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Heroic and humane entrepreneurs: identity work in entrepreneurship education

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Abstract

Purpose – The purpose of this paper is to investigate the identity work of postgraduate students participating in an entrepreneurship training programme for life sciences. The paper aims to analyse what kind of entrepreneurial identities are constructed and in what ways in the context of the programme.

Design/methodology/approach – The paper relies on learning diaries and other written materials harvested from seven participants. Drawing on a social constructivist analysis, the materials were analysed by drawing attention to the kind of identities created, the contradictions that surfaced and how those were resolved in the written materials.

Findings – Two distinct entrepreneurial identities were constructed by the participants: the heroic and the humane. The first is the stereotypical role prototype that the participants experiment with. For the male participants this seems acceptable and normal. If they were in possession of more information, knowledge and skills they could identify with this heroic entrepreneurial identity. However, the female participants constructed an alternative identity; the humane entrepreneur running a low-tech firm with modest business goals or acting as an intrapreneur in an existing organisation.

Research limitations/implications – Future research should consider entrepreneurship programmes as arenas for (gendered) identity work.

Practical implications – Entrepreneurship training should not only provide the participants with business knowledge and skills but facilitate their entrepreneurial identity work.

Originality/value – The paper contributes to understanding entrepreneurship education as a context for entrepreneurial identity construction and extends the understanding of the expected outcomes of entrepreneurship education programmes. The study demonstrates how entrepreneurial identity construction processes in the context of entrepreneurship training are gendered.

Keywords Gender, Entrepreneurship training, Identity construction, Postgraduates

Paper type Research paper

Introduction

In knowledge-based economies, universities are increasingly expected to contribute to academic entrepreneurship. Simultaneously, the number of PhDs awarded annually has grown in many countries, including Finland, and consequently universities can no longer absorb the growing number of PhDs into an academic career. Therefore, graduates must seek alternate career options, such as entrepreneurship, and it is important for entrepreneurship education to play its part (Henry *et al.*, 2005). It is assumed that providing students with the skills necessary to launch new ventures contributes positively to their perceived self-efficacy (Wilson *et al.*, 2007) which in turn positively affects their entrepreneurial intentions and ultimately their behaviour (Kolvereid, 1996; Krueger *et al.*, 2000).

Research on entrepreneurial identities suggests that before becoming an entrepreneur, people first need to identify themselves with entrepreneurs (Hytti, 2005; Down and Warren, 2008). This is not always self-evident even for self-employed individuals or

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existing entrepreneurs. The image of entrepreneurs as heroic and masculine (see e.g. Drakopoulou Dodd and Anderson, 2007) may make it difficult for some to embrace the entrepreneurial identity and to view themselves as entrepreneurs (Mallon, 1998). As a result, entrepreneurship education can play a role in facilitating this identity work, and so transcend the mere provision of skills to establish and develop the venture (Hägg, 2011a, b).

This study investigates the identity work of postgraduate students participating in an entrepreneurship training programme at a graduate school for life sciences. The study aims to analyse how entrepreneurial identities are constructed in the context of the training programme and what kind of identities emerge. The study also analyses how the participants go about creating an entrepreneurial identity acceptable to them.

We argue that entrepreneurship programmes can serve as arenas for identity construction (Hägg, 2011a, b). The participants are active agents in the creation of meanings and they do not necessarily fit the available identity constructions explicitly or implicitly offered by the programme. In this study, two distinct constructions were derived. The heroic entrepreneurial identity was constructed as the stereotypical identity prototype to experiment with. Since not all the participants could embrace this identity an alternative humane entrepreneurial identity was constructed to support the entrepreneurial identity construction process. Gender played an important role in this. Theoretically our study contributes to understanding entrepreneurship education as a context for (gendered) entrepreneurial identity construction.

The paper is structured as follows. In the next section we will discuss entrepreneurial identity in the context of education followed by a description of the methodology and findings. The final sections discuss the meaning of the findings and their implications for research and practice.

Entrepreneurial identity in the context of education

Traditionally, entrepreneurship training has emphasised idea development and start up planning. Entrepreneurship education is seen to provide nascent entrepreneurs with the skills and knowledge they need for entrepreneurship and entrepreneurial behaviour, which in turn increases their self-efficacy linked with entrepreneurship (Wilson *et al.*, 2007) and ultimately positively affects their entrepreneurial intentions and behaviour (Kolvereid, 1996; Krueger *et al.*, 2000). From the individual perspective, entrepreneurship training is focused on developing the skills of potential entrepreneurs and on improving their knowledge of entrepreneurship related issues (Henry *et al.*, 2005). Entrepreneurship education is promoted with the idea that increasing the cohort of students with the relevant venturing knowledge and skills will lead to a similar growth in the number or quality of nascent entrepreneurs (Matlay, 2005, 2006).

Recent research is critical of this emphasis on the venture level and suggests that entrepreneurship training could be viewed as an important arena for identity work too (Hägg, 2011a, b). Accordingly we will draw theoretically on the concept of entrepreneurial identity (Steyart, 1995; Fournier and Lightfoot, 1997; Wåhlin, 1999; Lindgren, 2000; Down and Reveley, 2004; Hytti, 2005) and focus on how people construct identities for themselves (Fournier and Lightfoot, 1997). Identity work is about the way people position themselves in discourse, how they attach themselves to certain issues, using and combining texts and materials to articulate and give meanings for themselves and their actions. Identity is constructed through a positioning in discourse, as a performance created and sustained through textual labour. Identity is not pre-determined or fixed but is always emergent (Linstead and Thomas, 2002;

Thomas and Linstead, 2002). Within a training programme the participants have the opportunity to explore their relationship with the new venture creation and entrepreneurial career, in short reflecting their own identity with regard to entrepreneurship (Hägg, 2011a, b).

Furthermore, within management education research there is strong criticism of viewing the role of management education solely from the perspective of the transfer of knowledge and skill to practice. There is a shift towards emphasising learning in processual terms and emphasising how management education might contribute to identity work of becoming a manager (Sturdy *et al.*, 2006; Warhurst, 2011). The findings of these last studies may also be helpful in understanding the role of education in facilitating the becoming of an entrepreneur in the context of entrepreneurship education. First, the participants are not succumbing to identity-regulation and to an oppressive construction of themselves, but people who are prepared to challenge meanings and appropriate them for their own purposes. Hence, the question is about active agency facilitated by identity work. Second, management education contributes to developing language skills (in a broad sense) and thereby the ability to assert a position in front of peers or significant others. The language contributes to providing both self-confidence and identity resources for creating, strengthening and maintaining an identity. Third, the importance of role prototyping in the construction of the self is highlighted. Individuals engage in identity matching with notable people they compare themselves against. Fourth, the classroom provides a safe environment for experimenting with provisional selves. Fifth, identity formation does not take place in a vacuum, demanding participants in management education break away from their established professional identities. Finally, the participants may also resist the identity altogether by opting out, so effectively declaring that this is not something for them (Sturdy *et al.*, 2006; Warhurst, 2011). Liminality refers to a change process where an individual is between two identity constructions, and is suggested to be a useful concept for understanding identity work/construction. Hence, liminality can be defined as a reconstruction of identity in such a way that the new identity is meaningful for the individual and their community (Beech, 2011; Hägg, 2011a, b).

Methodology

The Academy of Finland funded an entrepreneurship programme "Entrepreneurship – an interesting opportunity?" that was targeted at research schools in the fields of chemistry, physics, information technology and bioinformatics, life sciences and pharmacology. The programme was aimed at increasing knowledge about entrepreneurship, providing relevant business skills and supporting the possibility to start in business as an entrepreneur. A total of 34 doctoral or post-doctoral students completed the programme.

This study reports a qualitative analysis of the learning and evaluation material written by the students during and after the programme. Writing personal learning diaries was an integral part of the programme, and those diaries provided important information about their learning and the development of individual perceptions. Similarly the written assignments on entrepreneurship completed by the students gave us valuable information on their perceptions and learning outcomes and also on how they constructed their own entrepreneurial identity and entrepreneurial behaviour. At the final stage of the programme, the students were also asked to reflect upon their personal learning outcomes and future perspectives from an entrepreneurial point of view.

For the purposes of this study these learning diaries and other materials produced by the participants were understood as arenas for identity work. The materials were analysed in particular by focusing on the following issues (see Eriksson and Kovalainen, 2008):

- What kind of entrepreneurial identities and perceptions of entrepreneurship are evoked and constructed in the learning diaries?
- What kind of entrepreneurial identities the participants perceive acceptable and attractive for themselves?

The analysis focused on material produced by seven participants – four women (Anna, Mary, Norah and Sally) and three men (Luca, Matt and Thomas) – who were selected based on their responses to surveys conducted during the programme. These individuals were hand-picked from the survey data based on their reports of decreased or increased intentions to start new ventures before and after the programme (Paasio and Hytti, 2006; Heinonen *et al.*, 2006). We felt that this change – either towards or away from starting a new business – would signify that considerable identity work had taken place during the programme, which could be analysed from their writing.

Following the social constructionist approach we did not aim to capture the truth but rather to understand what kind of identities are created, what kind of contradictions or puzzles surface and how these are resolved in the written materials (Silverman, 1993; Silverman, 2000; Eriksson and Kovalainen, 2008). Through this analysis we investigated how participants identified with entrepreneurs during the programme and what forms of identity they found acceptable. We isolate the different ways the participants wrote about their personal entrepreneurship to explore their entrepreneurial identity based on their experiences and understanding (Patterson and Mavin, 2009). The analysis focuses on which narrative reserves are available to the participants and how that influences the participants' engagement in entrepreneurial activities. In this approach individuals are not completely free to construct their identities but they rely on the available individual and collective histories or narrative reserves as important resources in the identity construction (Hytti, 2003). In the analysis we demonstrate the identity construction process of the participants and the acceptable entrepreneurial identity constructions they crafted for themselves. Next, we will present the findings from the analysis.

Reflecting on their entrepreneurial identity

Based on our study we were able to identity two different identity constructions – here named heroic and humane entrepreneurs – which are examined further in the following sections.

Heroic entrepreneurs

Previous research has demonstrated how entrepreneurship is gendered and dominated by heroic and masculine images (Ahl, 2002; Marlow, 2002; Ahl and Marlow, 2012). The ability to take risks, the need for achievement, dominance, aggression and independence are associated with this image of a hero (Mitchell, 1997; Ahl, 2002; Ogbor, 2000). The Entrepreneur, as Mitchell (1997) ironically points out, acts "as the **stork-like** deliverer of new business, the entrepreneur acts as a mythic character. Somehow s/he single-handedly 'creates new enterprise' Low and MacMillan (1988)

through the use of extraordinary powers. Mere mortals need not apply" (Mitchell, 1997, p. 122, emphases and reference in the original).

To understand the results of this study it is important to note that entrepreneurial activity in high-tech sectors, including the life sciences, is a particularly masculine phenomenon (Rosa and Dawson, 2006), hence the male image of an entrepreneur may be even more pronounced in the life sciences context than it is more generally. Our findings are informative on how the heroic image of an entrepreneur is an important narrative resource influencing identity work. These masculine and heroic images and perceptions can also be applied as a resource in constructing alternative identities that are legitimate and acceptable to the individual (Bruni *et al.*, 2004). It is this heroic image against which potential entrepreneurs reflect their own identity when attempting to move towards entrepreneurship. The image is conveyed by the talk of risk taking, courage, success and masculinity, which reinforces the perceived importance of those qualities, or how they are inherent, to entrepreneurs:

> I am not too independent and innovative. I am bad at taking risks (Norah).

The research material is illustrative of the ways the participants can envision themselves acting as entrepreneurs and can construct an entrepreneurial identity. A male participant claimed to be ambitious and had a strong drive to entrepreneurship, but suffered from a lack of courage, which he believed he would get by obtaining more knowledge about entrepreneurship and businesses:

> I said that one ability I'm lacking is courage. I have been thinking this in the last few days. I have started to believe that the missing courage is only missing knowledge about being an entrepreneur in your own field (Matt).

The approach to the entrepreneurship programme was therefore very instrumental and practical. They would be ideal students for many entrepreneurship educators who believe that providing knowledge is sufficient to promote entrepreneurship and to start up a company:

> I want to gain knowledge and instruments to develop and evaluate my own business ideas […] as well as concrete pieces of advice on how to start up a company (Matt).

> I am lacking a lot of knowledge on business world and commercial related issues (Luca).

The same pragmatic approach can be seen in the comments of another male participant. For him, starting up a company was a relevant option, but one that could only be implemented after acquiring practical experience from working in a business:

> Starting up a company isn't likely in the coming years but is, however, an interesting and relevant idea in the future after I've gained some experience as an employee in a company (Thomas).

We interpret the pragmatic approach of the participants to suggest that they are capable of evaluating and accepting an entrepreneurial identity without needing to alter or transform themselves. The identity work deals therefore more with adding to skills, competences and experience in order to acquire the entrepreneurial identity.

Success is also an intriguing theme in the materials. The programme invited several successful entrepreneurs active in the life sciences to contribute, with the idea that the similar science background they shared with the course participants would help the latter group identify with the entrepreneurs and could help them to see themselves as entrepreneurs. This was, however, not the case as the lack of business experience

became a barrier between the students and the entrepreneurs, so that the students doubted the applicability of the success stories:

> Mister XX and Mister YY come from such a different sphere to me, and when they talked in such fancy terms and professionally I felt I was listening to a company advertising spiel, not their honest account of the everyday life of the firm and being an entrepreneur (Sally).

In contrast, the input offered by a visiting entrepreneur who had started a business without much experience and who also openly talked about all the difficulties encountered initially was received by an attentive audience:

> I must say it was refreshing to hear that in the beginning things don't always go as planned (Sally).

These stories of success or things not going as planned could be understood from the perspective of role prototyping in constructing the provisional selves. Owing to their lack of knowledge, experience and insufficient professional vocabulary, the participants were not able to match themselves with the successful businesspeople. These successful people visiting the programme contributed to the heroic story, which not all participants were able to envision. Instead they found it much easier to identify with the stories of difficulties "mere mortals" face when launching a business.

The texts also provide cues that an entrepreneur is understood as someone professional and masculine but lacking compassion and empathy. Hence, when the participants were asked to read a case of a person capable of combining these elements in their life, this surprising notion was reflected in the learning diaries:

> You get the idea of Kevin Sharer that he is very competent at work, has internalized his position very well but is still a person with empathy (Sally).

> One must wonder how top managers in large firms – at least based on this article – manage with the challenges that drop into their laps all the time. Is there any time left for relaxation or family? (Mary).

Identity work is also made explicit in the texts; as is how constructing the entrepreneurial identity implies breaking away from the professional identity, and how this break is resisted by the participant. In a personal SWOT analysis, a male participant lists business skills as one of his weaknesses, and continues:

> I do not consider myself a future business leader, but more as a researcher. Personally, I'm not really a man with a suit (Thomas).

Interestingly, learning the language of business was noted to be an important milestone in constructing the entrepreneurial identity. One of the participants took the need to learn the language of business seriously and in his learning diaries offers explanations for different business-related concepts from the *Dictionary of Economics*, *Business Week* or other management journals that he has started to read during the programme. "I browse through business week and other business related journals and get familiar with stock market, shares in Europe and in the world" (Luca). Learning the language was an integral part of his identity work (Hägg, 2011a, b).

Although we do not wish to overemphasise the divide between men and women in our programme and research materials, it became obvious that the identity construction and identity work processes are gendered. For the men, the heroic entrepreneur identity as such is acceptable and even self-evident, and something attainable following the acquisition of additional experience and required knowledge of entrepreneurship: or

alternatively, it is refuted by turning back to the current prevailing identity as a researcher and academic. However, for the women to construct a meaningful entrepreneurial identity (Beech, 2011) required them to challenge the heroic entrepreneurial identity and to construct a new type, that we termed the humane entrepreneur.

Humane entrepreneurs

Academia, and particularly natural sciences, has been reported to be a masculine and male-dominated environment (Keskitalo-Foley *et al.*, 2007; Meriläinen, 2001). Female scientists are underrepresented in academic entrepreneurship (Rosa and Dawson, 2006). This is explained by their underrepresentation in the higher academic ranks. Hence, the female scientists engaged in entrepreneurial ventures do not have many role models of the same gender (Marlow and McAdam, 2012). In our research material, it became evident that a way for the female participants to craft an acceptable and meaningful entrepreneurial identity was to envision being entrepreneurially active in areas other than their own field of life sciences. They speculated about opening a cafeteria or an organic farm, that is, they thought of operating in industries with less masculine and softer qualities than are found in technology and the life sciences. As with the selected business sector, the business goals imagined were also fairly modest:

> [I would set up the café] only in the case that my partner has a decent enough salary that he can be the primary breadwinner in the family. I doubt that opening up a café can be very profitable (Mary).

In addition, these low-tech businesses may also be escapes or ways to opt out from the demands of academic life or the perceived necessity of technology firms to aspire to high-growth.

The role of management or entrepreneurship education being about learning a new language and applying that new language to construct a new identity also emerged in our materials from another angle. Early on in the programme, the participants were introduced to the concept of an intrapreneur or corporate entrepreneur. Corporate entrepreneurship (CE) was defined for the participants to mean entrepreneurship within an existing organisation referring to emergent intentions and behaviours that deviated from the customary way of doing business (Antoncic and Hisrich, 2001). CE is "the process whereby an individual or a group of individuals, in association with an existing organization, create a new organization or instigate renewal or innovation within that organization" (Sharma and Chrisman, 1999, p. 18).

Learning this new concept and language of intrapreneurship facilitated the entrepreneurial identity work and formation for those resisting the heroic start up entrepreneur identity. The concepts of intrapreneur, corporate entrepreneur and CE were novel and liberating, allowing the participants to approach entrepreneurship from a new angle. This new entrepreneurial identity was applied as a good enough reason to stay in the programme. This concept meant they did not need to feel inferior to others (who were able to identify with entrepreneurship and envision themselves becoming entrepreneurs one day) but rather could adopt a different orientation towards entrepreneurial behaviour in a corporate setting (Heinonen, 2007). CE gave them an opportunity to view themselves as entrepreneurial and to sample another type of entrepreneurship (cf. Verheul *et al.*, 2005), as the following citation illustrates:

> I discovered that an intrapreneur is something that would fit me, at least in the life sciences (Norah).

During the programme they eagerly reflected upon their own working environment and themselves in relation to CE. They became convinced that entrepreneurship and setting up a business was certainly not for them (at least at that time), but discovered the entrepreneurial process in the form of CE to be exploitable and of potential benefit to their current work:

> What a relief – I do not have to become an entrepreneur, there is a choice that suits me better! It is totally clear to me that I am more an intrapreneur than an entrepreneur (Anna).

Furthermore, this new language of intrapreneurship allowed for new interpretations of themselves as researchers in the male-dominated academic environment (Keskitalo-Foley *et al.*, 2007; Meriläinen, 2001). One participant related how she had unsuccessfully attempted to convince her project leader of her ideas for a new research approach for the past three years, which had left her feeling unsure about both the research project and herself. Then she wrote about the discovery she had made in the programme:

> The programme and its exercises have convinced me that I'm not a bad researcher but just in the wrong type of environment (Norah).

In addition, through exercises encouraging her to sample the entrepreneurial process and by throwing herself into the process, one participant was able to identify with being an entrepreneur and to perceive that entrepreneurship was not such a remote option for her as she had thought at the beginning of the programme:

> In the beginning I thought that these exercises don't say that much about yourself but now I have somehow started to open up to these activities (Anna).

It is not the case that these participants, primarily women, would refute the entrepreneurial identity altogether as some previous studies suggest (Mallon, 1998) but that they need to craft an alternative identity to the male and masculine connotations that are available within life science entrepreneurship. It was accomplished by considering entrepreneurship in industries with less masculine and softer qualities than are found in life sciences. In addition, the programme offered them the concept of an intrapreneur, which they embraced or accepted as a possible way to imagine themselves as entrepreneurs outside their own professional arena of high-tech entrepreneurship and the life sciences.

Discussion

This paper investigated how entrepreneurial identities are constructed in the context of a training programme organised for doctoral students in life sciences. We analysed learning diaries and other materials produced by seven participants (four women and three men). The social constructivist analysis led to two entrepreneurial identity constructions: heroic and humane entrepreneurs. It became evident that the men in our study found it easy to accept and experiment with the heroic entrepreneur identity imbued with qualities such as risk taking, courage and masculinity. This does not mean that they anticipated becoming entrepreneurs in the foreseeable future, but it is presented as a natural and realistic option without contesting the heroic entrepreneurial identity. Adopting and accepting this identity was not the challenge, rather it was a lack of the knowledge and skills needed to realise it. Hence, starting up a company could be facilitated by acquiring more information, knowledge and experience and by learning the language of business. Accordingly, it was merely a pragmatic challenge and did not require the construction of a new type of identity.

These participants would benefit from entrepreneurship education programmes that enable the development of skills necessary for venture creation.

In contrast, for some of the participants, who in our study were women, becoming an entrepreneur posed additional challenges, involving their identity. They were not capable of viewing themselves as high-achievers akin to successful men in suits and therefore they challenged the heroic entrepreneurial identity. This suggests that the realm of high-tech life science entrepreneurship is particularly masculine and male dominated (Marlow and McAdam, 2012) and consequently a more challenging arena for women. To experiment with entrepreneurship the female programme participants constructed an alternative entrepreneurial identity. For example, they rejected the option of starting up a life science business but were prepared to speculate about starting an organic farm or a cafeteria with modest business goals. For these participants learning a new language meant being introduced to the concepts of intrapreneurship and CE. The CE concept acted as an emancipatory tool allowing the female participants to identify themselves as entrepreneurs and construct an entrepreneurial identity, which they were not able to do while they perceived external entrepreneurs to be burdened with the masculine and heroic image (Verheul *et al.*, 2005). At least for some of the participants, CE was a near revolutionary idea (Meriläinen, 2001) with which to craft their entrepreneurial identity. In comparison to high-tech entrepreneurship, CE is less laden with masculine images giving more room for the women to adopt this kind of identity. Hence, the concept was useful in permitting the female participants to experiment with the fit of a certain type of entrepreneurial identity and the entrepreneurship process. Since entrepreneurship is not necessarily obvious or easily acceptable in many professions, such as in case of artesans or creative people (Carey and Matlay, 2010), it is fruitful to understand and analyse entrepreneurship education programmes as contexts for identity work (Fournier and Lightfoot, 1997; Linstead and Thomas, 2002; Thomas and Linstead, 2002) rather than viewing them merely as vehicles for influencing entrepreneurial attitudes and transferring necessary knowledge and skills enabling venture creation (Hägg, 2011a, b).

Implications

Theoretically our contribution is linked to entrepreneurial identity (Steyart, 1995; Fournier and Lightfoot, 1997; Wåhlin, 1999; Lindgren, 2000; Down and Reveley, 2004; Hytti, 2005) in the context of an entrepreneurship training programme. Entrepreneurship programmes can be used as arenas for exploring and constructing the entrepreneurial identity (Hägg, 2011a, b). The gender-neutral assumption within the training programme contributed to strengthening and maintaining the masculine connotations of entrepreneurship, which were contested by some of the participants. The weak fit of those masculine connotations led to the construction of an alternative entrepreneurial identity, that of the humane entrepreneur. The educational environment can serve as a place for reflecting upon and trying to identify an entrepreneurial identity that is authentic and accessible (Hägg, 2011a, b). The contexts of the study were the masculine and male-dominated academic arenas of life sciences and new venture creation in the high-tech industries. It would be interesting to research this in other contexts near to life sciences, such as participants exploring start up health care ventures which is clearly a female-dominated business sector.

Our study confirms previous studies in that the participants were capable of challenging meanings and appropriating them for their own purposes. In addition, the

importance of learning a new language as a source of self-confidence was also highlighted by our study (Sturdy *et al.*, 2006; Warhurst, 2011). Future research is needed to further investigate how the aspiring or nascent entrepreneurs learn the language and apply symbols or rituals that instigate them into the "entrepreneurial tribe".

The study has several practical implications for educators and programme planners and also for researchers studying entrepreneurship education and identity work. First, input from visiting practitioners, even if from a very relevant field, will not always offer course participants with role models with whom they can identify. Those practitioners with experience of meeting customers and investors have become accustomed to business life and its jargon that remains alien to the participants, despite the shared scientific background. The business experience and the successes achieved may also be difficult for the participants to absorb while they foresee a number of hurdles on their own path towards entrepreneurship. Therefore, people openly sharing their experiences of difficulties and of how they survived as entrepreneurs are more accessible to the participants than the more distant examples of success.

Second, it is necessary to experiment with different programmes and the ways to construct entrepreneurs to present accessible options to various participants (Eriksson and Pietiläinen, 2001; Hägg, 2011a, b). Incorporating the CE aspect into entrepreneurship programmes might make them and entrepreneurship itself more accessible for those who have difficulties in accepting the heroic image of entrepreneurship. Through the CE concept they can perceive themselves as certain types of entrepreneurs, even while not being able to identify with entrepreneurs (Heinonen, 2007). The participants might also benefit from and relate to other concepts such as social entrepreneurs. Hence, it is of importance not to consider entrepreneurship and entrepreneurial identities only in the business realm. Similarly, it is of utmost importance to be able to develop and implement tools and measures to identify such various learning outcomes, not merely the change in entrepreneurial intention or the actual starting point of a business.

Conclusions

By studying the identity work of postgraduate students participating in an entrepreneurship training programme at a graduate school for life sciences the study revealed two distinct entrepreneurial identities constructed by the participants: the heroic and the humane. Our study demonstrates how the heroic entrepreneur is the most common narrative reserve the participants draw from: they need to either embrace or differentiate from this heroic entrepreneurial identity. Second, we demonstrate how entrepreneurial identity construction processes in the context of entrepreneurship training are gendered. Life sciences, as a male-dominated field laden with masculine connotations, limit women's access to it. Therefore, women needed to construct an alternative, more acceptable entrepreneurial identity for themselves during the programme.

Existing literature highlights the quantity and quality (performance and survival) of nascent entrepreneurs as the major outcomes of the programmes, and they are achieved by influencing entrepreneurial attitudes and motivation of the participants as well as by increasing their skills and knowledge during the programme (Matlay, 2005, 2006). This study contributes to understanding entrepreneurship education as a context for (gendered) entrepreneurial identity construction and therefore extends our understanding of the expected outcomes of entrepreneurship education programmes. Finally, our qualitative approach to studying the entrepreneurship education

programme clearly demonstrates the potential of intrapreneurship – entrepreneurial behaviour within existing organisation – as an optional entrepreneurial identity and outcome of the entrepreneurship education programme. This opens up new avenues for researching the role of entrepreneurship education programmes in promoting entrepreneneurial careers also in existing larger organisations.

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