-dimensional view on competence is

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the generic approach. The generic approach concentrates on “the general attributes associated with expert performance” (McMullan, 2003, p. 287) and expertise is not domain specific. This implies that competences are based on the common abilities that explain variations in performance according to broad clusters of abilities or general attributes (Mulder *et al.*, 2007). (McMullan, 2003, p. 287).

These views have developed in what is now described in literature as multidimensional views of competence. A wholesome or holistic approach is seen in recent literature as to “have been able to address many of the criticism on earlier models and to propose adequate schemas on the bass of which useful practices supporting the provision of quality services can be generated” (Sultana, 2009, p. 22). A holistic model of competence as a set of five interrelated competences and competencies was constructed by Cheetham and Chivers (1996). The five are: cognitive, functional, personal, ethical and meta-competence. Their work was continued by Winterton and Le Deist (2005) who created three of its dimensions—cognitive, functional and social competence—respectively to be related to the familiar knowledge (know ‘that’), skills (know ‘how’) and attitudes (know ‘how to behave’) and a fourth: meta-competence. This is an overarching form of competence concerned with facilitating the acquisition of the other substantive competencies.

### *Entrepreneurial competence as multidimensional construct*

The association of the two concepts, *entrepreneurship* and *competence* has created new horizons of research from different perspectives. One perspective concentrates on the competences needed to be an entrepreneur or to practice entrepreneurship (antecedents for venture creation). Another perspective focuses on entrepreneurship as a competence domain for top managers, as part of performing management competence domain. A more recent perspective considers entrepreneurship as a competence by itself, recently related to key

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individual competences for lifelong learning, within the knowledge economy context (European Commission, 2010).

According to Mitchelmore and Rowley (2010) entrepreneurial competences come in the form of group of competences that are relevant for successful entrepreneurship. This view is in line with Bird (1995) who considers that entrepreneurial competences are the mechanism by which the potential for success of a company can be improved. Kiggundy (2002) considers that entrepreneurial competences create a real image of the knowhow on how to manage a company, more maybe than studies done in large organizations. What is more, developing entrepreneurial skills among SME managers contributes to profitability (Cushion, 1996) and growth (Gray, 1997).

One important aspect noted in literature about entrepreneurial competences, is that many authors have made the distinction between the ones needed to start a venture and the ones needed to manage a venture (Mitchelmore and Rowley, 2010; Chandler and Hanks, 1994a, b, c; Chandler and Jansen, 1992; Man *et al.*, 2002). Studies of entrepreneurial competence in relation to entrepreneurship as venture creation have so far focused on the link between the founder/manager of a small enterprise and performance. Still there is a lot of room for rigorous research on the relationship between entrepreneurial competence, performance and venture success (Mitchelmore and Rowley, 2010). Our interest in this concept concentrates on defining competence as a function – *what is required*- in order to facilitate successful *enterprising* to further add to the body of knowledge of the entrepreneurial competence and enterprising process.

### **3. Applying the competence perspective on enterprising behavior**

In order to find out what comprises enterprising we have searched for the tasks entrepreneurs are involved with by using the critical incident technique (CIT). The CIT is a qualitative

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technique often applied in psychology for identifying certain tasks or actions that comprises a phenomenon or a job assignment. This technique gives facts regarding behavior instead of opinions. An application of the CIT provides the opportunity to gather a list of variables on an exploratory basis rather than literature review. While the CIT procedure starts from a qualitative point of view, the analyses consist of a more quantitative follow up.

### *Critical Incident Technique*

The CIT was developed by Flanagan in the 1950's as a procedure to gather direct observations on human behavioral acts to facilitate the potential usefulness of these observations in solving practical problems and developing broad psychological principles. This technique has its roots in the US Navy and nowadays it forms the basis for several psychological tests and job analysis procedures. According to Flanagan (1954, p.327), an incident is any observable human activity that is sufficiently complete in itself to permit inferences and predictions to be made about the person performing the act. To be critical, the incident must occur in a situation where the purpose of the act seems fairly clear to the observer and where its consequences are sufficiently definite to leave little doubt concerning its effects. According to Flanagan (1954) the CIT does not consist of a single rigid set of rules but forms a flexible set of principles which must be modified and adapted to meet the specific situation. However he defined a few steps which we have applied for this paper. Interestingly, the CIT has hardly been used in the field of entrepreneurship. We only encountered a few studies on entrepreneurship done by Kaulio (2003); Tjosvold and Weicker (1993); Sullivan (2000); Wing Yan Man (2006); Gabott and Hogg (1996); Sharkin and Birkey (1992) and Fly *et al.* (1997).

### *The present study*



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We gathered data from Dutch entrepreneurs of 205 firms in their early, expansion and maturity firm life cycle stage through a mail questionnaire. To reach a representative group of entrepreneurs we used multiple sources to collect the data. Firstly, we collected a random sample of entrepreneurs from the data of the Netherlands Chambers of Commerce. The response rate was 11%. The second sample came from an address list from the Dutch association for Venture capitalists. This association informed us in advance that the list mainly includes firms in the expansion and maturity stages. The response rate was 19%. The third source was a group that was selected from the alumni address list of the Nyenrode Business university database on the basis of their job description. Those with a job description of business owner, business founder or self-employer were approached. The response rate was 40%. Overall 26% of the respondents were entrepreneur for less than 6 years, 25% between 6 and 11 years, 20% between 11 and 15 years, and the others were entrepreneurs for a longer time. 33,5% did not have any experience with their line of business before they became entrepreneur in their current firm, 45% already knew the business before as an employee and the remaining 20% knew the line of business as former entrepreneur. Only 4, 4% of the respondents were female. They varied in their age. 22, 7% belonged to the age group till 40 and 32, 5% belonged to the age group between 40 and 50. The remaining group was older. 10% of the respondents had completed high school, 14% had lower education and 75% had completed college or university education. This means that the educational level of the respondents is high. About 14% mentioned that they had a paid job in young adulthood.

The final version of the CIT questionnaire was based on a pilot study with 5 entrepreneurs. They were asked to fill in the questionnaire in the presence of a researcher (first author). Any comment or question was registered by the researcher and afterwards some adjustments were made to the draft version. Besides questions concerning the CIT, entrepreneurs could categorize themselves in one of the firms' life cycle stages. The total group of respondents

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was 205 of which 41 had a company in the early stage, 89 in the expansion stage and 66 in the maturity stage.

The following instructions to the questionnaire were provided: As an entrepreneur you have experienced positive and negative incidents. Some of these are very critical because they have a large impact on your entrepreneurial success. This impact could be described in tangible or intangible results. We are interested in critical incidents you have experienced during your entrepreneurial career, including both positive and negative incidents. Please focus on your own experiences and mention the critical incidents for your entrepreneurial career. The following CIT-questions were specifically asked: A) According to you, what are the critical positive achievements in your entrepreneurial career? Please list 1-3 critical achievements. B) According to you, what are the critical negative 'achievements' (failures) in your entrepreneurial career? Please list 1-3 critical achievements. (C) In which year / month did each of them happen? (D) How did you behave, what did you do? (E) Who were involved in these incidents? (F) What is your relationship with these individuals? (G) Did these individuals have a big influence on the way you behaved? (H) Can you describe their influence? The questions C, D, E, F, G, and H were used as controls. If they were not answered then the incidents were left out from the analyses. Furthermore, from checking whether these questions were clear to the respondents, it appeared that 17 respondents (= 8%) said they don't find them clear and 11 (= 5%) did not find them interesting. These respondents were deleted from the analyses.

### *Data analyses*

On average each entrepreneur mentioned more than one critical incident. From the 205 entrepreneurs 181 answered the questions related to success and 137 gave also answers related to failure. In total, 341 useful positive incidents were mentioned and 181 negative

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incidents. Exact dates were mentioned for 167 positive incidents and 80 negative incidents. In cases where no date was mentioned we judged the quality of the data which means that when all the other questions were answered and the information was detailed enough these incidents were included in the analyses. All in all, 59 positive and 11 negative incidents were left out.

The incidents mentioned showed a large variety referring to positive or negative entrepreneurial behaviors. Entrepreneur only gave short answers to the several questions that were asked. An entrepreneur mentioned for example the incident that he was fired and had to look for an opportunity. As he dreamt of starting his own venture he thought now it is the right time to start. He was young, did not had a family yet and starting a venture would give him more satisfaction. Instead of finding another job, after having taken a short break abroad he came up with several ideas and tried a few of time. In this example the entrepreneur mentioned two incidents: getting fired and the need to earn a living which corresponds with his dream to become an entrepreneur one day. And the incident of getting ideas while being abroad. Other incidents are briefly mentioned in Table 1. The broad range of incidents, were categorized by 3 researchers. *Step 1:* The first 50 incidents were categorized together to find out main categories. The other incidents were categorized separately. *Step 2:* At the end the categories were discussed with the aim to reach consistent categories. This process resulted in 30 categories within the list of positive incidents and 25 in the list of negative incidents. *Step 3:* A second round of categorization was built in to find out main dimensions of entrepreneurial behaviors during the entrepreneurs' careers. To find these dimensions a main distinction was made between the process of discovery of opportunities and the process of exploitation of opportunities, as these two processes dominate in the literature on the process of entrepreneurship (Shane and Venkataraman, 2000). Two researchers categorized the 55 incidents (30+25) separately with a consistent result in 80% of the incidents. The main inconsistencies occurred regarding the discovery category. As this level of consistency was

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not satisfactory, after brainstorming about these two dimensions another round of categorization was built in to categorize the 55 incidents. *Step 4:* The tasks and behaviors that were mentioned in the follow up question D were analyzed by using the four-dimension framework of competences of Winterton and Le Deist (2005). Which competences were categorized in which dimension, can be found in Table 2. As the authors did not provide a list of items for the entrepreneurial competences, only the framework and its distinctive dimensions, we categorized ourselves, using the definitions given by the two authors to each of the dimensions.

### *Results*

This resulted in the following main categories of entrepreneurial behavior (see Table 1): A. Preparation towards taking initiative and discovering opportunities. PO= discovery of opportunity, PE= discovery of own expertise, PP= discovery of personal ambition, B. Activities to add value related to market position; team, organization structure and resources. AM= value to market, AO renewal to organizational structure, AT= initiative of team, human capital, partnership, AR=Finding resources. For each category a description of a type can be found in Table 1. These categories seem applicable to enterprising behavior too. As preparing a renewal, pro activeness and initiative are all relevant to the process of enterprising. Furthermore as defined earlier enterprising is also about adding value. In the commercial business context it is mainly about commercial value. As enterprising is rather a way of living and applicable to other context too, we can think of a broader perspective of value addition.

We conducted the chi-square test to find out if respondents mentioned more often positive incidents in the distinctive dimensions. The chi-square value equaled 36.4,  $p=.000$ ,  $df=7$ , which means that positive incidents were mentioned significantly more often in comparison with negative incidents.

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**Table 1. Dimension of the positive incidents experienced in entrepreneurial career**

PO= perception of discovery of opportunity, PE= discovery of own expertise, efficacy PP= discovery of personal ambition, AM= exploitation of market, AO exploitation related to organizational structure, AT=exploitation related to team, human capital, partnership, AR=exploitation related to resources

NC=not classified

Numbers for each dimension

Dimension based on positive incidents	Dimensions based on negative incidents
Total N=341	Total N=181
PO=68	PO=39
PE=41	PE=31
PP=15	PP=12
AM=34	AM=2
AO=45	AO=7
AT=54	AT=44
AR=75	AR=36
NC=7	NC=10
Mean = 42.2	Mean is 22.6
Chi Square goodness of fit test=92.8. p=.000	Chi Square Goodness of fit test=84.8, p=.000
df=7	df=7

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Chi Square=36.4, p=.000, df=7

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PO positive examples: Quit job to start a business; Acquisition of other firm; Acquisition of big orders for firm; Focused on growing the firm; Aims were focused; Was asked to start together; Visited USA and saw opportunities.

PO negative examples: Closed the firm; Loose the contract; Firm was taken over; Plan was not accepted by local government.

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PE positive examples: Decision to actually start the business; Finished relevant courses to start;

DE negative examples: Was too late to act adequate; Could not handle it; Did not had the competences; Motivation dropped; Acted too quickly to leave problem behind.

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PP positive examples: Change in job; Stopped study to start; Decided to start department in foreign country.

DP negative examples: Change in personal ambition.

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AM positive examples: Development of new product for market; Realized a spin off; Internationalized the firm.

EM negative example: Could not handle the competition in the market.

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AO positive examples: Restructuring of the firm; Realizing change from product to market orientation; Realizing culture change in firm; Realizing firm activities.

EO negative examples: Could not get license; The organization was not willing to adjust

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AT positive examples: Repairing relationship with management; Partnership and mergers; Management buy out; Developed the firm; Developed the team in the firm; Could get high qualified employees; Could satisfy customers; Could build on relationship with former owner.

AT negative example: Partner quit; Wrong partner; Employees quit; Too many changes in parent company; Partnership did not work; Insufficient trust in employees; Project did not succeed.

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AR positive examples: Expansion of financial activities; Good sales; Good financial results.

AR negative examples: Wrong investment; Productivity decreased.

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We also conducted statistical goodness of fit tests within the positive incidents and within the negative incidents separately. Both chi square values were significant: For the positive incidents the Chi square goodness of fit test=92.8,  $p=.000$   $df=7$ . For the negative incidents the Chi square goodness of fit test=84.8,  $p=.000$   $df=7$ . This means that both, within the positive and negative incidents there is a variation in occurrence of the different dimensions of entrepreneurial incidents. When entrepreneurs mentioned the positive incidents they especially refer to the discovery of opportunities (PO), activities related to team, human capital and partnership (AT) and exploitation related to resources (AR). Categories of experiences which mainly occur as negative are also PO, AT, AR and the discovery of lack of expertise (PE).

Entrepreneurs described the competences (induced from descriptions of tasks and behaviors) they needed to deal with the incidents. We categorized the competences by applying the framework of Winterton and Le Deist (2005), defining conceptual competences: cognitive and meta-competences; operational competences: functional and social competences. The findings can be seen in Table 2. We notice a few competences that do not fit the four categories and therefore we added a fifth category which is psychic competences.

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Also, it is obvious that entrepreneurs mostly mentioned the functional skills followed by social, psychic, cognitive and meta-competences.

**Table 2. Enterprising behavior as competence**

	Total	PO	PE	PP	EM	EO	ET	ER
<b>Cognitive competences:</b>	101							
Ability to focus upon goals	37	6	5	1	0	10	9	6
Ability to think pragmatic	6	0	1	0	1	1	1	2
Ability to persevere	36	12	7	1	0	6	4	6
Ability to show creativity	22	5	3	0	2	2	2	8
<b>Social competences:</b>	152							
Ability to express empathy	14	5	1	0	0	2	2	4
Ability to act trustworthy	44	8	6	0	0	10	12	8
Ability to persuade (positive)	11	1	0	0	0	2	5	3
Could not persuade (negative)	10	3	2	1	0	0	2	2
Ability to develop relevant networks	45	11	5	2	3	8	7	9
Lack of relevant networks	28	8	2	3	0	2	4	9



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<b>Functional competences:</b>	517							
Capacity to negotiate	91	23	13	4	5	21	16	9
Lack of Negotiation skills	49	12	10	5	1	5	5	11
Communication skills	60	18	6	2	2	16	1	15
Lack of Communication skills	72	15	8	3	2	2	28	14
Leadership ability	96	18	8	8	4	22	19	17
Lack of leadership	55	13	12	3	1	1	11	14
Market awareness	30	6	1	1	4	9	3	6
Lack of Market awareness	15	3	3	0	0	1	1	7
Marketing skills	22	1	3	2	0	10	2	4
Lack of Marketing skills	15	5	3	1	0	1	2	3
Financial skills	32	5	5	1	2	7	6	6
Lack of Financial skills	17	2	5	2	0	0	0	8

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<b>Psychic competences:</b>	124							
Ability to act according to integrity	6	1	1	1	1	1	1	0
Showing self-confident	30	8	5	1	1	3	4	8
Act from emotional stability	0	0	0	0	0	0	0	0
Act from emotional vulnerability	7	2	2	1	0	1	1	0
Ability to express courage	53	13	8	3	1	12	8	8
Ability to act determined/ resolute	15	1	1	0	2	6	3	1
Lack of being determined/resolute	13	1	1	4	0	0	4	3

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<b>Meta competences:</b>	70							
Ability to be decisive	12	2	0	0	0	2	3	5
Ability to be considered and reflective	13	0	2	1	0	1	6	3
Ability to be watchful	12	4	0	0	0	2	3	3
Lack of being watchful	6	1	2	0	1	1	0	1
Ability to get the overview	16	10	2	6	21	16	0	12
towards renewal/ innovation								
Lack of orientation towards	11	6	4	0	3	6	0	14
renewal/innovation								

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To judge the validity of our findings regarding the individual competences in a separate study we offered the list of competences to 117 entrepreneurs with the question to rate the importance of each on a 5 point scale (1= highly unimportant to 5= highly important) for three life cycle stages. These were described and are the early stage, the expansion stage and the maturity stage. We found that the mean average on the competences were all higher than 3.6 in the early stage. The mean was 4.12 in the expansion stage and 4.31 in the maturity stage. On average the score for competences were 4.01 according to the new group of entrepreneurs. From the high averages found we can conclude that we have been able to identify the relevant competences on the basis of the CIT.

### *Additional study with a competence survey*

Based on the findings we developed items for the five dimensions using a 5 point Likert scale and we tested them among students of the HAN University of Applied sciences in the Netherlands. This university adopted the idea of entrepreneurial behavior as competence for lifelong learning. The meta-competence we found in the CIT represented in our view the

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concept of Integrative thinking as described by Herriot, (2009). The respondents were approached through a convenience sampling, based on the teacher's cooperation and accessibility. They are from 2<sup>nd</sup>, 3<sup>rd</sup> and 4<sup>th</sup> year study streams in business studies and health care & occupational studies. For the health care & occupational studies enterprising behavior is becoming a key focal point in the bachelor level education. Students from these study streams are exposed to the idea that they can also start their own company as professional and that enterprising behavior (in terms of taking initiative, thinking of what resources are required to get an activity done, what it takes to renew) can be helpful for their careers even if after graduation they end up working as an employee. Some examples from the scale we have surveyed contain items like: *I have the ability to make a cost-benefit analysis*, *I have the skills to decide on targets and means for an innovative idea*. Examples of psychic competences: *I can recover quickly after experiencing failures*, *I am able to take decisions in tough situations*. Examples of social skills: *I have skills to set up a network*; *I have skills to convince other people*. Examples of cognitive competence: *I have the ability to generate creative ideas*, *I have the ability to include all the information for analysing a situation*. Examples of items for meta-competence: *I learn by reflecting*, *I perceive situations by considering the whole picture*. A total of 110 students participated in this study. We conducted the reliability of the scales and the inter-correlations and descriptive. The results can be found in table 3. Overall the results were satisfactory resulting in confirming the idea of a multidimensional view on competences. However, further testing is being done with a more diverse and larger sample.

**Table 3. Alpha's and Descriptive, Survey on Competence Dimensions, N=110**

(alpha, N of items)	1	2	3	4	Mean	SD

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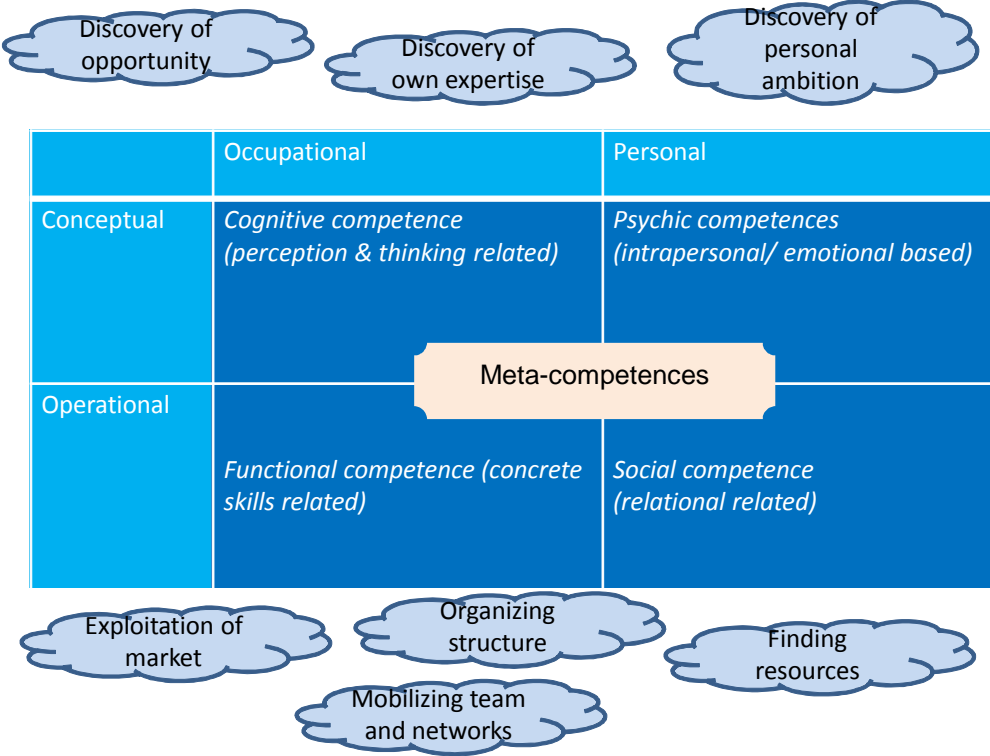
1.Functional	--				3,50	,46
(.80, N=16)						
2.Cognitive	,646**	--			3,48	,47
(.77, N=12)						
3.Social	,639**	,519**	--		3,61	,58
(.87, N=15)						
4.Psychological	,612**	,612**	,709**	--	3,62	,55
(.89, N=19)						
5.Integrative	,416**	,570**	,491**	,521**	3,75	,53
(.68, N=6)						

\*\*=.005 (2-tailed)

### 4. Conclusion

Based on the findings we propose the following model for enterprising competences. We had borrowed the model on competences from Winterton and Le Deist (2005). Based on the empirical findings in the context of entrepreneurial competences, following the approach of entrepreneurship as a lifelong learning competence, and what entrepreneurs need to do rather than who they are, we propose a total of five dimensions with one acting as a meta-dimension, feeding the other dimensions. An element of novelty that this research brings is the addition to the four dimension framework proposed by Winterton and Le Deist (2005), we have added, a fifth one, the psychic related competences. Furthermore by connecting the competences to specific incidents through the CIT, we could induce relevant categories of individual competences in each dimension and enrich the debate of entrepreneurial competences as concrete competences rather than abstract concepts. By focusing on the incidents we also induce seven main activities that entrepreneurs focus upon.

**Figure 1: An Integral framework for Enterprising Behavior**



In further quantitative research designs this model should be tested to verify the distinctive dimensions and their relevance and the role of the meta-competence in the context of both enterprising and venturing. This can also be studied related to seven specific entrepreneurial tasks domains. While focusing on a behaviorist and individual approach such a study on competences may be further explored by examining the trainability of entrepreneurship.

**5. Discussion and limitations**

*Discussion*

We applied the CIT to the domain of entrepreneurial behavior because of its potential advantage to generate new perspectives for enterprising and what competences it comprises. We followed the competency approach to study what needs to be done as an entrepreneur

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rather than what people are like. The results gained a new dimension and therefore we add to the discussion the dimension of psychic related competences. This fits the subjectivist approach (Endres and Woods 2007) where entrepreneurs are presented as formulators of mental images or mental constructs in the process of conceiving new ventures. Here, it is believed that they make subjective judgments about profit opportunities before exploiting them which implies that enterprising cannot solely be studied by events external to them. For that, we need to look from within, the context from the entrepreneur's mind. The CIT has given us a tool for this approach. We also add to the discussion about the meta-competences by focusing on the integrative element of it rather than being very general. Our survey shows results that are promising for applying it in future studies for example to see how these competences are related to successful entrepreneurship or entrepreneurial growth.

Furthermore, our results add to the entrepreneurship literature in different ways. Entrepreneurship is considered as the discovery of opportunities and the exploitation of these opportunities. The exploration through the CIT resulted in a more detailed description of these two main tasks into seven main tasks dimensions: the discovery of opportunities, the discovery of personal ambition, the discovery of expertise, the exploitation of resources, of a team/ human capital, an organizational structure and the exploitation of a market for the products/ services. Entrepreneurs seem to value the discovery of opportunities, the exploitation of resources and a team as main tasks when they evaluate their positive experiences. When they assess their negative experiences they seem to add the lack of expertise, a less tangible dimension. This might imply that only when they reflect on the negative experiences, they value the relevance of expertise.

## *Limitations*

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There are some limitations that need to be tackled in future studies. The CIT has given us insights and it is appropriate for gathering data on a topic that is in its infancy stage. However, because the items are very focused and related to a main theme it does not provide extra information beyond the theme as in other qualitative designs such as in-depth interviews. For testing the findings a follow up quantitative research design is required in future studies. The survey items were developed as a follow up on the CIT results. However, these were only applied to students. It would be interesting to find out the validity and reliability of the survey items for other student groups and for (successful) entrepreneurs. If we consider enterprising as a way of living then it would be interesting to apply the survey to other professional groups as well including managers. Perhaps the most important limitation is the sample. As the entrepreneurs are Dutch, although some deal with an international business environment, future research is needed to generalize the findings to other cultural settings.

Overall we think that the field will benefit from a multidimensional orientation in understanding enterprising. Entrepreneurs do need different competences related to different outcomes in their entrepreneurial endeavors. Entrepreneurial behavior is not about learning a single set of competences, it is rather an integral system of competences. Some can be taught, others need to be experienced and tried out.

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