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Self-awareness and beliefs about improvability of entrepreneurial competence[1]

Chapter 2 reports the results of the first study. This chapter answers the following two research questions.

Q1. How do small business owner-managers evaluate their own entrepreneurial competence, and how do these evaluations relate to the perceptions of significant others in the work environment?

Q2. How do small business owner-managers assess the 'improvability' of their entrepreneurial competence themselves and how do these assessments relate to the perceptions of significant others in the work environment?

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Abstract

This chapter reports the results of a study that explored the concepts of self-awareness and beliefs about improvability of entrepreneurial competence among owner-managers of small businesses in a well-defined innovative small-business sector in the Netherlands: horticulture. The study was carried out by means of a multisource assessment. Research addressing these two concepts has been conducted in large organizations and non-business settings, but there is limited data on these concepts in relation to small firms, particularly from a multisource perspective. The results of the current study show an almost consistent underestimation of entrepreneurial competence and reveal that entrepreneurial competence is seen as being subject to at least some development. The data illustrate the tacit nature of much of what is learned during work and suggest lack of feedback on entrepreneurial accomplishments. Furthermore, they suggest that what is viewed as developed and improvable is not only based on personal 'objective' judgements, but most likely influenced by what is valued and promoted in a particular practice. Multisource assessments as adopted in this study can help owner-managers raise their self-awareness, and consequently help them bypass some of their often costly trial-and-error learning.

Introduction

Small firms are considered to be important contributors to employment, innovation and growth of the economy: 92% of all European enterprises have less than 10 employees (Observatory of European SMEs, 2003). As innovation, growth and strategic renewal require new roles and competencies (Fuller-Love, 2006; Kazanijan, 1988; Sullivan, 2000), owner-managers need to learn to further adapt themselves, develop their strengths or delegate more tasks and responsibilities, e.g. through close cooperation with external partners or by building an entrepreneurial team (Deakins & Freel, 1998). Since owner-managers rarely participate in formal management education and training (e.g. Rowden, 2002; Storey, 2004, see also Chapter 1), competence development is to a large degree dependent on what Ehrich and Billett (2004) call individual agency of the owner-managers to engage in all sorts of informal, work-related, learning activities. Accordingly, if owner-managers are not aware of their situation and not motivated to deploy activities aimed at competence development, the small firm will be vulnerable to changes in the market, competition, technology and societal demands such as those related to the environment and integrity issues.

In this chapter two important aspects are explored that reflect the nature of learning in small firms and potentially influence the decision of owner-managers of small firms to invest in their competence, namely: self-awareness (i.e. awareness of their current competence profile) and the belief that improvement of competence is possible (i.e. beliefs about improvability). Research addressing these two concepts has been carried out in large organizations and non-business settings (e.g. Maurer et al., 2003b; Ostroff et al., 2004), but there is limited data on these concepts in relation to existing small firms (Murphy & Young, 1996) (except some work that has been done on entrepreneurial self-efficacy, a construct which is conceptually related, e.g. Chen et al., 1998).

With respect to self-awareness: studies in education science repeatedly stress that raising awareness and developing an understanding of professional competence, accompanied by a notion of which competencies should be (further) developed in the future by an individual in order for him or her to become a more successful professional, are vital for development in a variety of professions (Boud, 2000; Dall'Alba & Sandberg, 2006; Sadler, 1989). Empirical studies conducted in large organizations have shown that lack of an accurate perception of one's own professional competence correlates with ignorance of criticism, overlooking of failures (for instance mistakes) and lack of feedback-seeking behaviour (Atwater et al., 1998; Jansen & Vloeberghs, 1999); in other words, these professionals are not engaging in, potentially rich learning activities, which are also reported as being important for entrepreneurial learning in small firms (Cope & Watts, 2000).

With respect to beliefs about improvability: from research with college students as well as managers, it is known that learning-oriented behaviour is influenced by the motivation to master new situations and develop new areas of competence, which is closely connected to people's perceptions of the improvability of their skills, abilities and intelligence (Dweck & Legget, 1988; Maurer, 2002; Maurer et al. 2003a).

Those who view their abilities as more flexible will be more likely to participate in activities that are challenging in terms of learning. Whereas, those who perceive their abilities as more or less fixed will direct their attention to situations that match their current level of ability. The latter group do not see learning and development as a priority (Dweck & Leggett, 1988). An incremental view of competence seems therefore important for developing it.

This chapter reports the results of a study on self-awareness and beliefs about improvability of competence among owner-managers of small businesses in a well-defined small business sector, namely Dutch horticulture. These two concepts were explored by means of a multisource assessment, i.e. an assessment in which the subject is rated by multiple individuals with whom the subject has varying relationships (Craig & Hannum, 2006). Small firms provide an interesting occupational setting, since formalized human resource development (HRD) practices such as multisource assessments are quite rare in this setting.

The focus is on competence related to the entrepreneurial role of the small business owner-manager (Chandler & Jansen, 1992), i.e. entrepreneurial competence. Research on entrepreneurial competence in small firms typically focuses on the identification of all sorts of relevant competencies required at different stages in a variety of small firm sectors (Bird, 1995; Collins et al., 2006; Nuthall, 2006). Other studies have investigated the relationship between entrepreneurial competence of owner-managers and business success, defined as financial performance, growth and the identification of business opportunities (Baum & Locke, 2004; Baron & Markman, 2003; Chandler & Jansen, 1992; Ucbasaran et al., 2008). An important, but poorly investigated aspect of entrepreneurial competence is the notion that underlying competencies are

assumed to be the product of learning and development (Bird, 1995; Caird, 1992). This chapter starts by briefly describing the concepts of self-awareness and beliefs about improvability of entrepreneurial competence as they are central to this study, which leads to the specific research questions, the applied methods, results, discussion and conclusion.

Self-awareness of entrepreneurial competence

Self-awareness, defined as either *'the extent to which the self- and other-raters agree on the level of competence the focal individual (or 'target') attains'*, or *'the extent to which individuals agree on the relative strengths and weaknesses of the target individual'* (Fletcher & Bailey, 2003; 397, 398), has seldom been the direct focus of study in small business and entrepreneurship research. However, many examples suggest that lack of self-awareness impedes small firm development. For instance Hambrick and Crozier (1985) observe that extremely fast-growing firms led by executives who are not aware of their limitations, and therefore do not change their behaviour or delegate part of their tasks to someone else, often end up with low performance or even in bankruptcy. Also Meyer and Dean (1990) state that founders repeatedly blindly rely on their own, often narrow, technical skills, whereas they actually should develop (or hire someone who has) additional managerial and entrepreneurial abilities. Strategic questions like 'what type of business opportunities do I want to pursue in the near future' and 'am I pursuing the right opportunities' (contrary to 'am I pursuing opportunities in a good way') are not only important in the firm creation phase, but will continue to be important as firms develop. Likewise on a more operational level, to successfully negotiate a new deal with the bank, to convince a potential investor to invest in a new innovative project or to attract and manage new employees, the small firm owner-manager needs to have some insight into his/her entrepreneurial strengths and limitations.

There is a general belief that self-awareness has a positive effect on all sorts of behaviours that facilitate learning, such as openness to reactions and feedback of others, self-monitoring and assessment of other people's qualities (Jansen & Vloeberghs, 1999). Similarly, lack of self-awareness seems to be negatively related to performance. What is important with respect to learning and development is the difference between overestimation and underestimation.

Overestimation is frequently reported in studies of managers in large organizations. Although one might argue that managers who overestimate their level of competence have a positive self-image, high expectations and are optimistic in their self-assessment, research suggests that overestimators have in fact lower actual performance than underestimators or in-agreement assessors (Ehrlinger et al., 2008; Ostroff et al., 2004). Overestimation can lead to ignorance of criticism, overlooking of failures (for instance mistakes) and lack of feedback-seeking behaviour (Atwater et al., 1998; Jansen & Vloeberghs, 1999). Current empirical research on self-insight postulates that overestimators are doubly cursed: they have a lower actual performance and,

due to their lack of reflective skills, are unable to recognize their deficits (Ehrlinger et al., 2008).

Underestimation of competence is usually correlated with good performance (actual performance is often better than the image people have of themselves) (Jansen & Vloeberghs, 1999). Yet this does not mean that underestimation must be seen as a virtue. The 'success' of underestimators has been linked to the tendency to be too negative about weaknesses and/or too modest about strengths. The latter has been shown to be quite common among professionals who are high performers in a particular field. They underestimate themselves basically because they overestimate their professional peers (Ehrlinger et al., 2008). The tendency to overemphasize weaknesses seems to be more problematic in work organizations. Overemphasis of weaknesses may lead to compensation behaviour. Compensation, in a positive scenario, can be sought for instance through outsourcing (let others do that particular task, since I am 'terrible' at it), but it can also lead to putting too much energy into competencies which are not critical for a specific function or perhaps difficult to develop.

So, whereas the overestimator tends to ignore feedback and criticism, the underestimator actually wants feedback, but does not get it. After all, in the eyes of others (e.g. subordinates or clients) the person in question is performing just fine or even very well. In short, overestimation may imply a lack of meta-cognitive skills and motivation to engage in learning activities, whereas underestimation may lead to a situation in which feedback is difficult to obtain and the focus may be on a set of competencies that are not critical or difficult to develop.

Therefore, the first research question is: *How do small business owner-managers evaluate their own entrepreneurial competence, and how do these evaluations relate to the perceptions of significant others in the work environment?*

Beliefs about improvability of entrepreneurial competence

Many studies on professional development measure the relevance and use of all sorts of competencies but few of these explore whether professionals themselves believe it is possible to improve on these competencies, i.e., whether they can be learned (Maurer et al., 2003b). Ideas about flexibility of intelligence, personality, knowledge, skills, abilities and achievements have always been associated with theories on personal motivation and cognitive processes, such as the conception of ability with which people approach complex activities. What seems to be clear from the diversity of concepts used in the learning and development literature is that people differ in their beliefs on how improvable profession-relevant attributes are (Maurer, 2002). Studies on adults in organizations have shown that learning behaviour is connected to opinions on whether it is possible to develop and improve specific competencies (Martocchio, 1994). In terms of continuous learning, beliefs about improvability have been shown to be associated with employee engagement in follow-up training activities (Maurer, et al., 2003a), higher self-efficacy (Martocchio, 1994) and perceived importance of

competencies for success (Maurer et al., 2003b).

Rooted in theories on personal beliefs (i.e. self-theories), Dweck and Leggett (1988) postulated that people see intelligence as an either incremental or static human attribute. Some individuals believe that intelligence is a fixed trait. It is something that we carry with us and is difficult to change. In contrast, incremental theorists believe that intelligence is something that can be improved through learning. Experiments carried out with students show that different self-theories result in differences in performance and learning goals (Dweck, 1999). Dweck (1999) showed that students who perceive their intelligence and abilities as incremental are challenged by new situations rather than plagued by them. On the other hand, students who perceive their intelligence and abilities as fixed are more likely to pass up valuable learning opportunities, such as opportunities that are challenging or pose obstacles. Some researchers point out, however, that in reality people's beliefs fall somewhere along a more continuous scale between the two extreme poles of static and incremental (Garofano & Salas, 2005).

Traditionally, attributes associated with entrepreneurship have been approached from the perspective of innate traits (c.f. Begley & Boyd, 1987; McClelland, 1967). Despite the many efforts that have been put into defining entrepreneurship as an aggregate of general traits, no consensus exists on any taxonomy of traits (Rauch & Frese, 2007). Not surprisingly, in the beginning of the 1990s approaches like these were criticized for paying too little attention to the process of the creation of the organization, and the tasks and activities involved in enabling the firm to come into existence and blossom (Gartner, 1989). As noted above, in this chapter entrepreneurial competence is used as the level of analysis. Competence can be seen as the integration of different elements (such as knowledge, skills and attitudes) necessary in a particular job or task in a specific context (Biemans et al., 2004; Cheetham & Chivers, 1996; Delamare-Le Deist & Winterton, 2005; Mulder, 2001). Entrepreneurial competence encompasses those competencies which are associated with the entrepreneurial role (and not the technical or managerial role) of the small business owner-manager (Chandler & Jansen, 1992).

In summary, the outlined importance of people's conception of improvability of their own (work-related) abilities, combined with the shift in entrepreneurship literature from viewing entrepreneurship as a set of innate traits towards embracing a notion of entrepreneurial competence, lead us to the formulation of the second research question:

How do small business owner-managers assess the 'improvability' of their entrepreneurial competence themselves and how do these assessments relate to the perceptions of significant others in the work environment?

Methods

Participants and setting

The research population consisted of 40 owner-managers, who were selected from a specific Dutch small-business sector, namely horticulture. The horticultural sector is dominated by small firms that operate under highly comparable conditions with respect to climate, laws and regulations, financial institutions, market and availability of labour and technology. Entrepreneurial competence and its development have become increasingly important in this particular sector (De Lauwere, 2005; McElwee, 2008; Phillipson et al., 2004). This importance is reflected in current horticultural trends, such as fast growth, innovations in logistics, innovations in energy-saving technology, production and harvesting techniques and internationalization.

To supplement the self-assessment of the owner-managers with the judgments of others, one external assessor and one internal assessor were selected by each owner-manager to participate in the study. The internal assessor was someone within the business (in most cases a direct employee or member of the management team) who works closely with the owner-manager and is not afraid to judge him or her. The external assessor was someone from outside the firm, who has a professional understanding of the owner-manager's business activities. External assessors were in most cases business consultants or advisers who frequently (several times a year) meet with the owner-managers to discuss selected strategies. The owner-managers were instructed to select objective assessors and all participants were encouraged to be as honest and critical as possible in answering the study questions.

Data collection

Assessment procedures were designed based on the theoretical considerations outlined above and the categorization of entrepreneurial competence for small firms described by Man et al. (2002). The procedures consisted of (1) a self-assessment, (2) an internal assessment and (3) an external assessment. The self-assessment questionnaire consisted of two parts. In the first part the owner-managers had to answer several questions about themselves and their businesses (education, work experience, type of business). In the second part the owner-managers had to assess themselves on twenty underlying competencies which represented the spectrum of entrepreneurial competence as suggested by Man et al. (2002) and further worked out by Lans et al. (2005).

To make the competencies recognizable, they were accompanied by a short, precise, context-appropriate description. For example, networking was described as: *the active development and management of contacts and relationships with (internal) customers, suppliers and other stakeholders*. For each of the twenty competencies the respondents were instructed to indicate to what extent they have mastered it (*self-awareness*) and to what extent they think they can develop it further over the coming five years (*improvability*). The internal and external assessment questionnaires asked

the respondents to assess the owner-manager on the same set of competencies. Again, two questions were asked about each of the twenty competencies: to what extent do the assessors think the owner-manager has mastered it and to what extent do they think the owner-manager will be able to develop it over the coming five years. All ratings were made on a five-point Likert scale ranging from 1 (not at all) to 5 (to a great extent).

Data analysis

To calculate the similarities or differences between the assessments of the owner-managers and those of the other assessors, two commonly used indices for self-awareness were calculated (Bailey & Fletcher, 2002). First, congruence-*r*, which is the correlation between the self-assessment and other ratings, was computed by Spearmans correlation coefficient. Congruence-*r* is a measure of the extent to which assessors agree on the *relative* strengths and weaknesses of the owner-managers (i.e. do the different patterns correlate?). If the correlation is high, there is strong agreement about the relative strengths and weaknesses, if it is low, there is little agreement. Although correlation reveals something about the coherence between the self-assessment and other scores, it does not say anything about whether the absolute difference between self-assessment and other scores is large or small. Therefore, a second measure was calculated, congruence-*d*, which is the standardized difference between two profiles' means. It is calculated by dividing the difference between two ratings by the pooled standard deviation of those ratings (Bailey & Fletcher, 2002). This measure reveals the extent to which all three assessors agree on the level of competence of the owner-manager. If congruence-*d* is low, there is little difference; thus there is strong agreement about the *absolute* level of competence. If it is high, there is little agreement.

The scores the owner-managers gave in response to the second question (whether they saw possibilities to develop a particular competence further) were also compared with the ratings the internal and external assessors gave for this same question (congruence *r* and *d*). To investigate differences between classes of belief in improvability (in Dweck's (1999) terminology very incremental or very static), the responses were divided into three groups, based on the owner-managers' mean perception of improvability over the 20 competencies. The division of the three groups was done by calculating thirds (corresponding to low, moderate and high, whereby the highest group believed strongly in improvability). Subsequently, to find out whether the owner-managers' perceptions of improvability matched those of the internal and external assessors, the means of the two other assessors together (internal-external) were calculated for all the thirds. By adopting this method it was possible to see whether there were significant differences between the owner-managers' perceptions and those of the other assessors within each category, e.g. those who saw many opportunities for development (high group). Differences between the three discerned groups were statistically tested by analysis of variance (ANOVA).

Results

Data of 36 of the 40 owner-managers were suitable for the analysis (108 questionnaires in total). Three cases could not be used because of incomplete assessments; either the internal (two cases) or external assessments (one case) were missing. One case appeared to employ about 420 full-time workers, which did not fit our definition of a small firm.

The average age of the owner-managers was 39 years with 17 years of work experience as owner-manager. More than half of the owner-managers (55%) had work experience outside the sector of their current businesses. About half of the participants (53%) had a intermediate vocational education background, a quarter (28%) lower vocational education or primary school and one-fifth (19%) higher or university education.

Assessment scores

Table 2.1 presents the average assessment scores. The low mean for the self-assessment underlines the general finding in this study that owner-managers underestimate their entrepreneurial competence. This underestimation is significant for the difference between the self-assessment scores and the internal assessors' scores.

Comparing the self-assessment scores with the other scores (Table 2.2) reveals that on average the correlations (congruence-*r*) between self and internal assessment scores and between self and external assessment scores are small to medium, respectively $r_s = .30$

Table 2.1 Mean assessment scores including standard deviation

Source*	Mean	St. dev.
Self	3.31_a	0.41
Internal	3.60_b	0.40
External	3.48_{ab}	0.46
Mean other	3.54_{ab}	0.30

Note. Judgements were made on 5-point scales (1 = not at all, 5 = to a great extent). **n* = 36 for each group. Means in the same column that do not share subscripts differ at $p < .05$ in the *Tukey*-HSD comparison.

Table 2.2 Inter-correlations (congruence-*r*) and standardized differences (congruence-d) of the assessment scores for the different assessors

Source[a]	Congruence-*r*	Congruence-*d*
Self-Internal	0.30	0.61**
Self-External	0.36*	0.40
Internal-External	0.08	0.46

Note. [a] *n* = 36 for each group.
* = $p < .05$; ** = $p < .01$

and r_s = .36. Moreover, only the correlation between self and external assessment scores is significant. No correlation was found between the internal and external assessment scores (r_s = .08). The (mean) differences between the ratings are highest for the self and internal assessment scores (d = .61) and lowest for the self and external assessment scores (d = .40).

More in detail, Table 2.3 reveals that correlation patterns differ between the self-internal and self-external sets of scores for the 20 underlying competencies. Significant correlations for the self-internal scores are found for the competencies problem analysis, leadership and general awareness. For the self-external scores significant correlations

Table 2.3 Self, internal and external ratings, inter-correlations (congruence-*r*) and standardized differences (congruence-*d*) for the underlying 20 competencies

Competencies	Self	Int	Ext	M[a]	Self-Int		Self-Ext		Int-Ext	
					r_s	d	r_s	d	r_s	d
Organizing	3.67	3.89	3.81	3.85	0.19	0.23	0.11	0.14	-0.09	0.08
Problem analysis	3.61	3.66	3.47	3.56	0.47**	0.04	0.20	0.13	-0.06	0.19
Leadership	3.58	3.75	3.67	3.71	0.40*	0.15	0.14	0.08	0.13	0.07
Conceptual thinking	3.51	3.67	3.44	3.56	0.21	0.16	0.01	0.07	-0.07	0.22
Persuasiveness	3.51	3.69	3.49	3.59	0.10	0.16	0.43**	0.03	-0.03	0.18
Communication	3.50	3.56	3.42	3.49	0.05	0.05	0.24	0.07	0.10	0.12
Strategic thinking	3.50	3.60	3.36	3.48	0.19	0.09	0.43**	0.13	0.11	0.22
Planning	3.49	3.57	3.56	3.56	0.07	0.08	0.06	0.07	0.15	0.02
Result orientation	3.46	4.00	3.89	3.94	0.09	0.51**	0.31	0.39*	0.00	0.10
Negotiating	3.39	3.60	3.58	3.59	-0.06	0.20	0.15	0.17	0.08	0.02
Team work	3.34	3.60	3.56	3.58	0.30	0.23	0.29	0.18	-0.20	0.04
Market orientation	3.31	3.81	3.53	3.67	0.21	0.49**	0.13	0.21	0.18	0.27
Networking	3.31	3.50	3.67	3.58	-0.12	0.18	0.35*	0.33	-0.02	0.15
Judgment	3.28	3.40	3.49	3.44	0.28	0.12	0.15	0.20	0.00	0.09
Vision	3.24	3.51	3.33	3.42	0.12	0.25	0.24	0.08	0.24	0.16
General awareness	3.23	3.54	3.67	3.60	0.64**	0.27	0.28	0.39*	0.19	0.11
Management control	3.15	3.60	3.33	3.47	0.02	0.45**	0.09	0.17	0.00	0.25
Value clarification	3.00	3.54	3.39	3.47	0.16	0.48*	0.23	0.32	0.14	0.13
Personnel management	2.79	3.03	2.94	2.99	0.31	0.21	0.28	0.13	0.26	0.08
International orientation	2.39	3.32	3.03	3.18	0.07	0.78***	0.47**	0.51*	0.02	0.25

Note. The competencies are sorted on the self-ratings (high-low). Judgements were made on 5-point scales (1 = not at all, 5 = to a great extent). Self = self-assessment, Int = internal assessment, Ext = external assessment.

[a] = (internal assessment + external assessment)/2

* = $p < .05$; ** = $p < .01$; *** = $p < .001$

are found for the competencies persuasiveness, strategic thinking, networking and international orientation. The owner-managers underestimated themselves fairly consistently over all the different competencies, except for communication, problem analysis and strategic thinking (self scores compared to the average 'other' scores). The owner-managers underestimated themselves most (reflected by the highest *d*-scores) in relation to the internal assessors' estimation for the competencies result orientation, market orientation, management control, value clarification and international orientation (all these differences are significant). In relation to the external assessors' scores, the owner-managers underestimated themselves most for the competencies result orientation, general awareness and international orientation (all differences on these competencies are significant).

Improvability scores

The owner-managers as well as their internal and external assessors saw many areas for improvement; they indicated that entrepreneurial competence was improvable to some extent (Table 2.4). The external assessors were the most optimistic about the improvability of the owner-managers' entrepreneurial competence. Nevertheless, none of the mean differences between their assessments and those of the other respondents were found to be significant.

Furthermore, the congruence-*r* and *d* scores show that there is a higher level of agreement (high correlations and low congruence-*d* scores) between what the owner-managers and the internal assessors saw as improvable (Table 2.5). There is little

Table 2.4 Mean improvability scores including standard deviation

Source	*n*	Mean	St. dev.
Self	35*	3.33	0.62
Internal	36	3.31	0.78
External	36	3.60	0.64
Mean other	36	3.51	0.35

Note. Judgements were made on 5-point scales (1 = not at all, 5 = to a great extent).

* In this case one competency was not assessed, thus the average was not calculated.

Table 2.5 Inter-correlations (congruence-*r*) and standardized differences (congruence-*d*) of the improvability scores for the different assessors

Source	*n*	Congruence-*r*	Congruence-*d*
Self-Internal	35	0.38*	0.02
Self-External	35	0.21	0.29
Internal-External	36	0.17	0.29

* = $p < .05$

agreement, however, between the owner-managers' and the external assessors' scores, or between the internal and external assessors' scores.

Table 2.6 displays the perceived improvability of the twenty underlying competencies separately. According to the owner-managers the competencies networking and leadership are the most promising areas for individual improvement for the owner-managers. Value clarification and international orientation were perceived as the least improvable over the coming five years. Differences between the internal and external assessment scores on improvability seem to reflect a difference in the level of importance attached to certain competencies or familiarity with certain competencies. According to the internal assessors, there is most room for improvement in the areas of

Table 2.6 Self, internal and external improvability ratings, inter-correlations (congruence-*r*) and standardized differences (congruence-*d*) for the underlying 20 competencies

Competencies	Self	Int	Ext	Self-Int		Self-Ext		Int-Ext	
				r_s	*d*	r_s	*d*	r_s	*d*
Networking	3.69	3.39	3.69	0.26	0.27	0.06	0.01	-0.13	0.26
Leadership	3.66	3.49	3.61	0.39*	0.14	-0.13	0.04	0.10	0.11
Strategic thinking	3.60	3.20	3.75	0.29	0.34	0.09	0.14	0.14	0.48*
Communication	3.59	3.51	3.64	0.37*	0.06	0.08	0.04	0.27	0.11
Planning	3.57	3.11	3.72	0.38*	0.38	0.03	0.13	0.18	0.53**
Personnel management	3.51	3.15	3.42	0.34	0.31	0.19	0.09	0.04	0.23
Market orientation	3.46	3.39	3.75	0.23	0.06	0.05	0.26	0.21	0.31
Vision	3.46	3.31	3.53	0.22	0.12	-0.04	0.06	0.22	0.18
Result orientation	3.43	3.29	3.69	0.56**	0.11	0.17	0.22	0.23	0.33
Negotiating	3.37	3.46	3.78	0.18	0.08	0.20	0.40*	0.26	0.30
Organizing	3.37	3.21	3.63	0.31	0.13	0.30	0.22	0.03	0.35
Persuasiveness	3.29	3.26	3.64	0.30	0.02	-0.07	0.30	0.22	0.33
Judgment	3.29	3.17	3.60	0.01	0.10	-0.04	0.30	0.03	0.40*
Conceptual thinking	3.26	3.15	3.47	0.00	0.11	0.25	0.18	0.07	0.29
Problem analysis	3.23	3.24	3.61	0.35	0.01	0.06	0.33	0.26	0.32
Management control	3.23	3.14	3.58	0.40*	0.08	0.01	0.33	-0.01	0.40*
Team work	3.04	3.23	3.47	0.38*	0.17	0.09	0.39*	0.31	0.22
General awareness	3.00	3.17	3.58	0.02	0.15	0.44**	0.50*	0.14	0.37
Value clarification	2.86	3.29	3.53	0.12	0.34	0.08	0.53*	0.25	0.21
International orientation	2.69	3.18	3.38	0.22	0.40	0.17	0.57**	0.09	0.18

Note. The competencies are sorted on the self-ratings (high-low). Judgements were made on 5-point scales (1 = not at all, 5 = to a great extent). Self = self-assessment, Int = internal assessment, Ext = external assessment.
* = $p < .05$; ** = $p < .01$

communication and leadership (typical internally oriented competencies), whereas the external assessors see greater opportunities for developing negotiation skills, market orientation and strategic thinking (typical externally oriented competencies).

Furthermore, correlations between the internal assessment and self-assessment scores are significant for leadership, communication, planning, result orientation, management control and team work. Again, from the view point of the owner-manager this list reflects the more internally oriented competencies. The correlations between the external-assessment scores and self-assessment scores are not significant, with the exception of general awareness.

Finally, Figure 2.1 shows the improvability scores awarded by the internal and external assessors plotted in relation to the owner-managers' own perceptions of their improvability (low, moderate and high). Low represents the average self-improvability scores ≤ 3.05 (n=12), moderate > 3.05 < 3.70 (n=11) and high ≥ 3.70 (n=12). The pattern from the self-perceived improvability rank (low-moderate-high) is also significant for what the internal and external assessors perceived as improvable ($F(2,32) = 4.45$, $p < .05$). What is particularly interesting is that the internal and external assessors do not see significant differences in improvability of competence between the two groups of owner-managers who view their own entrepreneurial competence as either fairly improvable (moderate) or highly improvable (high). However, the internal and external assessors are both much more negative about the improvability of the competence of the owner-managers who view their own entrepreneurial competence as unlikely to improve (low improvability) (this difference is significant, $p < .05$ in *Gabriel's* procedure).

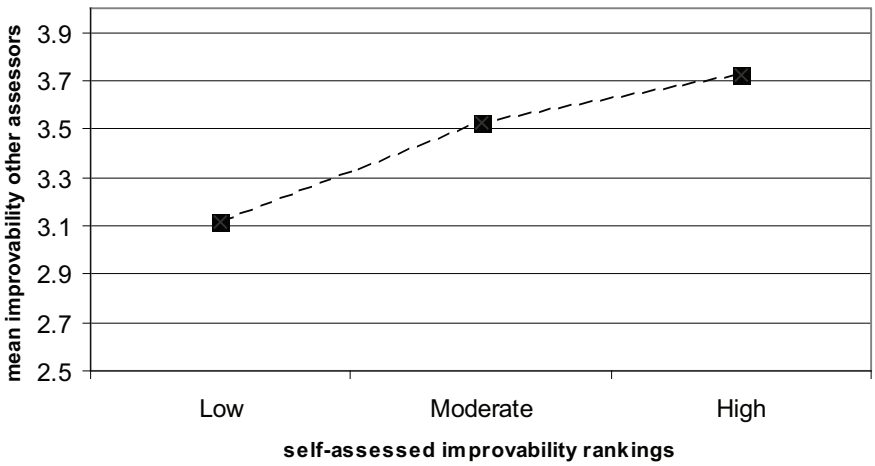

Figure 2.1 Improvability according to the other (internal and external) assessors for the three discerned self-assessed improvability rankings (low, moderate, high). Judgements were made on 5-point scales (1 = not at all, 5 = to a great extent).

Discussion and conclusions

The primary aim of this chapter was to shed more light on self-awareness and beliefs about the improvability of entrepreneurial competence. A multisource assessment of owner-managers was conducted to provide input for discussions on entrepreneurial competence, in particular from a small-firm perspective. The results of the study will be discussed below in relation to the postulated research questions. This will be followed by a discussion of the implications for practice and suggestions for subsequent research.

How do small business owner-managers evaluate their own entrepreneurial competence, and how do these evaluations relate to the perceptions of significant others in the work environment?

While many studies focused on managers in large firms have found a tendency toward overestimation of personal attributes, this study of small business owner-managers found a tendency toward underestimation, although the correlations between self-assessments and ratings of others were comparable (see for instance Church, 1997). A logical explanation, as suggested by Dunning and colleagues (2003), would be that owner-managers tend to overestimate their peers (i.e. professional colleagues), and therefore are too modest about their own qualities. The small business owner-managers' almost consistent underestimation of their own competencies seems to illustrate the tacit nature of much of what they have learned during their work as owners of their firms and suggests a lack of feedback on their accomplishments. However, there are more issues that should be considered in explaining underestimation.

First of all, it could reflect a sampling bias. It is possible that internal and external assessors, because of their power relationships with the owner-managers, were tempted to assess the owner-managers more positively than how they actually perceive the owner-managers' strengths and/or weaknesses. We tried to control for this by instructing the owner-managers to select internal and external assessors who knew the owner-managers' strengths/weakness well and were not afraid to articulate their thoughts. If this was a systematic bias, all the competencies would have received higher internal/external scores compared to the self-assessment scores. However, this is not the case, since the self-assessment scores for some competencies, such as problem-analysis, communication and strategic thinking, are higher than the other scores. The predominant underestimation could also be influenced by a cultural dimension. For example, the consequences of overestimation are much milder in the United States, where most multisource assessments have been conducted, than in the Netherlands (Atwater et al., 2005). This might lead to overly conservative self-assessments by the owner-managers in the Netherlands.

What is also interesting in this particular study is the difference between internal and external ratings. The internal-external correlations are quite low, and are in fact almost non-existent. Differences between internal and external assessments could mean

several things. First of all, the external and internal assessors may in fact not really have a good overview of all the competence areas. This idea seems to be reflected partly in the pattern of correlations between the self-assessment and internal or external scores. The self-internal correlation is the highest in competence areas that relate to the internal management of the firms, such as problem analysis, leadership and general awareness. The self-external correlation is the highest in competence areas which relate mostly to the external environment, namely persuasiveness, strategic thinking, networking and international orientation.

Finally, differences between the internal and external assessors' scores could also be explained by the fact that the assessments of the competencies were conducted on the basis of a context-appropriate, though still rather general, description of the different competencies. If one of the internal/external assessors has a slightly different picture of the competencies in question, he or she might make an assessment of something that was understood differently by the others. Assessors have their own expectations and frames of references, which colour their understanding of the competencies to be assessed.

How do small business owner-managers assess the 'improvability' of their entrepreneurial competence themselves and how do these assessments relate to the perceptions of significant others in the work environment?

This research suggests that all competencies are seen as subject to at least some development. The owner-managers in this study assessed the competencies networking and leadership the highest, reflecting the largest potential for improvement. Value clarification and international orientation were perceived as the least improvable. The score for international orientation could reflect whether a company is focused on internationalization, for example, on a very specific (transcontinental) niche market. If most of the firms in this particular sample were not so much orientated towards these areas, this orientation would not represent an area for improvement. An alternative explanation for the low score is that international orientation is perceived as a more complex construct, which requires many different elements such as foreign language skills, cultural sensitivity and international experience.

As noted earlier, the data also suggest different areas for improvement as perceived by the internal and external assessors. External assessors see more room for improvement for more externally orientated competencies, whereas internal assessors see more room for improvement for internal competencies. A logical explanation for this would be that the internal as well as external assessors have more insight into or attach more value to particular areas, and thus also see more opportunities for improvement in these areas. It is important to note that the owner-managers who perceive their competencies as least improvable were also rated as such by their internal and external assessors. It would be interesting to identify what characteristics set this group apart: whether these include for instance age, education or other factors. Together all the data suggest that what is viewed as improvable and the level of improvability are not only

personal judgements, but also most likely influenced by what is valued and promoted in a particular practice. This aspect was not the focus of this research, but represents an interesting venue for further research.

Implications for entrepreneurship education and training

As stated in the introduction, participation of small firms in formal education and training, including on management development, is low (Storey, 2004). This does not mean that owner-managers of small businesses do not learn (Lans et al, 2004); they learn mostly by doing (Cope & Watts, 2000). However, this type of learning sometimes comes at a price (Cope & Watts, 2000; Fenwick, 2003). Multisource assessments as adopted in this study can help owner-managers raise their self-awareness, and consequently help them bypass some of their (costly) trial-and-error learning experiences.

In this particular case, in which owner-managers consistently underestimated their entrepreneurial competencies, a programme aimed at strengthening entrepreneurial management would have to focus not on competence deficits (which is often the case) but rather on making owner-managers more aware of their entrepreneurial strengths and assisting them in working on their confidence (e.g self-efficacy in general but also specifically concerning learning and development) by providing them with more regular feedback. Furthermore, since this type of assessment functions as a learning and development tool, and not a test, it should also be communicated that way, not in terms of deficits, but in terms of areas for further improvement (this is similar to the notion of core competence of the organization, Prahalad & Hamel, 1990). In education and HRD literature, multisource assessments like these are referred to as formative assessments (Sadler, 1989). Formative assessments are not aimed at trying to acquire the most correct judgement about the competence level (e.g. assessment *of* learning), but are used to acquire more insight into the strengths and weaknesses of the person being rated, as well as to discover areas for improvement by discussing the results (i.e. assessment *for* learning).

A potential advantage of engaging business owner-managers in multisource (formative) assessments, besides stimulating their own development, is that it can help raise awareness about the possibilities and opportunities for learning in the small firm in general. Small firm HRD practices are not only influenced by the owner-managers' attitudes and experiences with HR strategies, but also by interaction with the wider business community (Bacon & Hoque, 2005; Jones & Macpherson, 2006). Interactions with external assessors about learning and development may convince the owner-managers to adopt learning-fostering activities like multisource assessments on a broader scale in the small firm.

Suggestions for further research

Firstly, this research was conducted with a limited number of small firms in a specific sector. It would be interesting to replicate and expand the scale of the same research in different industrial settings (e.g. different sectors and countries), to find out whether and to what extent the broader agricultural context actually influences the results.

Secondly, since this sample of owner-mangers was quite consistent in its assessment and underestimation of competencies, we were not able to investigate the difference between over- and underestimators on different performance criteria. Whereas under- and overestimation are both negative from a learning perspective, they might be viewed differently from a performance perspective. For instance literature suggests that, unlike managers, successful entrepreneurs are known to have high levels of entrepreneurial self-efficacy, make decisions based on little (or even counterfactual) information and often fail more than once before starting their most successful enterprise (see e.g. Chen et al., 1998). In simple terms this suggests that such entrepreneurs have a very positive self-image, are very selective in their use of feedback and advice or even ignore it. What is the balance between overestimation and underestimation in relation to learning and performance? With additional data on all sorts of entrepreneurial performance and learning (such as innovativeness, growth, number of employees, participation in training, coaching, learning behaviour, etc.), the effect of under/over estimation could be studied in more detail.

Thirdly, the investigated constructs of self-awareness and beliefs about improvability are conceptually related, but were studied separately in this research. In a more large-scale study it would be interesting to also investigate their empirical relatedness. Similar work has been carried out by Maurer and colleagues (2003a) among constructs such as general or task-specific self-efficacy. More sophisticated data analysis methods (for instance with structural equation models) could be adopted in such a study.

Finally, this research does not provide an answer to the question of whether heightened self-awareness, as can be expected from an intervention like this, does indeed lead to follow-up learning activities. In general, research findings from studies on large organizations suggest that the impact of multisource assessments is relatively weak if they only involve peer or supervisor feedback (Smither et al., 2005). A time-series type of study could look into which combinations of multisource assessments, feedback and other learning-orientated interventions lead to engagement in actual goal-oriented learning activities.