Autonomy represents an inner endorsement of one’s actions—the sense that one’s actions emanate from oneself and are one’s own (Deci & Ryan, 2000). Autonomy pertains to striving toward the development and realization of personal goals, values, and interests (Assor, Kaplan, & Roth, 2002). Autonomy extends beyond having decisional freedoms to self-awareness, knowing what one’s dreams and aims are, and acting on those dreams and aims. This chapter’s central argument is that autonomy can be a guiding aim in entrepreneurship education. There are three purposes to this chapter: first, to present a vision of entrepreneurship education that has the student’s capacity for autonomous action as its ultimate aim; second, to convince the reader of the timeliness and relevance of such an approach; and finally, to outline how this can be implemented. It starts out by presenting several arguments to support the view that student autonomy can be an ultimate aim of entrepreneurship education.

THE RELEVANCE OF PERSONAL AUTONOMY FOR ENTREPRENEURSHIP EDUCATION

Both entrepreneurship research and entrepreneurship education are oriented toward explaining and furthering the financial performance of firms. Yet, research of entrepreneurial motivation shows that it is not financial gain but autonomy that is most often mentioned or rated as the most important motive for starting a business (Shane, Locke, & Collins, 2003; Van Gelderen & Jansen, 2006). Recent research on work satisfaction shows that this finding cannot be taken for granted, however. Studies show that the self-employed (and entrepreneurs, as a subgroup of the self-employed) have higher work satisfaction than the employed (Benz & Frey, 2008a, 2008b; Hundley, 2001; Lange, in press; Prottas, 2008; Schjoedt, 2009). This relationship persists, irrespective of income earned or hours worked (Benz & Frey, 2008a), the level of the employee in the organization (Schjoedt, 2009), differences in culture (Benz & Frey, 2008b), or the type of business owned (both owners of businesses employing others and independent contractors have higher satisfaction scores; Prottas, 2008). Even more interesting, the difference in satisfaction can to a large extent be explained by the level of...
autonomy enjoyed (Benz & Frey, 2008a, 2008b; Hundley, 2001; Lange, in press; Prottas, 2008; Schjoedt, 2009). Prottas (2008) shows that when employees have comparable levels of autonomy, they also have similar satisfaction scores. Overall, the research shows that autonomy is not only a dominant entrepreneurial motivation but also a dominant source of entrepreneurial satisfaction.

There are yet more reasons to put autonomy center stage. According to Gibb (2002a, 2002b), we live in a society in which we increasingly need the capacity to cope with, and enjoy, an enterprising way of life. This way of life is characterized by uncertainty, change, and complexity on the one hand and freedom, individual responsibility, and the opportunity to reap the fruits of one’s own labor on the other. Gibb claims that more and more people are taking part in this enterprising way of life as a result of several powerful trends in the ways in which individuals relate to the state, organizations, and to other individuals.

All these trends strongly favor self-reliance. First, some changes increase the attractiveness of the enterprising way of life, for example, as a result of individualization processes (Gibb 2002a, 2002b). Being capable of autonomous action is crucial in light of these ‘preference’ trends. Entrepreneurship students can be expected to have elevated needs for autonomy and to call for independent action. It is important to stimulate this spirit of autonomy, not to temper it. Second, there are enabling trends, such as the democratization of production and distribution (Anderson, 2006), and the increased importance of services and knowledge-based business (Gibb, 2002a, 2002b). Autonomy is essential in light of the trends that enable the enterprising way of life; in order to make full use of the possibilities, people must have the capacity for autonomous action. Finally, there are trends that force us into an enterprising way of life, for example, globalization, governmental budget cuts, reduced welfare spending, reduced opportunities for lifelong employment, and the increased use of short-term contracts (Gibb, 2002a, 2002b). Autonomy is also crucial for the trends that ‘force’ the enterprising way of life; the capacity for autonomous action is essential to respond effectively to the demands of the world of work.

Autonomy is strongly associated with entrepreneurship because of the decisional freedoms it entails: One can decide what, how, and when work will be done (Lange, in press; Prottas, 2008; Schjoedt, 2009). These freedoms arise irrespective of whether the entrepreneurship takes the form of an independent contractor or a business employing others. However, the need for autonomy can also be a prerequisite for the fulfillment of other motives (Van Gelderen & Jansen, 2006). Van Gelderen and Jansen (2006) asked business starters why they wanted autonomy. Many wanted autonomy in order to have the freedom to make their own decisions. However, people also need autonomy because it is instrumental to the fulfillment of other motives. Some were motivated by ‘negative’ freedom, that is
to say that they generally disliked, or had recently experienced, a difficult boss or stifling organizational rules. Others emphasized that they wanted to do ‘their own thing’: In their view, entrepreneurship offered the opportunity to work according to their own goals, values, tastes, and beliefs. Still others emphasized the opportunities offered by entrepreneurship in terms of being in charge, directing, and for leading instead of being led.

When these motives are unfulfilled, some may not persist in their entrepreneurial ventures, and conversely, autonomy may spur others to carry on in spite of financial underperformance (Gimeno, Folta, Cooper, & Woo, 1997). The attainment of autonomy cannot be taken for granted or assumed as each underlying motive is paradoxical. Instead of working for a boss, one has to deal with clients, suppliers, and other stakeholders; one may like to do one’s own thing, but customers may want the entrepreneur to work according to their specifications; one may be in control within one’s company, but uncertainty with regard to stakeholders outside the company can be severe. If autonomy is lacking, entrepreneurs may give up in spite of financial success. Given that autonomy is a dominant motivation and source of satisfaction, far more attention should be paid in entrepreneurship research and education to whether and how autonomy is realized.

Neither can it be automatically assumed that entrepreneurship education furthers autonomy. With the ever-increasing inevitability of the enterprising way of life, business education should not aim to produce graduates who look to others to take responsibility, who are other directed or who have an employee attitude. Yet, if students do their coursework only because they feel obliged, pressured, or merely because they just want the degree; or if students’ coursework only consists of finding out what the teacher expects and subsequently jumping over the required hurdles, then students are not strengthened in their ability to behave autonomously. On the contrary, all this conditions people to become docile followers who look to others to be told what and how to do things. Even worse, there is the risk of alienation, and it may be difficult for people to regain their capacity for autonomous action, as autonomy seems to work in a ‘use it or lose it’ type of fashion (Baumann & Kuhl, 2005).

Entrepreneurship education should aim to prepare people to take a leading role in the enterprising way of life, rather than a supporting one. This chapter argues that autonomy can be a guiding aim for entrepreneurship education. How can this be achieved? What practices are conducive? Which trade-offs and issues are encountered? These are the questions this chapter will address.

The remainder of this chapter proceeds as follows: Presented first are two perspectives in educational psychology that give central emphasis to autonomy, self-determination theory and self-directed learning. Then, empirical studies of autonomy-supportive teacher behaviors and their
consequences are reported. Finally, a range of potential implementation issues that can arise when applying this knowledge to entrepreneurship education are discussed.

**AUTONOMY IN EDUCATIONAL PSYCHOLOGY**

Students’ motivation reflects both intrapersonal and interpersonal processes (Reeve & Jang, 2006). In general, psychological research has focused on individual intrapsychic influences on motivation. In contrast, educational research has focused on teacher behaviors that should be effective in promoting student motivation (Skinner & Belmont, 1993). At their intersection are theories that proceed deductively from the intrapsychic influences on student motivation in order to analyze the variety of classroom practices that affect these student attitudes and beliefs (Skinner & Belmont, 1993). Two such positions, self-determination theory and self-directed learning, will now be discussed.

**Self-Determination Theory**

Self-determination theory (SDT) views humans as innately motivated to learn and develop, as long as the social environment provides for their basic psychological needs (Deci & Ryan, 2000; Ryan & Deci, 2000). SDT postulates three of those needs: autonomy, competence, and relatedness. The need for autonomy refers to the need to feel a sense of full volition and ‘choicefulness’ regarding one’s activities and goals, a feeling that emerges when actions and goals are experienced as emanating from one’s authentic self. The need for relatedness refers to the need to feel closely related to other people. The need for competence is the need to be effective in one’s interactions with the environment and to feel that one is capable of mastering challenges (Deci & Ryan, 2000; Ryan & Deci, 2000). The theory is mainly concerned with the conditions that support or thwart the innate propensity to be autonomous, related, and competent. SDT emphasizes that students’ motivation to learn can vary in its relative autonomy, ranging from behaviors stimulated by external reward and punishment (controlled motivation) to those that are energized by interests and values (autonomous motivation).

SDT distinguishes four types of extrinsic motivation. Externally regulated behaviors are performed to satisfy an external demand or to obtain an externally imposed reward contingency. A second type of extrinsic motivation is introjected regulation. Introjection describes a type of internal regulation that is controlling because people perform such actions with a feeling of pressure in order to avoid guilt or anxiety, or to attain ego enhancements or pride. A more autonomous, or self-determined, form of extrinsic motivation is regulation through identification. Here, the person has identified with the personal importance of a behavior and has thus accepted its regulation as his or her own. Finally, the
most autonomous form of extrinsic motivation is integrated regulation. Integration occurs when identified regulations have been fully brought into congruence with one’s values and needs. Integrated motivation shares many qualities with intrinsic motivation. However, in intrinsic motivation, behavior is undertaken for its own sake, whereas in integrated regulation, behavior is performed for its presumed instrumental value with respect to some outcome that is separate from the behavior, even though it is volitional and valued by the self (Deci & Ryan, 2000; Ryan & Deci, 2000). Both evidence and theory suggest that the more one’s motivation is autonomous, the more the quality of learning, persistence, and affective experience are enhanced (Niemiec & Ryan, 2009).

The achievement of enterprising goals typically requires a mixture of both intrinsic and extrinsic motivation: Some aspects are intrinsically motivating, but it is not all fun and games. Enterprising goals are typically midrange goals that require effort to enact and often involve obstacles, competing temptations, or just plain inertia being overcome (Sheldon & Elliott, 1998). Sometimes the goals may be intrinsically motivating, but the means to get there may require internalization and identification. Understanding how to facilitate autonomous motivation is a critical educational agenda in SDT (Niemiec & Ryan, 2009).

**Self-Directed Learning**

Whereas SDT is concerned with how autonomous motivation can be promoted through identification and integration processes, in contrast, selfdirected learning (SDL) takes autonomous motivation as its starting point. It claims that the student has decision rights in the setting of learning goals, activities, and outcome evaluations (Knowles, 1975). Individuals select, manage, and assess their own learning activities, which can be pursued at any time, in any place, through any means, at any age. SDL involves, perhaps counterintuitively, extensive collaboration with teachers and peers (Brookfield, 1985). Learning environments that foster SDL are believed to promote deep-level processing because learners have the freedom to choose what they learn and how they learn it (Knowles, 1975). SDL has been applied to entrepreneurship education by Bird (2002), who asked her students to design and execute a learning contract in which they identify the competencies that they want to develop and the activities that are necessary for them to undertake.

In SDL, the teacher seems to have a merely facilitating role. However, SDL proponents have also made it clear that, without teacher support, students may stagnate in their learning (Brookfield, 1985), and that students need their teachers to help them become self-directed. A later section will go more deeply into the tension between guidance and freedom. SDT and SDL have inspired a wide range of autonomy-supportive practices. These will now be discussed.
Autonomy-Supportive Practices and Their Effects

Autonomy-supportive teachers seek to proceed from the aims, abilities, and preferences of the student. They ask, inquire into, and acknowledge what their students want and need and what their goals, values, and interests are to proceed from there (Reeve & Jang, 2006). Learning activities are then tied to each person’s individual context. Whenever possible, the educator takes actions that help students to understand their work as contributing to the realization of their personal goals, interests, and values. Thus, the personal relevance of learning activities is made explicit (Assor & Kaplan, 2001; Assor, Kaplan, & Roth, 2002; Katz & Assor, 2007; Skinner & Belmont, 1993). Autonomy-supportive teachers are also open to feedback and critique from their students as this allows them to link educational activities to individual circumstances, interests, and aims (Assor et al., 2002; Reeve, Jang, Carrell, Jeon, & Barch, 2004).

Sometimes educational activities cannot be integrated with a student’s aims, ambitions, or needs because these have not yet been developed by the student. In this situation, autonomy-supportive teachers aim at identification, the next type of autonomous motivation according to SDT. Rationales are offered to explain why the activity is important (Reeve et al., 2004; Reeve & Jang, 2006) without referring to the student’s unique personal situation (Stefanou, Perencevich, DiCintio, & Turner, 2004).

The provision of choice is also an important autonomy-supportive practice, especially if it allows the student to choose activities that are personally relevant (Assor et al., 2002; Katz & Assor, 2007). Stimulating the self-initiation of learning activities, encouraging independent thinking (Assor & Kaplan, 2001) and allowing students to find their own solutions to puzzles or problems (Stefanou et al., 2004) are other examples of autonomy-supporting practices that provide students with leeway. Choice can also refer to organizational or procedural aspects, such as seating arrangements in the classroom, deadlines, working methods, and sequencing (Ames, 1992; Katz & Assor, 2007; Reeve & Jang, 2006; Skinner & Belmont, 1993; Stefanou et al., 2004). Research has repeatedly shown that choice by itself is not enough to support student autonomy and is of lesser importance to the provision of (personal) relevance (Assor & Kaplan, 2001; Assor et al., 2002; Stefanou et al., 2004). A later section will delve deeper into this issue.

Autonomy-supportive teachers minimize the use of controls (Katz & Assor, 2007; Reeve & Jang, 2006; Skinner & Belmont, 1993). This applies to controls aimed at both extrinsic motivation (punishments, bonuses) and introjected controlled motivation (inducing guilt, shame, or public comparisons with peers). They refrain from close surveillance and frequent intrusions (Assor & Kaplan, 2001; Assor et al., 2002). In contrast, controlling teachers influence students’ ways of thinking, feeling, and behaving in ways consistent with behavior modification programs. For them, the idea is to establish an agenda.
of what students should and should not do, then shape students toward that agenda by using external contingencies and pressuring language (Reeve & Jang, 2006).

In terms of evaluation practices, autonomy-supportive teachers emphasize individual improvement and development (rather than generic norms) and, to this end, provide informational (rather than controlling) feedback (Ames, 1992; Reeve et al., 2004; Reeve & Jang, 2006). They recognize effort and allow errors to be made, as mistakes are seen as part of the learning process (Ames, 1992). Self-monitoring is strongly encouraged. Evaluations are kept private rather than ranking classmates in terms of percentile scores. Finally, autonomy-supportive teachers typically do not practice all the aforementioned in isolation; they also create a warm, safe climate (in response to relational needs) and make sure that challenges are optimal for each person (in response to competence needs). Learning is seen as a social activity, and students are encouraged to share and learn from each other.

The primary aim of autonomy-supportive practices is to allow students to work from their own inner motivational resource base. Contradicting the expectancy-valence approach to achievement behavior that does not distinguish between autonomous and controlled motivation, research finds that autonomous motivation is related to increased levels of engagement (Niemiec & Ryan, 2009; Reeve & Jang, 2006); effort (Ryan & Brown, 2005); persistence (Reeve & Jang, 2006; Sheldon & Elliott, 1998); self-directedness, flexibility, and creativeness (Sheldon & Elliott, 1998); deep-level learning (Ryan & Deci, 2000; Niemiec & Ryan, 2009); personal goal attainment (Sheldon & Elliott, 1998); and well-being (Reeve & Jang, 2006). These outcomes are directly relevant for enterprising behaviors as these behaviors tend to be risky, require effort to enact, and encounter obstacles along the way; are self-starting, require flexibility, creative approaches, and continuous learning; and are tied to personal goals and beliefs (Gibb, 1993).

IMPLEMENTATION TRADE-OFFS AND ISSUES

Guidance and Freedom

Autonomy as the guiding principle of entrepreneurship education may appear to suggest that students are best left alone to pursue their own learning processes. However, autonomy support is not about undirected, unguided learning (Loyens, Magda, & Rikers, 2008). In fact, students, paradoxically perhaps, want their teachers to help them become more self-directed (Loyens et al., 2008). As Assor et al. (2002) state, autonomy support is not about the minimization of guidance and consultation by educators so as to leave sufficient space for the emergence of the student’s true self, but rather about taking an active emphatic role in helping them to develop and realize personal goals. Individuation and identity-formation processes do not require detachment from supportive others.
Assor & Kaplan, 2001). Teachers can offer new vistas, alternative ways to view the world (Brookfield, 1985). Students may be caught in narrowly defined frameworks of thought and action (Brookfield, 1985). Moreover, their goals may be emergent rather than known. Without teacher guidance, learning may stagnate (Mezirow, 1985).

The question, therefore, is how to balance guidance and freedom: to optimize individual autonomy whenever possible without excluding guidance. Solutions to the tension between instruction and autonomy can be found in course design features that individualize entrepreneurship education. One solution, paradoxically, is to require students to develop goals and tasks that they are motivated to do. Another is to assign a right to students to replace assignments and readings with ones that they feel to fit better. The opposite problem may also arise, namely, when the teacher intends to support autonomy but the student demands teacher-directed learning. This will be further discussed later.

Information Versus Pressure

Autonomy-supportive teachers aim to provide feedback that relates to each person’s circumstances and psychology. However, there is a thin line between informational and controlling feedback. Two examples are the use of praise and hints. Praise can be used as a controlling extrinsic reward in which social approval and positive evaluation act as contingent rewards for right answers and acceptable behaviors. Teachers also use praise as positive informational feedback to affirm the student’s progress, improvement, or task mastery (Reeve & Jang, 2006). Similarly, hints represent a teacher’s instructional effort to provide students with information when they reach an impasse. Hints can support the student’s own learning processes. However, they can also be taken as directives and as indications of ‘the right answer.’ The difficulty is that praise or hints act in support of autonomy or become controlling depending on the perception of the student. Praise and hints may be intended as supporting autonomy but can be interpreted as controlling, perhaps especially by independence-driven entrepreneurship students. Autonomy-supportive teachers stress the informational value of their feedback.

The Self and Others

Autonomy may carry an association with singular, soloist behavior. Both SDT and SDL emphasize that this is not the case. SDT posits three basic needs: autonomy, competence, and relatedness. Ryan and Deci (2000) argue that autonomy without relatedness is problematic, just as the following section will discuss the suggestion that autonomy without competence is problematic. SDL research shows that successful self-directed learners place their learning within a social context, and other people are cited as the most important learning resource (Brookfield, 1985). A personalized approach makes it
interesting to engage with other students. Peers and fellow learners provide information, serve as
skill models, act as reinforcers of learning, and serve as counselors at times of crisis (Brookfield,

This focus on social embeddedness fits well with the enterprising way of life. Being enterprising is
about creating value for others, especially in the case of social entrepreneurship. Moreover, the
enterprising way of life strongly requires networking and influence competencies. A community of
learners can practice these competencies and itself becomes a vital and important network of
enterprising individuals.

Choice and Relevance

Research has shown that organizational or procedural choice by itself is not enough to support
student autonomy and is of lesser importance than the provision of (personal) relevance (Assor &
Kaplan, 2001; Assor et al., 2002). Teachers who provide choice create a space that allows students to
exercise their autonomy. However, it is possible that many students do not know what to do in this
open space. Encouraging independent thinking (Assor & Kaplan, 2001) and allowing students to find
their own solutions to puzzles or problems (Stefanou et al., 2004) also presupposes a certain level of
competence.

Choice must thus support not only autonomy but also competence. Just as Ryan and Deci (2000)
argue that autonomy without relatedness is problematic, so too is autonomy without competence.
Competence can be enhanced by creating challenges that are neither too easy nor too difficult. An
individualized approach helps to match choices to each person’s capability, circumstances, and zone
of proximal development.

Reciprocal Effects: Influences of Students on Faculty

Thus far, this analysis has reported autonomy-supportive practices that have been found to influence
students. The question also arises whether student behavior influences the autonomy support of
faculty. If a student does not respond well to autonomy support, will the teacher increase his or her
efforts or instead resort to more controlling methods? Skinner and Belmont (1993) found evidence
for the latter pattern. Students who show higher initial levels of behavioral engagement receive even
more subsequent autonomy support, and students who show lower initial levels of behavioral
engagement subsequently receive less. Skinner and Belmont acknowledge that passivity can be
interpreted as lack of internal motivation, which leads teachers to apply increased coercion to get the
student to participate in classroom activities. Although understandable, this suggests that students
who are behaviorally disengaged receive teacher responses that will undermine their motivation
even further. This raises the question whether each and every entrepreneurship student is ready for autonomy support.

Is Autonomy Support Suitable for Every Student?

A lack of readiness for autonomy support may arise out of preference or out of inability. First, as noted by Bird (2002), students often prefer teacher-directed learning, having had a long history of passive learning. Many want to know exactly where the bar is set to get an A, B, or C and follow the most efficient pathway to that goal. Just like other students, entrepreneurship students want to graduate, and they want to know how they can achieve this. However, an entrepreneurship student without the drive for autonomous action is somewhat of a contradiction. It is difficult to see why someone who is guided mainly by external standards, as opposed to their own, would want to graduate as an entrepreneurship student. If students are not ready for autonomy support because they prefer to be teacher led, then it is not unreasonable to ask them to reflect on their suitability as entrepreneurship students.

A second issue is that students may feel unable to cope with entrepreneurship education aimed at furthering the ability to take autonomous action (Stefanou et al., 2004). As discussed earlier, course activities must be tied to individual levels of academic competence. Moreover, students are asked to develop a strong sense of self as autonomy pertains to striving to develop and realize personal goals, values, and interests (Assor et al., 2002). Students may not yet sufficiently know themselves. But this is exactly an area where autonomy-supportive teaching can explore and experiment. Students may have a number of possible selves (Markus & Nurius, 1986), which they might like to explore in the context of entrepreneurship. Depending on their outlook, they may design the type of entrepreneurship that is right for them (Sarasvathy, 2004).

Is Autonomy-Support Suitable for Every Type and Level of Entrepreneurship Education?

Gibb (1999) distinguishes three aims of entrepreneurship education. The first is to learn to understand entrepreneurship: what it is, what entrepreneurs do, why they are needed, and the like. The second aim is to become entrepreneurial as a person: to take responsibility for learning, career, and life. The third aim is to become an actual entrepreneur: how to start and manage a business. Entrepreneurship education as an exercise in the strengthening of autonomy refers first and foremost to the second aim, learning to become entrepreneurial. However, the other two aims are obviously important if enterprising initiatives are to succeed. Having the central focus on the capacity for autonomous action will mean that the personal relevance of course activities serving the first and the third aim are enhanced, which furthers integrated and identified regulation.
Another issue is whether autonomy-guided entrepreneurship education may be especially suitable for students at university. Compared with students in vocational education, university students are trained to develop independent and critical thinking skills and to rely more on self-management to conduct their studies. In these respects, university students may have a head start. On the other hand, it should be noted that students in vocational education live the same enterprising way of life (Gibb, 2002a, 2002b) as university students do. They are equally in need of a developed capacity for autonomous action.

CONCLUSION

What does it actually mean if an entrepreneurship student graduates with straight As? Obviously, his student is expected to have gained knowledge about various aspects of entrepreneurship in general and of setting up a new venture in particular. But unlike a medical doctor, an engineer, or an accountant, the fulfillment of graduation criteria does not result in a qualification for the profession. Perhaps above all, the top student in entrepreneurship can be expected to have a developed capacity for autonomous action. This chapter has presented several arguments for putting autonomy center stage; it has offered theories and practices that aim at autonomy support and has discussed various implementation issues.

Key to students experiencing and exercising their sense of autonomy are educational processes that individualize and empower. Autonomy may serve as a generic focus for entrepreneurship education, yet it can only be practiced and developed in circumstances and conditions that are unique to each individual. Rather than decontextualizing education in the belief that learning in abstract form will promote generalization, autonomy-supportive teachers will attempt to present learning activities in individualized contexts (Cordova & Lepper, 1996).

Unfortunately, today’s pressures on the educational system put severe strains on the individualization of education. Budget cuts typically result in standardization and less attention for individual student circumstances, needs and preferences. It is observed that the increased use of high-stakes testing results in teachers and schools feeling pushed into implementing controlling strategies, rather than being concerned with individual students’ self-determination (Ryan & Brown, 2005). Entrepreneurship education without a strong focus on autonomy is doing individual students and society at large a disservice. The entrepreneurs of tomorrow face elevated levels of uncertainty and risk. They need a fully developed capacity for autonomous action in order to have a fighting chance.

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REFERENCES


Hundley, G. (2001). Why and when are the self-employed more satisfied with their work? Industrial Relations, 40(2), 293–316.


