Two flavors of entrepreneurial education

- happiness empowerment versus meaningful creativity

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1 Introduction

Entrepreneurial education has been stated to promote capitalism through its alleged connections to neoliberalism (Erkkilä, 2000, p.124-126). Some teachers see it as a way to covertly introduce capitalist values into the education system, thereby clashing with traditional humanistic values in education such as equity, participation and the common good (Korhonen et al., 2012; Rose, 1998; Komulainen et al., 2011). Neoliberalism celebrates market mechanisms through privatization, competition through the exercise of 'freedom of choice' and self-sufficient individuals taking own responsibility for their life's necessities (Castree, 2010). In a neoliberal state, collective well-being is maximized when each individual focuses on his or her happiness through constant strategizing and making profit versus loss calculations for oneself (Rose, 1998).

The alleged connection between neoliberalism and entrepreneurial education can be seen as valid when the ulitmate goal of entrepreneurial education is to empower students to achieve happiness for themselves through entrepreneurship. However, when the ultimate goal of entrepreneurial education is to let students engage in creative activities aiming to change the world into a better place, the alleged connection seems much less valid. Recent research in psychology and philosophy has pointed out some key differences between happiness and meaningfulness (Baumeister et al., 2012; Metz, 2009; Wong, 2014). Whereas happiness is about pleasant experiences for oneself through means of our five senses, meaningfulness is about the creative actions we take and the benefits they generate for others (Frankl, 1985; Feldman and Snyder, 2005; Metz, 2009). This paper explores these two quite different goals of human activity as outlined in well-being theory and motivation theory, and relates this to different forms of entrepreneurial education. Two distinct prototypic flavors of entrepreneurial education are outlined, where one aims to produce empowered individuals maximizing their own happiness through goal-directed achievement, and the other aims to produce creative citizens striving to instigate meaningful change for society even if it comes at a cost in reduced happiness for themselves.

This article proceeds as follows. First we look at how neoliberalism and entrepreneurial education have been defined and how their commonalities have been described in extant literature. Then we outline a new lens based on well-being and motivation theories, to use in our study of the relationship between entrepreneurial education and neoliberalism. Finally we apply this lens in order to try to shed some new light on two distinct flavors of entrepreneurial education, and discuss implications for entrepreneurial education as well as for education more in general.

2 Neoliberalism and entrepreneurial education

In this section we outline basic tenets of neoliberalism, entrepreneurial education and the alleged interaction between them.

2.1 Neoliberalism

The key idea of neoliberalism is to let governments pass legislation that lets autonomous entities such as individuals, groups and organizations self-organize and freely determine the best way forward for themselves, and at the same time by power of micro level market-like optimizations through such free choice maximize the total well-being in society (Rose, 1998). Castree (2010) has outlined seven principal characteristics of neoliberalism; privatization, marketization, state deregulation, market-friendly regulation, use of market proxies in government sectors, encouragement of NGOs to assume social responsibility and the creation of self-sufficient individuals. At its best, neoliberalism combines freedom of choice for the individual with optimal use of expertise to result in a higher level of wealth, health, well-being and efficiency in society than other policies could offer (Robinson, 2010; Rose, 1998). At its worst, it leads to governments handing over the power of nations to profit-maximizing multinational corporations, leading to commercial values overruling human needs, neglect of the common good and indoctrination of anti-democratic values (Down, 2009; Giroux, 2005). Being a pejorative term itself, neoliberalism has been stated to be the root of a multitude of evils in society, such as plundering of society for profit, looting of public lands, allowing for war profiteers to flourish, facilitating pollution of the environment, turning schools into shopping malls and reducing education to mere preparation for standardized tests (Giroux, 2005).

Neoliberalism is often associated with an emphasis on enterprising individuals taking autonomous responsibility for their life, exercising their freedom to choose whichever path in life that optimizes their own happiness and self-esteem (Rose, 1998). The social domain is rephrased as an economic domain where economic individuals (homo oeconomicus) make constant cost-benefit calculations to optimize their private life as well as their work life (Lemke, 2001). At their disposal are a plethora of "technologies of the self", i.e. therapeutic systems that can help people attain happiness, wisdom or perfection (Foucault, 1988, p.18). What constitutes happiness is further defined by self-help experts articulating appropriate life-styles for citizens, leading to a hedonistic and individualistic "cult of the self" (Rose, 1998). While compelling to many lay people, the resulting flip side of neoliberalism is that when the state withdraws from explicitly taking care of its population, each citizen needs to assume responsibility for the consequences of his/her choices and non-choices. This includes success but also potential failure, leadning to a "no excuses" culture of blaming unsuccessful citizens for their own failure (Petersen and O'Flynn, 2007). This has been labeled the "price-tag" of neoliberalism (Lemke, 2001). Such a meritocratic society increases inequality by being more beneficial to the people in possession of the traits and resources conducive to success, such as the "right" class, race and gender (Gill, 2014). Such effects have also been shown to impact educational institutions in terms of neoliberal policies leading to increased inequality in schools (Apple, 2001; Hursh, 2007).

2.2 Entrepreneurial education

Entrepreneurial education is a unifying term for entrepreneurship education and enterprise education (Erkkilä, 2000). Entrepreneurship education has been defined as developing competencies necessary to set up a new venture or business (QAA, 2012). Enterprise education has been defined as developing competencies necessary to generate and realize ideas (ibid). In line with this, Mahieu (2006), has proposed a narrow definition of entrepreneurship as focusing on starting a company and becoming *an entrepreneur*. A wider definition of entrepreneurship focuses on personal development, creativity, self-efficacy, initiative-taking, proactiveness and perseverance, i.e. becoming *more entrepreneurial*. By disregarding differences in organization creation implications of these two views, a common core of entrepreneurship has been articulated as creating new kinds of value for others (Bruyat and Julien, 2001; Fayolle, 2007). A

corresponding definition of entrepreneurship as new value creation for others has been stated to be particularly suitable for the educational domain, since it avoids the potential definitional confusion resulting from two very different forms of entrepreneurial education (Lackéus, 2015). Any educational intervention that allows students to learn by creating new kinds of value to others is thereby deemed entrepreneurial.

Entrepreneurial education has been positioned as the answer to a multitude of societal challenges, such as the need to create economic growth (Kuratko, 2005; Gorman et al., 1997; Hindle, 2007), develop key competencies (Henry et al., 2005; Hytti and O'Gorman, 2004), increase student engagement in schools (Moberg, 2014) and increase citizens' ability to address societal challenges (Volkmann et al., 2009; Rae, 2010). On an individual level, entrepreneurial education has been stated to allow for fostering self-reliant and opportunity-seeking individuals with an enterprising attitude to work and life (Mwasalwiba, 2010). What is seldom specified is whether the focus is on opportunity-seeking for oneself or for others. In today's prevailing "cult of the self" in many Western countries (Hofstede, 1983) one could assume that all entrepreneurial opportunities are implicitly stated to be opportunities for oneself, but in accordance to a value creation based definition of entrepreneurship the value is by definition created for someone else. What is meant by self-reliance is also usually implicit, not specifying whether it is a self-reliance in terms of providing for one's own income and well-being or self-reliance in terms of possessing a strong capability to independently initiate creation of new kinds of value to others. In later sections of this article we will come back to this perceived gap in the literature on entrepreneurial education.

2.3 The alleged links between neoliberalism and entrepreneurial education

Komulainen et al. (2011) have pictured the policy pressure for entrepreneurial education as an attempt to restructure the educational system in line with neoliberal values. Seeing education as a means towards often economic ends, rather than an end in itself, is stated to represent a neoliberal vocationalization of education, converting teachers to customer service agents of a human capitalist system. Based on the stereotypic teacher perception of entrepreneurs as self-reliant and risk-taking male heroes, they picture emphasis on entrepreneurial education as a means to preserve and strengthen outdated but widespread views on what entrepreneurship is. Thus, when policy-makers ask of teachers to develop students' entrepreneurial competencies, they at the same time spur a reproduction of the male hero myth of entrepreneurship (cf. Ogbor, 2000), leading to increased gender, class and race inequality.

Berglund (2013) claims the enterprising self to be at the core of entrepreneurship and entrepreneurial education. She outlines this particular ideal of an individual as someone seeking to maximize her own power, her own happiness and her own quality of life. Here, the UK mobilization towards enterprise education and other European examples are used to illustrate a trend towards educating rational choice focused individuals optimizing their own employability, flexibility and self-responsibility, well in line with the goals of neoliberalism.

The link between neoliberalism and entrepreneurial education relies upon the core idea of self-optimizing individuals, by means of the centrality of *homo oeconomicus* in neoliberalism (Lemke, 2001). This is in line with egoistic, heroic and individualistic views of entrepreneurship, but does not align with more altruistic (Gilder, 1981), collectivistic (Tiessen, 1997) or communitarian (Deuchar, 2007) views of entrepreneurship, nor with Bruyat and Julien's (2001) definition of entrepreneurship as the creation of new kinds of value for other people.

3 Establishing the analytic lens of well-being and human motivation

In this section we outline theory and literature from the domains of well-being, positive psychology, motivation theory and entrepreneurial motivation theory. Table 2 summarizes some key aspects relevant to this article. This will later be used as a lens for analyzing and discussing two different flavors of entrepreneurial education.

3.1 Well-being research on what constitutes "a good life"

Scholarly attempts to increase our understanding of what constitutes "a good life" is usually labeled wellbeing research or positive psychology. Such research has potential to impact a wide array of dimensions in society, since many change efforts in society are aimed at improving the daily life of people and can gain clarity and effectiveness by having a clear view of what is aimed for (Ryan and Deci, 2001). A common construct used is *quality of life*, stated to consist of *objective human needs* and *subjective well-being* (Costanza et al., 2007). Some basic human needs are food, water, rest, shelter, reproduction, security, affection and freedom. Subjective well-being has been defined by Seligman (2012) as consisting of five measurable elements; positive emotion, engagement, relationships, meaning and achievement, abbreviated as PERMA. Positive emotion is interpreted as a mood induced by a pleasant life. Engagement is interpreted as being in "flow", being completely absorbed by a task and losing track of time. Relationships. Meaning is interpreted as belonging to and serving something that is bigger than the self, often despite its sometimes detrimental impact on other elements of PERMA. Achievement (or accomplishment) is interpreted as achieving one's goals solely for their own sake, isolated from any eventual resulting impact on the four other elements of PERMA, i.e. winning just for the sake of winning.

In 20th century's prevailing behaviorist and cognitivist research paradigm, positive feelings were not a legitimate object of scholarly studies (Kahneman et al., 2003). Focus was instead on pathology and psychological disorder, neglecting what makes life worth living (Seligman and Csikszentmihalyi, 2000). Humans were regarded as passive vessels responding to stimuli, rather than active individuals with a free will to choose among multiple alternatives for purposive action (Seligman et al., 2013; Seligman and Csikszentmihalyi, 2000). This led to well-being and positive psychology remaining under-researched concepts for many decades, neglecting the potential of creative humans performing at their best and in "flow" (Csikszentmihalyi, 1991). In the 21:st century, positive psychology has grown rapidly and has been applied to a wide range of disciplines and professions such as education, healthcare, economics, political science, leadership, management and social services (Donaldson et al., 2011). A subdomain has been labeled positive education, defined as integrating principles of positive psychology into the academic curriculum in order to improve students' well-being and mental health (Norrish et al., 2013; Seligman et al., 2009). Kristjánsson (2012) has provided an overview of critique against this movement, tentatively labeling it as old wine in new bottles based on its many similarities with previous research in educational psychology. There is also a general critique of positive psychology provided by Lazarus (2003), claiming that it is a shallow and slogan based movement based on sloppy research methods and merely reframing old insights from psychology.

A common method to assess quality of life has been to ask a question such as ""How satisfied are you with your life as a whole these days?" (Schwarz and Strack, 1999, p.61). The responses given are however too context dependent and culturally biased to give reliable information that can guide public policy. Increasing focus has therefore been given to moment-by-moment assessment of well-being in terms of momentary experiences of well-being (Diener, 2000). The experience sampling method (ESM) is a common method consisting of short surveys capturing respondents' experiences directly in their natural environment, attempting to capture the "flow" of everyday experience (Hektner et al., 2007). This leads to

a high level of ecological validity (Reis et al., 2014), and reduces or eliminates the cultural norms based retrospective bias of people reporting their life experiences (Oishi, 2002).

Emerging evidence in well-being research has illustrated the shortcomings of the usual economic assumption that people will and should always optimize their self-interest (Kahneman et al., 2003). People act in unselfish and helping pro-social ways for many reasons despite at times considerable cost for themselves (Batson et al., 2008). And even if they would indeed optimize on self-benefit in terms of economic wealth, this will still not increase their well-being unless they were previously very poor (Myers and Diener, 1995). Research has shown that the degree of well-being of wealthy people is largely similar to that of non-wealthy people, and that the well-being of wealthy people is more related to the enjoyment and involvment in the work that has made them wealthy than to the resulting spending power of the money they made from it (Diener et al., 1985).

3.2 Contrasting happiness and meaningfulness

A key aspect unrecognized by Seligman's PERMA model of well-being is the potential conflict between happiness and meaningfulness (Wong, 2014). A classical example is the parenthood paradox (Baumeister, 1991), where a decrease in perceived happiness among parents due to stress and increased burden is accompanied by an increase in perceived meaningfulness due to a greater purpose in life (Rizzo et al., 2013). In order to truly pursue meaningfulness with others we often need to sacrifice happiness for ourselves, at least to some extent short-term but perhaps also significantly long-term (Wong, 2014). Some state that humans' inclination to opt for such a meaning-seeking sacrifice, exemplified by people such as Mahatma Gandhi, Oskar Schindler, Raoul Wallenberg, Mother Teresa and others (Batson et al., 2008), is what ultimately makes us human (Frankl, 1985; Baumeister et al., 2012). While the PERMA model posits meaningfulness as an instrumental goal to achieve the ultimate goal of personal well-being, Frankl (1985) states meaningfulness to be an ultimate and deeply rooted spiritual goal in itself (Wong, 2014).

Metz (2009) defines happiness as *pleasant experiences* as felt by means of our five senses, whereas meaningfulness is defined as stemming from human *acts of creativity* that result in benefit for others. This is in line with Frankl's (1985) famous logotherapy theory of psychotherapy emphasizing humans' strive for meaning, in contrast to Freud who emphasized will to pleasure and Nietzsche who emphasized will to power (Frankl, 1985, p.99). Baumeister et al. (2012) have empirically linked happiness to being a taker by selfishly focusing on satisfying one's own natural needs and wants here and now, whereas meaningfulness was linked to being a giver by culturally expressing one's identity through involvement in difficult undertakings in order to make significant contributions to society. Such a search for meaning by embracing difficulties often resulted in worry, stress, anxiety and bad experiences, thereby leading to a sacrifice in happiness. By contrasting the meaningful but unhappy life to the happy but meaningless life they called for more research in positive psychology that advances our understanding of human's search for meaning. A terminology anchored in ancient Greek philosophy sometimes used for emphasizing these fundamental differences is the dualistic separation between hedonic and eudaimonic aspects of well-being, i.e. differing between feeling good and functioning well (Huppert and So, 2013; Fredrickson et al., 2013; Ryan and Deci, 2001).

A key difference between happiness and meaningfulness according to Metz (2009) is temporal. Happiness is experienced momentarily whereas meaningfulness can be derived from past actions, even if the acting person has died. An example is Vincent van Gogh who led an unhappy but meaningful life, where the perception of meaningfulness was posthumously attributed to his life due to the fame of his artwork occuring after his death from suicide in 1890. A perceived lack of meaning and purpose in life can in fact drive people to commit suicide (Frankl, 1985; Seligman et al., 2013; Lester et al., 2011).

3.3 Motivation theory

Just like Baumeister's PERMA concept, motivation research has also classified humans' strives into five distinct core motives. According to Fiske (2008), motives differ depending on whether we study patients on the psychoanalytic couch, examine our own consciousness, watch students in the classroom, use the computer as a metaphor for cognitive understanding or study group members in a collective. On the psychoanalytic couch people appear hedonistically self-focused on maximizing pleasure and avoiding pain. When studying people's conscious experiences they appear optimistic, future-oriented, trust-based and focused on functional potential to get things done. In the classroom the clear-cut incentives in a constructed learning environment make for behavioristic motives based on students' *expectance* to achieve a goal and the perceived *value* if successfully achieved. When using the computer as a metaphor for researching human cognition, scientists have studied mental and social aspects of how people process information in order to reach a coherent understanding. When studying groups the motives for belonging to a collective seem endless, ranging from surviving, reproducing and conforming to collectively acting, understanding and sympathizing. Table 1 is an attempt to summarize five different foci in well-being and motivation theory.

Focus	Well-being theory	Motivation theory	Will to
	(Seligman, 2012)	(Fiske, 2008)	(Frankl, 1985)
Self-analysis	Positive emotion	Psychoanalytic couch based hedonistic self-focus	pleasure
Action-taking	Engagement / flow	Conscious focus on future-oriented functional action	meaning
Belongingness	Relationships	Coordinated and interdependent teamwork and relationships	meaning
Processing	Meaningfulness	Mental / social processes of reaching coherent understanding	meaning
Goal / power	Achievement	Expectancy-value theories of goalpowerprediction and control	

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3.4 Prosocial motivation theory

Batson (2008) has outlined four categories of prosocial motives, outlining why humans help others. The four categories are altruism, collectivism, moral principles and sophisticated forms of egoism. Egoistic motives are further categorized into three different sub-categories; gaining material and social rewards, avoiding material and social punishments and escaping situations triggering negative emotions. While some claim that altruism does not exist, others claim that altruism indeed exists and is a result of empathy or sympathy for another person due to perceiving a need or by genuinely valuing the other's welfare (ibid). The existence of collectivist motives for helping a group has also been debated by scholars. Some claim that helping acts that benefit a group are reducible to enlightened long-term egoism, while others claim that collectivist motivation can exist independently of egoistic motives (ibid). A famous experiment attempting to uncover the nature of altruistic and collectivist human motives is the prisoners' dilemma, where two prisoners isolated from each other are given punishments depending on their own and the other prisoner's choice between betrayal or cooperation. Principlism is defined as prosocial motives based on upholding certain basic moral principles, such as treating people fairly, helping others, avoiding harm to others and respecting the views, choices and actions of others (McCarthy, 2003).

3.5 Entrepreneurial motivation theory

80 years ago one of the most famous researchers on entrepreneurship Joseph Schumpeter articulated three main entrepreneurial motives; the will to found a private kingdom, the will to win and conquer, and the

joy of creating (Goss, 2005). More recent research on entrepreneurial motivation has been focused primarily on trait-based motives such as people's need for achievement, risk-taking and independence (see for example Shane et al., 2003; Shaver and Scott, 1991). A recent literature review by Murnieks (2007) called for more research on other kinds of entrepreneurial motivation. Morris et al. (2012) have summarized some key motives for people engaging in entrepreneurship; survival, income generation, wealth build-up, independence, achieving a dream, improving a community and changing the world. They also state that entrepreneurial motives change over time, and differ between times before, during and after the actual entrepreneurial process. An important source of entrepreneurial motivation during the process is stated to be the experience of being in flow, sensing meaningfulness and enjoying peak performance. Some entrepreneurs, primarily men, engage for reasons connected to neoliberalism, such as wealth creation, but such goals are often not the main entrepreneurial motive (Douglas and Shepherd, 2002; DeMartino and Barbato, 2003; Morris et al., 2012). Morris et al. (2012, p.208) state that research on entrepreneurship as a way to reach meaningfulness and a higher purpose in life represents "a departure from the traditional emphasis on entrepreneurship as a vehicle for wealth generation, job creation, economic development, and innovation".

4 Applying the lens - Two flavors of entrepreneurial education

In this section we will explore some examples of entrepreneurial education and try to position them in a continuum consisting of the two extremes happiness empowerment for oneself versus meaningful creativity with others. Such a continuum leans on the previously outlined key differences between a happy and a meaningful life. We will try to point out how the described examples align or misalign with neoliberal values. Table 2 summarizes some key aspects from this section categorized in either happiness or meaningfulness.

4.1 Examples of entrepreneurial education as happiness empowerment for oneself

Much emphasis in entrepreneurial education is on the wealth creation and profit making capability of entrepreneurs (Hytti and O'Gorman, 2004; Hytti, 2003). This is particularly evident in the IT industry with powerful and wealthy role models such as Bill Gates, Steve Jobs and Larry Page. On university level this has resulted in business schools taking the lead in entrepreneurial education, teaching students about entrepreneurship by discussing and generalizing from tales of successful entrepreneurs. A common format is guest speakers sharing their entrepreneurial war stories to students in an attempt to inspire them to later take the leap into entrepreneurship (Fiet, 2001a; 2001b; Neck et al., 2014). This has fuelled the hero myth of entrepreneurship and implicitly anchored entrepreneurial education with neoliberal values of individual self-realization. A focus on successful results of heroic entrepreneurs represents a façade of individual entrepreneurial achievement concealing the often collective and exhausting process of struggling towards entrepreneurial success. Neck and Greene (2011) also remind us that for each Bill Gates there is a million failed entrepreneurs.

On secondary education level the most widespread entrepreneurial education activity is Young Enterprise, which lets students establish mini-companies (Dwerryhouse, 2001). Immediate desired outcomes are skills development and increased student engagement, whereas more long-term desired outcomes are enhanced alumni employability, higher salaries and increased rate of alumni starting a business later in life (Chatzichristou et al., 2015; Elert et al., 2014). In the articulation of desired outcomes there is an implicit link to neoliberal values in terms of a financially related self-enhancement focus on earning more and becoming self-employed. The Young Enterprise approach seems to contain both extremes of the happiness empowerment versus meaningful creativity continuum. The goal is to create self-reliant and happy individuals in terms of self-employment and high salary. The process is team-based and frequently leads to the creation of artifacts valuable to others, thereby promoting a sense of meaningfulness for the students.

The focus is on business ideas, indicating that emphasis is perhaps more on making money for the company than making a difference in society (Chatzichristou et al., 2015), placing Young Enterprise more towards the happiness empowerment end of the continuum explored in this article.

An illustrative example of neoliberalism at work in secondary education has been provided by Petersen and O'Flynn (2007), outlining the Duke of Edinburgh award scheme that gives students bronze, silver and gold awards based on their achievements related to volunteering, expeditions, skills development and physical recreation. Petersen and O'Flynn (2007) show how the award scheme is designed to promote youth community service, but instead is perceived by the students as a path to enhancing one's productivity and employability, i.e. a focus on self-improvement rather than on meaningful creative activity with others. The organizers also emphasize the many benefits for the individual such as increasing self-confidence, improving one's CV, getting an award and having fun. Petersen and O'Flynn (2007) conclude that the award scheme promotes neoliberal values by emphasizing self-governance, responsibilization and self-motivation. On a happiness empowerment versus meaningful creativity continuum, this example seems to be positioned towards the happiness end, especially given its structured levels of invidual achievement awards useful when competing for good jobs on the labor market.

A general pattern among the above given examples is an alignment with the entrepreneurial motives of generating income, wealth creation and being / becoming independent. This is in alignment with the goal of maximizing own happiness by empowering the individual to create her own success.

4.2 Examples of entrepreneurial education as meaningful creativity with others

At university level an approach similar to Young Enterprise is the venture creation approach (Ollila and Williams-Middleton, 2011). This entails letting students start a real-life venture as formal part of curriculum with an intention to continue running the venture after graduation. Such venture creation programs are rare on a global level (Lackéus and Williams Middleton, 2015), but often include a team-based approach and frequent in-depth collaboration with stakeholders outside the program. In some of the venture creation programs students are coupled with idea providers such as university researchers and industry innovators. Such a 'surrogate' entrepreneurship coupling mechanism has shown to result in substantial increase in value created by students (Lundqvist, 2014). The venture creation approach markedly departs from a happiness empowerment focus through its focus on delivering real-life long-term value through innovative and creative but very exhausting and at times frustrating co-creation processes (Lackéus, 2014). Mechanisms facilitating emotional and financial ownership, co-creation with external stakeholders, surrogacy with idea providers add substantially to the degree of students' perceived meaningfulness and also potentially generate innovative solutions to real-life problems in society. When students choose to continue with their ventures they frequently turn down highly lucurative job offers (i.e. happiness for oneself), instead exploring the venture as a way to make a difference in the world (i.e. meaningfulness with others) (Lackéus, 2014).

A way to reach even more towards meaningful creativity for these venture creation programs is to add components of societal entrepreneurship, putting value creation for society at the heart of desired outcomes. A social entrepreneurship focused venture creation program at Colorado State University in USA teaches entrepreneurship by asking students to find market-based solutions to societal and environmental challenges (Sarason et al., 2014). Some challenges addressed include women's health issues in developing countries, solar lighting technology in rural areas and irrigation technology suitable for conditions in rural India (Lackéus, 2012). Also at the venture creation program at Chalmers University of Technology in Sweden there is a focus on sustainability and societal entrepreneurship (Henricson and Palmås, 2012; Lundqvist, 2009). Societal challenges are addressed in three different ways connected to education; initiating student-led start-ups with a societal mission, initiating whole-class societal entrepreneurship projects, and letting

student teams explore novel solutions to complex societal challenges together with industry (Williams Middleton, 2013; Henricson and Palmås, 2012; Holmberg, 2014). Topics have included technology for blocking of child pornography, tidal water energy harvesters, inspiring teenagers about science, helping teenagers in deprived areas with mathematics homework, improving conditions in Africa and improving the home city's transportation system (Lundqvist, 2009; Holmberg, 2014).

On secondary education level Surlemont (2007) outlines an illustrative example of entrepreneurial education from Belgium where secondary education students were assigned the role as teachers for primary education students. The older students gave a course to younger students on waste problems in society, applying novel pedagogical approaches that impressed their teachers. They displayed very high levels of creativity, engagement and motivation, invested heavily in the process and acquired a higher level of subject matter knowledge than a control group of students. Another example of mutual value creation explored in the same research study outlined by Surlemont (2007) was a linguistic exchange project where students from two different language zones in Belgium helped each other with learning the other person's native language. Common to these two examples is the complete absence of business ideas and wealth creation issues. Instead focus was on students helping other students to achieve new insights into waste problems and language skills, resulting in high perceived meaningfulness and high levels of student engagement. Both examples show how entrepreneurial education can result not only in developed entrepreneurial competencies such as risk-taking, perseverance and initiative, but also promote learning of more theoretical and declarative knowledge such as waste management and language. Both examples also illustrate an emphasis on meaningful creativity with others rather than happy empowerment for oneself, in terms of engaging fully in the task of doing good for others.

In a study of Scottish primary school teachers applying entrepreneurial education for a period of three years, Deuchar (2007) explored the use of individualist versus collectivist discourses around motives for entrepreneurial education. He concluded that teachers' reflections around the purpose of entrepreneurial education represented both neoliberal and collectivist perspectives. Some reflected around the need to equip students with skills to market themselves. Others reflected around the potential to instill collectivist values and work in teams towards a common goal. Many expressed a dual goal of entrepreneurial education as covering both individual rights and collective responsibilities, aiming at uniting conflicting values such as ambition versus compassion and determination versus respect. Teachers stated that some students were in need to learn more about taking collective responsibility, whereas other students were perhaps a bit too self-denying. Deuchar concluded (2007, p.49) that "seemingly opposing agendas were often comfortably reconciled" by the teachers.

A general pattern among the above examples is an alignment with the entrepreneurial motives of meaningful activity, improving the community and changing the world into a better place. This is in alignment with the goal of engaging in meaningful acts of creation that result in benefits for other people.

Happiness for oneself	Meaningfulness with others	References	
detached individualized living	attached social living		
Psychology / philosophy			
Happiness for oneself, being a	Meaningfulness with others, being a	(Baumeister et al.,	
taker, satisfying physical self	giver, reflecting own identity	2012)	
Experiences through own senses	Acts of creativity and their consequences for others	(Metz, 2009)	
Vitality, optimism, resilience, positive emotion, self-esteem	Engagement, competence, meaning, relationships	(Huppert and So, 2013)	
Experiential values – see, touch,	Creative values – write, sketch, erect,	(Frankl, 1985;	
taste, smell, hear	give birth to	Feldman and Snyder, 2005)	
Inividualism: Personal ambition.	Collectivism: Self-image based on	(Wagner, 2002)	
Sacredness of personal interests.	others' reactions. Shared well-being.		
Task achievement.	Interdependence.		
Entrepreneurship / education			
Neoliberalism	Communitarianism	(Deuchar, 2007)	
Neoliberalism, business driven,	Many value forms, sustainable,	(Rae, 2010)	
masculine aggression, profit	feminine relational / collaborative		
Inspiring students by talking	Making a difference by starting a	(Neck and Greene,	
about wealthy IT tycoons, sharing	real-life company / taking on a	2011; Lundqvist,	
war stories and nurturing the hero	societal challenge.	2009; Henricson and	
myth		Palmås, 2012)	
Learning by starting mini-	Learning in a more engaged way by	(Chatzichristou et al.,	
companies leading to self-	helping others to learn.	2015; Elert et al.,	
employment and higher salary.		2014; Petersen and	
Handing out awards for people		O'Flynn, 2007;	
having fun.		Surlemont, 2007)	
Wealth creation	Meaningful activity	(Morris et al., 2012,	
		p.208)	
Build wealth, be independent	Achieve a dream, improve the	(Morris et al., 2012,	
	community, change the world	p.16)	
Individualist entrepreneurship –	Collectivist entrepreneurship – co-	(Tiessen, 1997; Read	
independence, competition.	creation, team effort.	et al., 2009;	
		Sarasvathy and	
		Venkataraman, 2011)	
The hero myth of individual	Entrepreneurship as collective action	(Dodd and Anderson,	
entrepreneurship	in social context	2007)	

Table 2. Summarizing key aspects of happiness and meaningfulness in the domains of psychology, philosophy, entrepreneurship and entrepreneurial education.

5 Discussion

In order to analyze how two different flavors of entrepreneurial education are received in educational institutions we first need to discuss the climate and motivational characteristics of today's typical classrooms. This constitutes the starting point in terms of the context either flavor of entrepreneurial education is to be infused into.

5.1 An education system fuelled by will to power and pleasure

According to Fiske (2008), student motivation in the classroom is often regulated by clear-cut incentive structures aimed to regulate their behavior. Tests, grades and detailed learning goals are ubiquitous in the educational landscape. Biesta (2009) states that we are living in an age of measurement focus in educational institutions. According to Fiske (2008) this goes back to behaviorist Thorndike's law of effect (1927) stipulating that desired behavior can be fostered by rewarding with pleasant consequences and that unwanted behavior can be avoided by punishing with painful consequences. According to the often applicable set of expectancy-value theories of motivation (see for example Pekrun et al., 2007; Thompson and Schlehofer, 2008; Senko et al., 2008), student motivation is regulated by their *expectation* to reach a goal and the perceived *value* of reaching it. Students' *expectations* to reach an academic goal are recursively related to preceding academic outcomes, leading to positive or negative spirals of academic achievement (Farrington et al., 2012). The *value* of reaching the goal is extrinsically determined by society, since grades are used as a competitive selection mechanism later in students' journey throughout the education system, determining levels of pleasure or pain to be expected in later stages of life. Further, the main goal of educating students is for them to "take" what they need in terms of acquiring competencies in order to be happy, employable and competitive on society's human labor market.

We posit that the current system of artifical achievements is well aligned with neoliberalism as well as with Frankl's (1985) will to power and pleasure, see table 1. Students are encouraged to strive for achievement in accordance with a construed set of rules representing a well-established gamification of education, counting points based on academic achievements. Desired student behavior is rewarded with high grades leading to future pleasure in life, and undesired student behavior is punished with low grades leading to future pain in life. While it is easy to measure artificial achievements in a seemingly equal way, the long-term implications are increased inequality in society due to certain student groups being more disposed to flourish in an achievement-oriented power / pleasure culture (Boekaerts, 2010). Inequality comes in terms of gender, class and race differences, well in line with the neoliberal "price-tag".

What is not as evident in today's educational landscape is Frankl's (1985) will to meaning. We posit that the three motivational categories outlined in Table 1 of engaged action-taking, team-based belongingness and meaningful collective understanding are underrepresented in today's educational institutions. While they have indeed been more present in previous decades throughout educational history (Labaree, 2005), the current neoliberal climate in society has forced teachers to focus on what is measured by the state and what is valued by the system. Meaningful activity is not as easy to measure and assess as declarative knowledge, and has therefore been deprioritized by reluctant teachers in the wake of school inspections and high-stakes testing (Ball, 2003; Jeffrey and Woods, 1998; Hursh, 2007).

5.2 Entrepreneurial education in a power / pleasure based "student-as-taker" climate

In the current prevailing "achieve now, become happy later" focused and "student-as-taker" based educational climate, entrepreneurship can be presented as a path to individual success in life, or in Foucauldian terms (Foucault, 1988), as an educational technology to be applied to oneself. Entrepreneurial education can help students learn how to optimize their future prospects by becoming more proactive, action-oriented, creative and self-opportunistic, and thereby be better off in the stiff competition for society's scarce resources. The hero myth of entrepreneurship is flourishing in such an educational climate

(Korhonen et al., 2012; Williams Middleton, 2013) as well as in popular press (Gill, 2014). At business schools war stories and anecdotal successes are often used when presenting entrepreneurship, often in the shape of admiring male heroic IT tycoons (Neck et al., 2014). Such a flavor of entrepreneurial education is well aligned with neoliberal values in terms of promoting and supporting self-serving and self-optimizing behaviour in order to maximize own future power and happiness. Given the current popular image of self-made heroic entrepreneurs (Ogbor, 2000), it is not surprising that entrepreneurial education and neoliberalism have been perceived as very much complementary to eachother. Indeed, this flavor of entrepreneurial education is well in line with the neoliberal values already having been imposed onto the education system by policy-makers, and can also be found in national and international policy documents on entrepreneurial education (see for example European_Commission, 2012; Volkmann et al., 2009).

5.3 Entrepreneurial education as a path to a meaning-laden "student-as-giver" community

We have provided examples of entrepreneurial education as a way to infuse substantial levels of meaningfulness and purpose in students' lives, at times so pivotal that they change their whole identity and self-image (Donnellon et al., 2014; Lackéus, 2014). The high engagement levels among students are not so much caused by the traditional achievement-based will to pleasure or desire to win, but rather due to their status as meaningful activity in terms of making a difference, being fully engaged and taking part in a creative and action-based team effort to help people outside their own class or school.

These examples illustrate the possibility of entrepreneurial education to constitute a fundamentally different approach to education not at all in line with typical neoliberal values, but rather in stark opposition to them. Given the striking impact on student engagement, learning and creativity, these examples rather force us to ask the question of why it is to rare for teachers to ask students to learn this way, i.e. by using their knowledge to create something valuable to people outside their own classroom. One possible explanation could be that today's teachers view themselves as suppliers of knowledge and view their students as customers, i.e. a "students-as-takers" culture. Another explanation could be that adults don't perceive youths as capable of delivering value to outside stakeholders, and therefore seldom give them a chance to even try. This view has been forwarded by some managers of venture creation programs (Lackéus and Williams Middleton, 2015). Finally the hero myth of entrepreneurship could result in many teachers neglecting the opportunity that entrepreneurial education may constitute to them and their students.

Establishing a "student-as-giver" culture in educational institutions could perhaps paradoxically lead to many of them acquiring more knowledge than in a traditional "student-as-taker" culture, and in a more engaging way. This could be especially true for those students who are not comfortable with the neoliberal achievement-oriented culture of today's education system. Starting a venture has been compared with becoming a parent in that an entrepreneur often relates to her creation as her own "baby" (Cardon et al., 2005). Perhaps we can make our students experience an entrepreneurially related parenthood paradox already during their education by giving them a chance to initiate a value creation project that they can own and treat as "theirs". This could provide them with a sense of greater purpose in their educational life, and at the same time help them better fulfil academic goals. The examples given above illustrate that such endeavors are coupled with increased stress and higher burden, but that this is a sacrifice many students are more than willing to make. Meaningful activities also transcend the temporal moment in time when they are experienced (Metz, 2009), leading to a possibility that they could infuse a sense of purpose to other more traditional educational activities.

To summarize, while neoliberalism emphasizes the *choices we make* for ourselves, a meaningful creativity flavor of entrepreneurial education rather emphasizes the *actions we take* for others. By applying such a flavor, entrepreneurial education can be seen as an equalizer in two levels; first for the student struggling with today's neoliberal achievement culture now instead getting a chance to learn in a different way,

secondly for the receiver of value who can be selected based on its equalizing impact. Teachers could ask students to learn by creating value to people not being served by today's neoliberal marketized society.

5.4 Does entrepreneurial education lead to more or less neoliberalism in education?

The question of whether entrepreneurial education leads to more neoliberalism in our society can now be modified. The question is rather what flavors of entrepreneurial education that lead to even more neoliberalism in education, and what flavors of entrepreneurial education that can mitigate some of the already strong tendencies towards neoliberalism in educational institutions of today. Perhaps a "student-asgiver" based flavor of entrepreneurial education is rather an antidote to a capitalist and neoliberal values immersed society. Our discussion has shown that entrepreneurial education could be perceived as a way to infuse collectivist, altruistic and communitarian values into an education system currently severly plagued by the impact of neoliberal values (cf. Robinson, 2010). It however requires fighting the currently prevailing hero myth of entrepreneurship, replacing it with a view of entrepreneurship as meaningful creation of value to others in line with Bruyat and Julien (2001), and a more explicitly articulated definition of entrepreneurial education as being about letting students learn by using knowledge to create value to people outside the classroom (Lackéus et al., 2015). It also requires an in-depth exploration of the meaning of words used when defining entrepreneurship in its wide sense. Words such as creativity, initiative, self-reliance, perseverance and proactiveness need to be explicitly defined in a more "student-as-giver" way than would be the case if they were left unexamined. A source of increased insight when addressing these areas of development could be to draw from research on prosocial motivation as outlined by Batson et al. (2008).

5.5 Disentangling doing well from doing good

A limitation with the argumentation developed above is that it is difficult to separate happiness from meaningfulness, or in entrepreneurial terms, to separate doing well (i.e. making money) from doing good. The rules of society stipulate that any venture aiming to improve the society, for-profit or non-profit, will need to cover its monetary costs in order to be long-term sustainable. Indeed Baumeister et al. (2012) acknowledge that there is a large overlap between the two constructs happiness and meaningfulness. But as in the case of Baumeister et al., the focus here has been on the differences between making money and helping others and the implications of such differences. In addition, most students do not have to make money while they create value for others, since they rely on their parents or the state for their objective human needs such as food and shelter while they get educated. Their contribution when learning by creating value can be appreciated and rewarded in other than monetary terms such as access to exciting communities of practice, opportunities to be seen as valuable citizens, getting to learn in more engaging ways and being included in a collective effort to improve the world. This opens up for new forms of educational entrepreneurship more tailored to the needs and contexts of educational settings where learning outcomes are more important than the created value. Given the harmless and unconditional goodness of students, they can also acquire resources to their project in quite different ways than the typical business entrepreneur. If "student-as-giver" forms of entrepreneurial education are allowed to thrive in a future educational system, life as a student could perhaps be a quite meaningful and purposeful time in life, and a time when people get full support in their search for meaning in life.

5.6 The role of entrepreneurship research in education

If letting students learn by helping others is a viable way to increase learning and engagement, entrepreneurship research has a key role to play in education (Lackéus et al., 2015). Entrepreneurship research has articulated many tools, methods, practices and processes that can be used for making the process of creating value to others more explicit. Some examples are effectuation (Sarasvathy and Venkataraman, 2011), customer development (Blank and Dorf, 2012), design thinking (Brown, 2008; Johansson-Sköldberg et al., 2013) and bricolage (Baker and Nelson, 2005). These and other practices can be adopted by teachers in their efforts to support student value creation for others.

6 Conclusions

This article set out to contrast two different flavors of entrepreneurial education. One flavor in line with neoliberal values based on a view of "students-as-takers", inculcating competencies that improve students' future happiness and salary. Another flavor in line with collectivist values based on a view of "students-as-givers", allowing for a competence-building search for meaningful acts of creation for the benefit of others.

Different strands of literature such as well-being theory, positive psychology theory and motivation theory were explored and related in order to create an analytic lens used to contrast these two distinct flavors of entrepreneurial education. A key tenet was drawing on some key differences between a happy and a meaningful life, or in entrepreneurial terms, some key differences between doing well and doing good. Examples from primary, secondary and tertiary education levels were given for either flavor of entrepreneurial education, illustrating how fundamentally differently entrepreneurial education can be designed in order to get more, or indeed less, focus on neoliberal values in education.

Our analysis has shown that entrepreneurial education can be perceived as a close companion to neoliberalism if it is designed in line with the stereotypic image of entrepreneurs as self-made lone male heroes building wealth for themselves. The current educational climate of "achieve now, become happy later" is reinforced by entrepreneurial education emphasizing self-opportunistic and profit-maximizing behavior leading to enhanced competitiveness on the human capital market.

But our analysis has also shown that a do-good flavor of entrepreneurial education can be perceived as an antidote to the currently prevailing neoliberal values imposed upon teachers by today's political climate, where educational performativity and a measurement culture dominate schools and universities. By giving students assignments to learn by using their knowledge to create value to people outside the classroom, teachers can enjoy highly engaged and creative "students-as-givers" that acquire both entrepreneurial competencies and declarative knowledge more in-depth than they probably would in a "student-as-taker" culture. The question rather becomes why teachers so seldom trust their students with assignments to create value to external stakeholders. Some attempts to answer this question have been provided.

Based on this we posit that the ubiquitous ideal of the neoliberal *homo oeconomicus* emphasizing the *choices we make* for ourselves should instead be replaced by entrepreneurial education allowing students to learn from the *actions we take* for the benefit of others. Articulating such a difference seems to us to be crucial for advancing the field of entrepreneurial education. While it is challenging both in theory and practice to disentangle doing well from doing good, it could constitute a key not only to the hearts of school teachers and students, but also represent a way to make entrepreneurial education relevant to a much wider audience than today. It could also represent a more viable way to responsibilize citizens than the neoliberal way of encouraging them to selfishly mind their own business.

7 References

- Apple, M. W. 2001. Comparing neo-liberal projects and inequality in education. *Comparative education*, 37(4), 409-423.
- Baker, T. & Nelson, R. E. 2005. Creating something from nothing: Resource construction through entrepreneurial bricolage. *Administrative Science Quarterly*, 50(3), 329-366.
- Ball, S. J. 2003. The teacher's soul and the terrors of performativity. *Journal of Education Policy*, 18(2), 215-228.
- Batson, C. D., Ahmad, N., Powell, A. A. & Stocks, E. 2008. Prosocial motivation. *In:* Shah, J. & Gardner, W. (eds.) *Handbook of motivation science.*
- Baumeister, R. F. 1991. *Meanings of life*, Guilford Press.
- Baumeister, R. F., Vohs, K. D., Aaker, J. L. & Garbinsky, E. N. 2012. Some Key Differences between a Happy Life and a Meaningful Life. *Journal of Positive Psychology*.
- Berglund, K. 2013. Fighting against all odds: Entrepreneurship education as employability training. *Ephemera*, 13(4), 717-735.
- Biesta, G. 2009. Good education in an age of measurement: on the need to reconnect with the question of purpose in education. *Educational Assessment, Evaluation and Accountability*, 21(1), 33-46.
- Blank, S. G. & Dorf, B. 2012. *The startup owner's manual: the step-by-step guide for building a great company*, K&S Ranch, Incorporated.
- Boekaerts, M. 2010. The crucial role of motivation and emotion in classroom learning. *In:* Dumont, H., Istance, D. & Benavides, F. (eds.) *The Nature of Learning.* Paris: OECD Publishing.
- Brown, T. 2008. Design thinking. Harvard business review, 86(6), 84.
- Bruyat, C. & Julien, P.-A. 2001. Defining the field of research in entrepreneurship. *Journal of Business Venturing*, 16(2), 165-180.
- Cardon, M. S., Zietsma, C., Saparito, P., Matherne, B. P. & Davis, C. 2005. A tale of passion: New insights into entrepreneurship from a parenthood metaphor. *Journal of Business Venturing*, 20(1), 23-45.
- Castree, N. 2010. Neoliberalism and the biophysical environment 1: What 'neoliberalism'is, and what difference nature makes to it. *Geography Compass,* 4(12), 1725-1733.
- Chatzichristou, S., Curth, A., Feifa, I., Gosset, M., Kadunc, M., Mosca, M., Vale, P., Williamson, N., Allinson, R. & Håkansson, A. 2015. Entrepreneurship Education: A road to success - 13 Case studies. Brussels: European Commission.
- Costanza, R., Fisher, B., Ali, S., Beer, C., Bond, L., Boumans, R., Danigelis, N. L., Dickinson, J., Elliott, C. & Farley, J. 2007. Quality of life: An approach integrating opportunities, human needs, and subjective well-being. *Ecological economics*, 61(2), 267-276.

Csikszentmihalyi, M. 1991. *Flow: The psychology of optimal experience,* New York, NY, Harper Perennial.

Demartino, R. & Barbato, R. 2003. Differences between women and men MBA entrepreneurs: exploring family flexibility and wealth creation as career motivators. *Journal of business venturing*, 18(6), 815-832.

- Deuchar, R. 2007. *Citizenship, enterprise and learning: Harmonising competing educational agendas,* London, Trentham Books.
- Diener, E. 2000. Subjective well-being: The science of happiness and a proposal for a national index. *American psychologist*, 55(1), 34.
- Diener, E., Horwitz, J. & Emmons, R. A. 1985. Happiness of the very wealthy. *Social Indicators Research*, 16(3), 263-274.
- Dodd, S. D. & Anderson, A. R. 2007. Mumpsimus and the mything of the individualistic entrepreneur. International Small Business Journal, 25(4), 341-360.
- Donaldson, S. I., Csikszentmihalyi, M. & Nakamura, J. 2011. *Applied positive psychology: Improving everyday life, health, schools, work, and society*, Routledge.
- Donnellon, A., Ollila, S. & Williams Middleton, K. 2014. Constructing entrepreneurial identity in entrepreneurship education. *The International Journal of Management Education*, 12(3), 490-499.

- Douglas, E. J. & Shepherd, D. A. 2002. Self-employment as a career choice: Attitudes, entrepreneurial intentions, and utility maximization. *Entrepreneurship Theory and Practice*, 26(3), 81-90.
- Down, B. 2009. Schooling, productivity and the enterprising self: Beyond market values. *Critical studies in education*, 50(1), 51-64.
- Dwerryhouse, R. 2001. Real work in the 16-19 curriculum: AVCE business and Young Enterprise. *Education+ Training*, 43(3), 153-162.
- Elert, N., Andersson, F. & Wennberg, K. 2014. The impact of entrepreneurship education in high school on long-term entrepreneurial performance. *Journal of Economic Behavior & Organization*.
- Erkkilä, K. 2000. Entrepreneurial education: mapping the debates in the United States, the United Kingdom and Finland, Abingdon, Taylor & Francis.
- European_Commission 2012. Entrepreneurship Education at School in Europe National Strategies, Curricula and Learning Outcomes. Brussels: Education, Audiovisual and Culture Executive Agency.
- Farrington, C. A., Roderick, M., Allensworth, E., Nagaoka, J., Keyes, T. S., Johnson, D. W. & Beechum, N. O.
 2012. Teaching Adolescents to Become Learners: The Role of Noncognitive Factors in Shaping School Performance--A Critical Literature Review, ERIC.
- Fayolle, A. 2007. *Entrepreneurship and new value creation: the dynamic of the entrepreneurial process,* Cambridge University Press.
- Feldman, D. B. & Snyder, C. R. 2005. Hope and the meaningful life: Theoretical and empirical associations between goal–directed thinking and life meaning. *Journal of Social and Clinical Psychology*, 24(3), 401-421.
- Fiet, J. O. 2001a. The pedagogical side of entrepreneurship theory. *Journal of Business Venturing*, 16(2), 101-117.
- Fiet, J. O. 2001b. The theoretical side of teaching entrepreneurship. *Journal of Business Venturing*, 16(1), 1-24.
- Fiske, S. T. 2008. Core Social Motivations Views from the Couch, Consciousness, Classroom, Computers, and Collectives. *In:* Shah, J. & Gardner, W. (eds.) *Handbook of motivation science*. New York, NY: Guilford Press.
- Foucault, M. 1988. *Technologies of the self: A seminar with Michel Foucault*, Univ of Massachusetts Press. Frankl, V. E. 1985. *Man's search for meaning*, Simon and Schuster.
- Fredrickson, B. L., Grewen, K. M., Coffey, K. A., Algoe, S. B., Firestine, A. M., Arevalo, J. M., Ma, J. & Cole, S.
 W. 2013. A functional genomic perspective on human well-being. *Proceedings of the National Academy of Sciences*, 110(33), 13684-13689.
- Gilder, G. 1981. Moral sources of capitalism. Society, 18(6), 24-27.
- Gill, R. 2014. 'If you're struggling to survive day-to-day': Class optimism and contradiction in entrepreneurial discourse. *Organization*, 21(1), 50-67.
- Giroux, H. A. 2005. The terror of neoliberalism: Rethinking the significance of cultural politics. *College Literature*, 32(1), 1-19.
- Gorman, G., Hanlon, D. & King, W. 1997. Some research perspectives on entrepreneurship education, enterprise education and education for small business management: a ten-year literature review. *International Small Business Journal*, 15(3), 56.
- Goss, D. 2005. Schumpeter's legacy? Interaction and emotions in the sociology of entrepreneurship. *Entrepreneurship Theory and Practice*, 29(2), 205-218.
- Hektner, J. M., Schmidt, J. A. & Csikszentmihalyi, M. 2007. *Experience sampling method Measuring the Quality of Everyday Life,* London, Sage Publications.
- Henricson, K. & Palmås, K. 2012. The translation of an incubator: the case of the Lighthouse in Bubulo, Uganda. *Annals of Innovation & Entrepreneurship,* 3.
- Henry, C., Hill, F. & Leitch, C. 2005. Entrepreneurship education and training: can entrepreneurship be taught? Part I. *Education + Training*, 47(2), 98-111.
- Hindle, K. 2007. Teaching entrepreneurship at university: from the wrong building to the right philosophy. *In:* Fayolle, A. (ed.) *Handbook of research in entrepreneurship education*. Cheltenham, UK: Edward Elgar.

- Hofstede, G. 1983. National cultures in four dimensions: a research-based theory of cultural differences among nations. *International Studies of Management & Organization*, 13(1/2), 46-74.
- Holmberg, J. 2014. Transformative learning and leadership for a sustainable future: Challenge Lab at Chalmers University of Technology. *In:* Corcoran, P. B., Hollingshead, B. P., Lotz-Sisitka, H., Wals, A. & Weakland, J. P. (eds.) *Intergenerational learning and transformative leadership for sustainable futures.* Wageningen, NL: Wageningen Academic Publishers.
- Huppert, F. A. & So, T. T. 2013. Flourishing across Europe: Application of a new conceptual framework for defining well-being. *Social Indicators Research*, 110(3), 837-861.
- Hursh, D. 2007. Assessing No Child Left Behind and the rise of neoliberal education policies. *American Educational Research Journal*, 44(3), 493-518.
- Hytti, U. 2003. *Stories of entrepreneurs: narrative construction of identities*, Turku School of Economics and Business Administration.
- Hytti, U. & O'gorman, C. 2004. What is "enterprise education"? An analysis of the objectives and methods of enterprise education programmes in four European countries. *Education+ Training*, 46(1), 11-23.
- Jeffrey, B. & Woods, P. 1998. *Testing teachers: the effect of school inspections on primary teachers,* London, Routledge.
- Johansson-Sköldberg, U., Woodilla, J. & Çetinkaya, M. 2013. Design thinking: past, present and possible futures. *Creativity and Innovation Management*, 22(2), 121-146.
- Kahneman, D., Diener, E. & Schwarz, N. 2003. *Well-being: The foundations of hedonic psychology*, Russell Sage Foundation.
- Komulainen, K., Naskali, P., Korhonen, M. & Keskitalo-Foley, S. 2011. Internal entrepreneurship–A Trojan horse of the neoliberal governance of education? Finnish pre-and in-service teachers' implementation of and resistance towards entrepreneurship education. *Journal for Critical Education Policy Studies*, 9(1), 341-374.
- Korhonen, M., Komulainen, K. & Räty, H. 2012. "Not Everyone is Cut Out to be the Entrepreneur Type": How Finnish School Teachers Construct the Meaning of Entrepreneurship Education and the Related Abilities of the Pupils. *Scandinavian Journal of Educational Research*, 56(1), 1-19.
- Kristjánsson, K. 2012. Positive psychology and positive education: Old wine in new bottles? *Educational psychologist*, 47(2), 86-105.
- Kuratko, D. F. 2005. The emergence of entrepreneurship education: Development, trends, and challenges. *Entrepreneurship Theory and Practice*, 29(5), 577-597.
- Labaree, D. F. 2005. Progressivism, schools and schools of education: An American romance. *Paedagogica historica*, 41(1-2), 275-288.
- Lackéus, M. Venture Creation Programs 14 case descriptions of participating programs at ELF conference 2012. Available for download at <u>www.vcplist.com</u>. Entrepreneurial Learning Forum, 2012 Gothenburg. Chalmers University of Technology.
- Lackéus, M. 2014. An emotion based approach to assessing entrepreneurial education. *International Journal of Management Education*, 12(3).
- Lackéus, M. 2015. Entrepreneurship in Education What, Why, When, How. Trento, Italy: Background paper for OECD-LEED.
- Lackéus, M., Lundqvist, M. & Williams Middleton, K. 2015. Bridging the traditional versus progressive education rift through entrepreneurship. Working paper # ME1502 at MORE department: Chalmers University of Technology.
- Lackéus, M. & Williams Middleton, K. 2015. Venture Creation Programs Bridging Entrepreneurship Education and Technology Transfer. *Education + Training*, 57(1).
- Lazarus, R. S. 2003. Does the positive psychology movement have legs? *Psychological Inquiry*, 14(2), 93-109.
- Lemke, T. 2001. 'The birth of bio-politics': Michel Foucault's lecture at the Collège de France on neoliberal governmentality. *Economy and society*, 30(2), 190-207.

- Lester, P. B., Harms, P. D., Bulling, D. J., Herian, M. N. & Spain, S. M. 2011. Evaluation of Relationships Between Reported Resilience and Soldier Outcomes. Report# 1: Negative Outcomes (Suicide, Drug Use, & Violent Crimes). DTIC Document.
- Lundqvist, M. 2009. The University of Technology in the Societal Entrepreneurship Arena. *In:* Gawell, M., Johannisson, B. & Lundqvist, M. (eds.) *Entrepreneurship in the Name of Society.* Stockholm: Knowledge Foundation.
- Lundqvist, M. 2014. The importance of surrogate entrepreneurship for incubated Swedish technology ventures. *Technovation*, 34(2), 93-100.
- Mahieu, R. 2006. Agents of change and policies of scale: a policy study of entrepreneurship and enterprise in education. Doctoral thesis, Umeå Universitet.
- Mccarthy, J. 2003. Principlism or narrative ethics: must we choose between them? *Medical Humanities*, 29(2), 65-71.
- Metz, T. 2009. Happiness and Meaningfulness: Some Key Differences.
- Moberg, K. 2014. Two approaches to entrepreneurship education: The different effects of education for and through entrepreneurship at the lower secondary level. *International Journal of Management Education*, 12(3).
- Morris, M. H., Pryor, C. G. & Schindehutte, M. 2012. *Entrepreneurship as Experience: How Events Create Ventures and Ventures Create Entrepreneurs,* Cheltenham, UK, Edward Elgar Publishing.
- Murnieks, C. Y. 2007. Who am I? The quest for an entrepreneurial identity and an investigation of its relationship to entrepreneurial passion and goal-setting. Doctoral Thesis, University of Colorado.
- Mwasalwiba, E. S. 2010. Entrepreneurship education: a review of its objectives, teaching methods, and impact indicators. *Education + Training*, 52 (1), 20-47.
- Myers, D. G. & Diener, E. 1995. Who is happy? *Psychological science*, 6(1), 10-19.
- Neck, H. M. & Greene, P. G. 2011. Entrepreneurship Education: Known Worlds and New Frontiers. *Journal of Small Business Management*, 49(1), 55-70.
- Neck, H. M., Greene, P. G. & Brush, C. G. 2014. *Teaching entrepreneurship: A practice-based approach*, Edward Elgar Publishing.
- Norrish, J. M., Williams, P., O'connor, M. & Robinson, J. 2013. An applied framework for Positive Education. *International Journal of Wellbeing*, 3(2).
- Ogbor, J. O. 2000. Mythicizing and reification in entrepreneurial discourse: Ideology-critique of entrepreneurial studies. *Journal of Management Studies*, 37(5), 605-635.
- Oishi, S. 2002. The experiencing and remembering of well-being: A cross-cultural analysis. *Personality and Social Psychology Bulletin,* 28(10), 1398-1406.
- Ollila, S. & Williams-Middleton, K. 2011. The venture creation approach: integrating entrepreneurial education and incubation at the university. *Int. J. Entrepreneurship and Innovation Management*, 13(2), 161-178.
- Pekrun, R., Frenzel, A. C., Götz, T. & Perry, R. P. 2007. *The control-value theory of achievement emotions: An integrative approach to emotions in education.*
- Petersen, E. B. & O'flynn, G. 2007. Neoliberal technologies of subject formation: a case study of the Duke of Edinburgh's Award scheme. *Critical Studies in Education*, 48(2), 197-211.
- Qaa 2012. Enterprise and entrepreneurship education: Guidance for UK higher education providers. Gloucester, UK: The Quality Assurance Agency for Higher Education.
- Rae, D. 2010. Universities and enterprise education: responding to the challenges of the new era. *Journal of Small Business and Enterprise Development*, 17(4), 591-606.
- Read, S., Dew, N., Sarasvathy, S. D., Song, M. & Wiltbank, R. 2009. Marketing under uncertainty: The logic of an effectual approach. *Journal of Marketing*, 73(3), 1-18.
- Reis, H. T., Gable, S. L. & Maniaci, M. R. 2014. Methods for studying everyday experience in its natural context. *In:* Reis, H. T. & Judd, C. M. (eds.) *Handbook of Research Methods in Social and Personality Psychology*. Cambridge, UK: Cambridge University Press.
- Rizzo, K. M., Schiffrin, H. H. & Liss, M. 2013. Insight into the parenthood paradox: Mental health outcomes of intensive mothering. *Journal of Child and Family Studies*, 22(5), 614-620.

Robinson, S. 2010. *Guardians of the System? An Anthropological Analysis of Early 21st Century Reform of an Australian Educational Bureaucracy.* Doctoral Thesis, University of Western Australia.

Rose, N. 1998. Inventing our selves: Psychology, power, and personhood, Cambridge University Press.

Ryan, R. & Deci, E. 2001. On Happiness and Human Potentials: A Review of Research on Hedonic and Eudaimonic Well-Being. *Annual Review of Psychology*, 52(1), 141-166.

- Sarason, Y., Detienne, D. R. & Bentley, C. 2014. Wham-O's Offer to Buy Sprig Toys: Selling In or Selling Out? *Entrepreneurship Theory and Practice*, 38(4), 959-972.
- Sarasvathy, S. D. & Venkataraman, S. 2011. Entrepreneurship as method: open questions for an entrepreneurial future. *Entrepreneurship Theory and Practice*, 35(1), 113-135.
- Schwarz, N. & Strack, F. 1999. Reports of subjective well-being: Judgmental processes and their methodological implications. *In:* Kahneman, D., Diener, E. & Schwarz, N. (eds.) *Well-being: The foundations of hedonic psychology.*
- Seligman, M. E. 2012. Flourish: A visionary new understanding of happiness and well-being, Simon and Schuster.
- Seligman, M. E. & Csikszentmihalyi, M. 2000. *Positive psychology: An introduction*, American Psychological Association.
- Seligman, M. E., Ernst, R. M., Gillham, J., Reivich, K. & Linkins, M. 2009. Positive education: Positive psychology and classroom interventions. *Oxford review of education*, 35(3), 293-311.
- Seligman, M. E., Railton, P., Baumeister, R. F. & Sripada, C. 2013. Navigating into the future or driven by the past. *Perspectives on Psychological Science*, 8(2), 119-141.
- Senko, C., Durik, A. M. & Harackiewicz, J. M. 2008. Historical Perspectives and New Directions in Achievement Goal Theory - Understanding the Effects of Mastery and Performance-approach goals. *In:* Shah, J. & Gardner, W. (eds.) *Handbook of motivation science*. New York, NY: Guilford Press.
- Shane, S., Locke, E. A. & Collins, C. J. 2003. Entrepreneurial motivation. *Human resource management review*, 13(2), 257-279.
- Shaver, K. G. & Scott, L. R. 1991. Person, process, choice: The psychology of new venture creation. *Entrepreneurship theory and practice,* 16(2), 23-45.
- Surlemont, B. 2007. 16 Promoting enterprising: a strategic move to get schools' cooperation in the promotion of entrepreneurship. *In:* Fayolle, A. (ed.) *Handbook of Research in Entrepreneurship Education: Contextual perspectives.* Cheltenham, UK: Edward Elgar.
- Thompson, S. C. & Schlehofer, M. M. 2008. The Many Sides of Control Motivation Motives for High, Low and Illusory Control. *In:* Shah, J. & Gardner, W. (eds.) *Handbook of motivation science*. New York, NY: Guilford Press.
- Thorndike, E. L. 1927. The law of effect. The American Journal of Psychology, 212-222.
- Tiessen, J. H. 1997. Individualism, collectivism, and entrepreneurship: A framework for international comparative research. *Journal of Business Venturing*, 12(5), 367-384.
- Wagner, J. A. 2002. Utilitarian and ontological variation in individualism-collectivism. *Research in organizational behavior*, 24, 301-345.
- Williams Middleton, K. 2013. Becoming entrepreneurial: gaining legitimacy in the nascent phase. International Journal of Entrepreneurial Behaviour & Research, 19(4), 404-424.
- Volkmann, C., Wilson, K. E., Mariotti, S., Rabuzzi, D., Vyakarnam, S. & Sepulveda, A. 2009. Educating the Next Wave of Entrepreneurs - Unlocking entrepreneurial capabilities to meet the global challenges of the 21st Century. Geneva: World Economic Forum.
- Wong, P. T. 2014. Viktor Frankl's meaning-seeking model and positive psychology. *Meaning in Positive and Existential Psychology*. Springer.