

From Entrepreneurial Intention to Action Initiation

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This paper offers a conceptual investigation of why people sometimes unintentionally do not act on their entrepreneurial intentions. We propose that risk, aversion, and uncertainty on the action level can affect emotion and action regulation in such a way that no action is taken, even when risk, aversion, and uncertainty were accounted for when forming an intention on the business or the opportunity level. In addition, intention instability, lack of intention elaboration, a lack of excitement, and competing goals can all can have inaction as a result. Strategies are derived for actors to overcome the intention – action gap.

Keywords: Entrepreneurial-intentions; entrepreneurial-action; intention-action-gap.

Introduction

We all know people, perhaps even including ourselves, who talk about starting a business but never get around to doing it. Typically a situational constraint is cited to explain the lack of action: now is not the right time in the market place, I want to gain work experience first, I need to save money first, I first want to pay the mortgage, I am too busy now, and so forth. A gap between entrepreneurial intentions and actions is to be expected by definition, as intentions precede actions. In many cases people have good reasons to delay action (Brenner, Pringle, and Greenhaus, 1991; Dimov, 2007). If the entrepreneurial ambitions would indeed be realized at a later stage, or, alternatively, if newly emerged constraints or changed preferences would lead to abandonment of the intention, there would be no conflict between aims and the lack of action. However, if no action is taken, in spite of persisting intentions, goals and actions appear to be at odds. A lack of action in these cases means that many potentially fruitful entrepreneurial initiatives will never see the light of day.

This paper offers a conceptual investigation of why people unintentionally do not act on their entrepreneurial intentions. The ultimate aim is to derive strategies for actors to overcome the intention – action gap. We propose that risk, aversion, and uncertainty *on the action level* can affect emotion and action regulation in such a way that no action is taken, even when risk, aversion, and uncertainty were accounted for when forming an intention on the business or the opportunity level. In addition, intention instability, lack of intention elaboration, a lack of excitement, and competing goals can all have inaction as a result. We will argue that all these factors are related to how intentions are currently operationalised in research. If actions would be predicted by intention assessments that occur at multiple points in time, on the action level (rather than on the goal or opportunity level), and that include the degree of elaboration, accompanying affect (notably the levels of excitement, eagerness and enthusiasm), and the strength of competing intentions, the intention-action gap would be smaller as well as better predicted.

We will refer to the person having entrepreneurial intentions as the EI (entrepreneurial intender), and to the intention – action gap that unwillingly occurs as the UIG (unintended intention – action gap). We will refer to entrepreneurship in the sense of starting an independent business. We are well aware that multiple definitions of entrepreneurship exist. Our choice is explained by the consideration that starting an independent business is the operationalisation of entrepreneurial intentions in the research so far. To a large extent, our exposition also applies to entrepreneurship defined otherwise. This paper will proceed as

follows. First we discuss the UIG in general and in the field of entrepreneurship in particular. Because we will explain inaction as an outcome of action regulation and emotion regulation, we will describe these self-regulatory processes in the next two paragraphs. Then, we will turn to factors that cause action and emotion regulation to have inaction as a result. Finally, we provide remedies for each of these factors, that help in overcoming the intention – action gap.

The unintentional intention – action gap (UIG)

It's not just anecdotic evidence that points to the UIG. Research on entrepreneurial intentions has typically focussed on the prediction and explanation of intentions, rather than subsequent behavior, so little insight can be gained here. But research on nascent entrepreneurship in the U.S. shows sizeable amounts of people lingering for many years in the “still trying” phase, some even more than 30 (Reynolds, 2000; Gartner and Cartner, 2003). Already in 1996 it was shown by Cartner, Gartner and Reynolds that even people who abandoned the start-up process performed more gestation activities than those perennially “still trying”. In order to get into the research sample, these people must have performed at least a few gestation activities, but apparently they did little else.

The intention – action gap is researched in many academic fields, notably health psychology. Good intentions abound in this life domain. People intend to exercise, take their medication, eat healthier, or perform other health promoting or illness preventing behaviors, but never get around to doing it. For exercise behavior, meta-analyses show about a quarter of the variance of actual exercise behaviour can be predicted by intentions to exercise (Mohiyeddini et al, 2009). In other life domains a similar picture can be drawn. In a meta-analysis of meta-analyses, Sheeran (2002) found that across a variety of domains, intentions predict on average 28% of variance in subsequent behavior. Comparable figures were obtained in meta-analyses by Armitage and Connor (2001) and Sutton (1998). While in terms of effect sizes this is a strong effect (Sheeran, 2002), it also shows that a sizeable variation in behavior is left unpredicted. Sheeran (2002) also provides evidence that the intention – action gap is mostly caused by inclined abstainers, rather than by disinclined actors.

It is speculative whether these findings apply to the intention to start a business, as there is an absence of data regarding the entrepreneurial intention – action relationship. Health goals and enterprising goals share that they are medium term goals that are effortful to enact, they differ in that the former are for most people an avoidance goal (one exercises in order to prevent poor health), whereas the latter are usually, at least in developed countries, approach goals (Reynolds, 2000). Moreover, relative to other domains where the relation between intention

and behavior has been studied, entrepreneurship is characterized by uncertainty, risk, novelty, change, complexity, resource constraints, and financial as well as psychological ownership (Baron, 1998; Gibb, 1993). Enterprising behavior is self-starting and requires initiative (Fay and Frese, 2001) and pro-activeness (Parker et al., 2000) to conduct the multiple gestation activities needed to start a business.

Even though the relationship with subsequent behavior has been under-researched, the entrepreneurial intentions literature is still instructive and relevant for the study of the UIG. Two models dominate the literature. The first is Ajzen's (1988, 1991) Theory of Planned Behaviour (TPB), which explains intentions by means of attitudes, perceived behavioral control (PBC), and subjective norms. The second model is proposed by Shapero and Sokol (1982), and explains EI on the basis of perceived desirability, perceived feasibility and the propensity to act. Thus, the models share that intentions are predicted by willingness and capability. Both models have consistently received empirical support. In a direct comparison of the two models, Krueger, Reilly and Carsrud (2000) conclude that both models provide satisfactory predictions (Shapero and Sokol model adj. r sq. 0.41 ($p < 0.00$) and TPB model adj. r sq. 0.35 ($p < 0.00$)). In the remainder of this article, we will refer to the TPB, as this model has been applied extensively and widely across settings and domains, but our arguments equally apply to the model proposed by Shapero and Sokol.

When analysing the gap between intention and action, we will disregard the factors that explain intention. People are not inactive because they think that starting and having one's own business is not desirable or not feasible – if so, they would not have formed the intention in the first place. Perceived behavioral control in the TPB is conceptualised to affect intention as well as behavior. In the explanation of behavior, PBC is thought to be a proxy for actual control. Lack of PBC on the action level is indeed a contributor to the (goal, opportunity) intention – action gap. But this is a different variable. In those cases where it is clear beforehand that constraints make entrepreneurial actions impossible, one would expect no intentions to emerge (as intentions are also explained by PBC). Here, we are interested in the phenomenon that the intention persists, yet no action is taken. Assuming that people have good reasons for their goals and intentions, looking at these reasons will not explain the intention – action gap.

Not just empirical work in the field of entrepreneurship has ignored the intention-action gap, conceptual work has done just the same. In a influential recent article titled "Entrepreneurial action and the role of uncertainty in the theory of the entrepreneur", McMullen and Shepherd (2006) provide a synthesis of the risk perception and risk propensity literature. Unfortunately,

when proposing that entrepreneurial action is the outcome of the willingness to bear perceived uncertainty, they collapse the decision and the action stages. They claim that when a desire (“A wants to achieve X”) and a belief (“A believes that if B is performed X will occur”) are present, “the conclusion is not another belief but the action itself” (p.141). Similarly, they state that if someone believes that the payoff of an opportunity justifies bearing the perceived uncertainty necessary to attain it, entrepreneurial action will take place. The collapse of decision and action stages becomes most clear in their model, which discerns an attention stage, in which an opportunity is perceived, and an evaluative stage, where it is decided whether one is willing to bear risk. The attention stage is said to be unrelated to action, and the two determinants considered in the evaluative stage are called feasibility and desirability assessment. On page 148 the authors state that “this conceptualization is identical to an intention as described in the context of action theory”. Thus, they have returned to exactly the core elements of Shapero and Sokol’s (1982) theory of entrepreneurial intentions proposed 24 years earlier.

McMullen and Shepherd theory is a theory of entrepreneurial decision making or intentions, not of action. Willingness to bear perceived uncertainty is assumed to be automatically followed by action. Unfortunately, willingness can not be equated to action. We are all willing to eat better and to exercise more, but we do not do it. We may be willing to confront a group of burglars who entered our house during the night, but perhaps we don’t dare to. One reason why McMullen and Shepherd’s theory can not explain action nor inaction is because it refers to opportunities, whereas actions need to be analysed on the level of actions. The intention to pursue an opportunity is different from the intention to pursue an entrepreneurial action (e.g., to phone an acquaintance to convince her to become part of the team). McMullen and Shepherd refer to expected outcomes (whether they payoff of an opportunity justifies bearing the perceived uncertainty necessary to attain it). On the action level, the means to attain those outcomes, one may be uncertain of how, when and where this outcome is to be achieved.

The meta-analyses cited above all show the existence of a sizeable intention action gap. Our primary focus will be on what EIs can do to overcome this gap. Therefore, we are not interested in stable personality factors such as regulatory focus (Brockner, Higgins and Low, 2004), need for achievement (McClelland, 1961), proactive personality (Bateman and Crant, 1999), or action control (Kuhl and Beckman, 1994) that signify a propensity to take action. Instead, we focus on those explanatory factors for which strategies can be derived to overcome their effects. In doing so, this research helps to bridge the “thinking-doing” link in entrepreneurship research (Mitchell et al., 2007). It also helps to answer one of the

fundamental questions in entrepreneurship research as formulated by Baron (2004). Why are some so much more successful in entrepreneurship than others? One answer is: because they take action. Our analyses requires an understanding of action regulation and emotion regulation, to which we turn in the next two paragraphs.

Action Regulation

Not all actions are under conscious, rational control. Psychologists distinguish between two processing systems (Chaiken and Trope, 1999). Griffin and Kahneman (2003) call them system 1 and system 2. In system 1 processing of information and the control of actions is automatic. Processes occur spontaneously and do not require conscious attention or intervention. System 2 processes on the other hand are slow, controlled, and require effort. Here people use their capacity for rational analysis. Evidence suggests that the vast majority of behavior is effortless and automatic and relies on system 1 processing (Bargh and Chartrand, 1999). For example, while daydreaming we can walk through a busy city we're familiar with without any difficulty. Automatic control programs such as if-then rules and scripts guide routine behaviour which frees the actor from cognitive burdens. Just as mechanical devices free people from having to exert physical effort, so does system 1 processing prevents people from having to use their limited capacity for conscious attention. Therefore, humans strive to automatize behavior whenever possible, and even the process of automatization is automatic (Bargh and Chartrand, 1999).

System 2 processing occurs at best some of the time. The reason is that system 2 processing requires effort, and consumes resources in terms of attention and processing capacity. Our capacity to process information is severely limited and can readily be exceeded. We therefore seek to minimize cognitive effort, and often use various short-cuts in our thinking (Baron, 1998). Cognitive scientists have drawn a distinction between two modes of processing: systematic, careful, analytic processing; and heuristic processing, an effortless and quick form of processing using various heuristics (Baron, 2004). These short-cuts, heuristics, rules of thumb, can be used and applied consciously or unconsciously. Conscious analytic processes come into play when the automatic use of if-then rules, scripts and heuristics are disrupted. This can happen for example because of novelty and uncertainty (we're now walking through a busy city in totally different culture), or because issues of importance are at stake. The two systems work together and it makes little sense to pit them against each other in theories (e.g. intuition versus reason). Both system 1 and 2 are needed and they complement each other, and neither level can be called more effective or efficient (Frese, 2007).

Entrepreneurs are in situations of high novelty, change, uncertainty and complexity, and need to make many important decisions. They will therefore often need to regulate actions on the conscious level. But as executive control processes are effortful and make use of restricted processing capacity, there is a limit to system 2 processing capacity. Moreover, novelty, change, uncertainty and complexity can easily lead to cognitive overload, especially in combination with time pressure and when there is too little, too much, or unreliable information. When conscious processing capacity is exhausted, habits, routines, and the use of heuristics takes over. Successful entrepreneurs must therefore have the right habits, routines, and heuristics, as well as the capability to make the right choices in when to use systematic processing.

In action regulation, the ability to use conscious, systematic processing can be depleted, as has been shown by studies of self-regulatory strength (Baumeister and Heatherton, 1996; Baumeister, Gaijlot, DeWall, and Oaten, 2006). This research stream is concerned with self-control, for example resisting impulses to consume fatty food, shop impulsively, or to use violence (Vohs and Baumeister, 2004). Starting from impulse control, the argument is that if an impulse has a certain pulling strength, for instance an enticing piece of chocolate for a dieter, than what resists that impulse must have greater strength (Baumeister and Heatherton, 1996). This self-regulatory strength is a resource that becomes depleted when being used. Hence, it's often in the evening that dieters will take that chocolate, after having resisted it all day (Muraven and Baumeister, 2000). Laboratory research shows that when people have exerted self-control on an initial task, they are subsequently less successful at other tasks requiring self-control (Schmeichel and Baumeister, 2004). A person can become exhausted from many simultaneous demands. Self-regulatory strength can be replenished, for example, by sleeping or distractions.

Action theory (Frese and Zapf, 1994; Frese, 2007) is another dual process theory that explains how people regulate their actions to achieve goals in both routine and novel situations. It not only recognizes different levels of consciousness and automaticity in action regulation, but also several phases within the action process: goal setting, mapping of the environment, planning, executing, monitoring, and feedback. Action theory is intended to apply to broad level goals such starting a business, down to sensomotorical goals such as picking up the phone to make a call. Hence, in explaining how actions can about, its closer to the action than McMullen and Shepherd who only analyse on the level of the opportunity. Frese (2007) states that from an action regulation perspective there can be uncertainty for each phase in the action sequence.

From an action regulation perspective, we would argue that there are uncertainties for every step of the action sequences and that in each case, uncertainty means something different – uncertainty with regard to an action goal implies that there is uncertainty between a goal and further long-term goals of the entrepreneur. Uncertainty with regard to mapping the environment may be related to the complexity of the situation; uncertainty with regard to the plans related to how uncertain it is that the plan will work out; and uncertainty with regard to feedback may be uncertainty on whether one gets the feedback, when one gets it, or which kind of feedback one is likely to get (Frese, 2007, p. 162).

Uncertainty in each of the different action phases can have inaction as a result, as we will discuss in a later paragraph.

Emotion Regulation

Just as with the regulation of actions, so the regulation of emotions is thought to be subject to dual processes, differing in the degree to which conscious, deliberate, or non-conscious, automatic processes are involved. Brain research shows that emotions can take a quick and dirty pathway, and a conscious pathway. The former emotional responses occur automatically and involuntarily. They take place before the conscious brain has the chance to deliberate what to do (Zhu and Thagard, 2002). These automatic emotional reactions are evaluative in nature, indicating ‘good’ and ‘bad’, or ‘liking’ and ‘disliking’, and that activate approach or avoidance tendencies (Baumeister, Vohs, DeWall, and Zhang, 2007; Elliott, 2006; Gable, Reis and Elliott, 2000). Their main advantages are that they save time and signal importance (Zhu and Thagard, 2002). If conscious deliberation should have taken place, it may have been too late (e.g., when crossing the road and having to jump away for a car that does not stop). If the event or object was of no importance, no emotional response would have occurred (Frijda, 1988).

Conscious emotions are posited not to be direct causes of action, but are rather thought to serve as feedback in action control (Baumeister et al., 2007). As seen above when discussing action control, much behavior is driven by automatic programs, rules and scripts. This includes automatic, quick-pathway affective responses. Conscious, fully experienced emotions can serve to update these, thus influencing future behavior rather than current behavior. One example is guilt: after not giving a quarter to someone who asked for money to make a phone call, one may feel guilty, and decide to give a quarter the next time this situation comes up. The new rule relieves one from the unpleasant feeling of guilt, and one’s mood may go back to a neutral or positive state. Similarly, fear, which is often thought to trigger fleeing, may trigger future plans to prevent the fear-evoking situation from happening again. What would otherwise be the point fear if one is running already? Fleeing may have

been caused by the automatic response. For example, when seeing a ferocious snake, one runs away, and the experience of fear results in a rule to avoid that spot in the future (Baumeister et al., 2007). Generally, people are reluctant to stay in emotionally unpleasant state, and will employ mood repair strategies to feel good again, a self-regulation principle that has been called hedonistic emotion regulation (Mohiyeddini et al., 2009) or ubiquitous emotion regulation (Baumeister et al., 2007).

That conscious emotion may primarily function as feedback in action control helps to explain why the experience of emotions is so strong and often can not be controlled, whereas the actions in response to emotions can be controlled. According to Baumeister et al. (2007), if emotions could be changed or removed at will, no lessons would be learned. They state that “you can not control your emotions because the purpose of emotions is to control you” (p. 175). In contrast, the behavioral response to emotions can be regulated. People sit in cinemas experiencing a wide range of emotions and never move from their chair, and soldiers in the battlefield can stay in position in spite of being frightened to death. The conscious regulation of emotion consumes considerable cognitive capacity and resources, just like the conscious regulation of actions. For example, it may be difficult to concentrate on a work task, after an argument with the boss or with one’s partner.

Negative feelings, in particular anxiety, can have inaction as a result. Insofar as these influence attitude, perceived behavioral control, and subjective norms (in the TPB), no entrepreneurial intention should emerge. For example, anticipated regret, in the context of forming entrepreneurial intentions, should be factored in the attitude (or desirability) component. However, are several conditions under which feelings can cause inaction even if the original intention was strong. These are considered in the next paragraph.

Factors leading action and emotion regulation to result in inaction

A variety of factors can be inputs to action and emotion regulation that have inaction as a result.

Intention strength instability. Enthusiasm about an ambitious, risky aim such as starting a business may vary during the day, weeks, months or years. Although the intention is continuously present, its strength may vary, which may cause difficulties for action control when strength is down. Starting a business requires effortful behaviour in often novel, uncertain contexts, and in order for intentions to pull the action, they require a certain strength. The intention – action gap may be even larger among samples of business students that are commonly used in studies of entrepreneurial intentions. Intentions are invariably

measured only once, and students, given their phase in life, may be still exploring their options (Nabi, Holden and Warmley, 2006). Some have goals that often change, in other words, they suffer from goal instability (Multon, Heppner, and Lapan, 1995).

Lack of intention elaboration. Intention instability can also be caused by a lack of intention elaboration (Sheeran, 2002). Some have thought about business ownership longer and harder than others. Those who have formed their entrepreneurial intentions on the basis of an superficial analysis may never get started. They may experience anxiety and/or task aversion when actually attempting to take action. Having underdeveloped ideas of when, where and how to take actions, they run into action control problems.

Lack of excitement, enthusiasm, eagerness. Emotion has a motivating function and a lack of excitement may make it difficult to get started, in spite of having formed entrepreneurial intentions. Here, the idea of having one's own business seems attractive and feasible, but somehow this does not translate into a state of excitement, enthusiasm and eagerness. This means that in order to achieve the goal, one has to exert conscious effort to generate action, which consumes self-regulatory strength. One possible reason can be that the entrepreneurial intention is at odds with implicit motives such as affiliation, achievement and power (Kehr, 2004). Intentions need to pull the action, but without excitement, it is likely to remain a wish. It is possible that the intention is competing with other goals and intentions that create more excitement, as will be discussed next.

Competing goals. The TPB measures intentions as a function of attitudes, perceived behavioral control and subjective norms with regard to one goal. In practice, people have multiple goals organised in a goal hierarchy (Austin and Vancouver, 1996). Business ownership may serve multiple goals in the hierarchy (such as wealth, autonomy, challenge, identity), and these superordinate goal can be achieved by various means. For example wealth can be attained through business ownership but also by means of a lucrative job, speculating, buying lottery tickets, stealing, or marrying a rich partner. The position and strength in the goal hierarchy of entrepreneurial intentions as a means to achieve superordinate goals can contribute to inaction. Not only competing means to the same superordinate goals, but also intentions that compete for time, attention and other resources need to be considered. For example, leisure, hobbies, family demands, and social activities can all have greater pull. The EI may have to choose between spending the evening watching television, or doing preparatory steps for setting up the business, and in some cases the television may have greater pull.

Goal selection difficulty can give rise to negative feelings. Research shows that when people have to choose between multiple attractive options that vary in non-comparable attributes (for example, whether to spend one's time and energy on starting a business, learning a second language, or travelling around the world for six months), they show an increased tendency to postpone action (Anderson, 2003). Goals also compete in terms of time frame and urgency. Starting an independent business is itself often a medium range goal, but may serve to achieve higher level, long-range life goals such as self-actualisation, or becoming a millionaire. This puts the EI at risk of being caught up by goals that are more important in the short or medium term, such as keeping the job that brings a monthly income in the bank account. Higher level goals, although considered of utmost importance, are often not in the foreground of attention. Short term goals may have more regulatory power, having procrastination as a result (Steel, 2007).

Aversive aspects. The different level of analysis of a goal and action intentions can mean that, in spite of a willingness to bear perceived uncertainty on the level of the opportunity, starting a business can still involve aspects that arouse apprehension. Starting a business requires conducting numerous diverse activities and chances are that one or more are aversive to the EI. Possible candidates, amongst others, are bookkeeping, finding out about and dealing with governmental regulations and agencies, raising finance, and doing acquisition. In order to avoid the aversive feelings that these tasks bring about, the activities can be procrastinated (Van Eerde, 2003; Steel, 2007).

Fear. The time frame between intention formation and its realisation gives rise to another phenomenon that can cause stalling. As the prospect of an uncertain, risky event approaches in time, fear tends to increase (Loewenstein, Weber, Hsee, and Welch, 2001). The urge to chicken out is augmented by the tendency to consider practical considerations and loss implications as the moment of action draws near (Loewenstein et al., 2001). The original intention may have been guided by more vague desirability and feasibility considerations. As an automatic process, fear may trigger the automatic avoidance response system, leading to inaction (Gable, Reis and Elliott, 2000). As a conscious emotion having an effect on cognition, fear may lead to reflection (Baumeister et al., 2007). Does the EI really want to give up her job? Does the EI really want to invest a sizeable amount of hard-saved money? Fear also increases a focus on magnitude outcomes as opposed to probabilities (Loewenstein et al., 2002). For some, fear can propel EIs into action, for example, when afraid to miss out on an opportunity (Baron, 2004). Others, however, will increasingly experience fear of loss or failure when the time comes to implement one's intentions, and become more cautious.

The moment of action drawing close may also give rise to anticipatory feelings of regret. With increased attention for the immediate loss implications of risky and uncertain courses of action, inaction may be preferred over action. In the short run people associate regret with actions taken, and its only when looking back over long periods that inaction rather than action are regretted most (Baron, 1998). Perhaps those who do take action are motivated by anticipated regret of foregone opportunities (Baron, 2004).

Action uncertainty. Even if the EI is certain and excited about the intention, no competing goals are present, aversive aspects are absent, and fear is conquered, inaction and procrastination can still occur as a consequence of action uncertainty. That the EI perceived enough control to form the intention at the business or opportunity level, does not necessarily mean knowing what to do at the action level. The EI may not know where to start and how to go about. Coming back to the action sequence (Frese and Zapf, 1994; Frese, 2007), uncertainty in each phase can have regulation overload and regulation uncertainty as a result. Entrepreneurial goals may not be specified very well (not complying with the SMART formula (Doran, 1981): specific, measurable, attainable, realistic, and time-bound). The mental maps of the EI may be inaccurate, which can be conducive to getting started initially if they are overoptimistic, but will be problematic if actions quickly turn out to be ineffectiveness. Plans can be poorly devised, showing no detailed description of where and when which action needs to be taken. The EI may not know what feedback to look for, or where to find it.

Uncertainty about courses of action can be a function of entrepreneurial experience. Experienced entrepreneurs may possess entrepreneurial action scripts such as arrangement and ability scripts (Mitchell, Smith, Morse, Seawright, Peredo, and McKenzie, 2002; Mitchell, Smith, Seawright, and Morse, 2000). Arrangement scripts concern the resources, relationships and assets needed to engage in entrepreneurial activity. Ability scripts are thoughts and mental frameworks concerning the skills, knowledge and capacities needed to create a new venture. Those with developed entrepreneurial action scripts can get into action quickly, perhaps even without much cognitive processing, whereas the inexperienced entrepreneurs need to consider each step along the way. The tendency to associate wrong actions with regret can cause the inexperienced EI to avoid experimentation and to procrastinate, rather than act. Conscious action control as a consequence of a lack of skills and knowledge will also mean expenditure of time, energy, and cognitive capacity. When this proves to be too much of a burden, other goals or distractions may take over, or past habits and routines kick in.

In the case of inaction, there is obviously no feedback on one's actions, but procrastination is feedback by itself. It tells the EI that she has not come closer to the goal. A lack of progress towards goal attainment can result in negative affect (Carver and Scheier, 1981). Negative feelings about a lack of progression towards to goal may lead to an increase in effort. Insofar as the approach system is activated, this is correct. For approach goals, progress in goal achievement is conceptualized to cause elation, whereas a lack of progress causes dejection (Carver, Sutton, and Scheier, 2000). If, however, the avoidance system is activated, because of risk, uncertainty, aversive aspects, or any other cause of inaction, inaction will result in relief, whereas a lack of success in avoiding the avoidance goal will result in distress (Carver et al., 2000). Over time, not working on the new venture may provide feelings of relief rather than dejection.

Figure 1: Model of the entrepreneurship UIG.

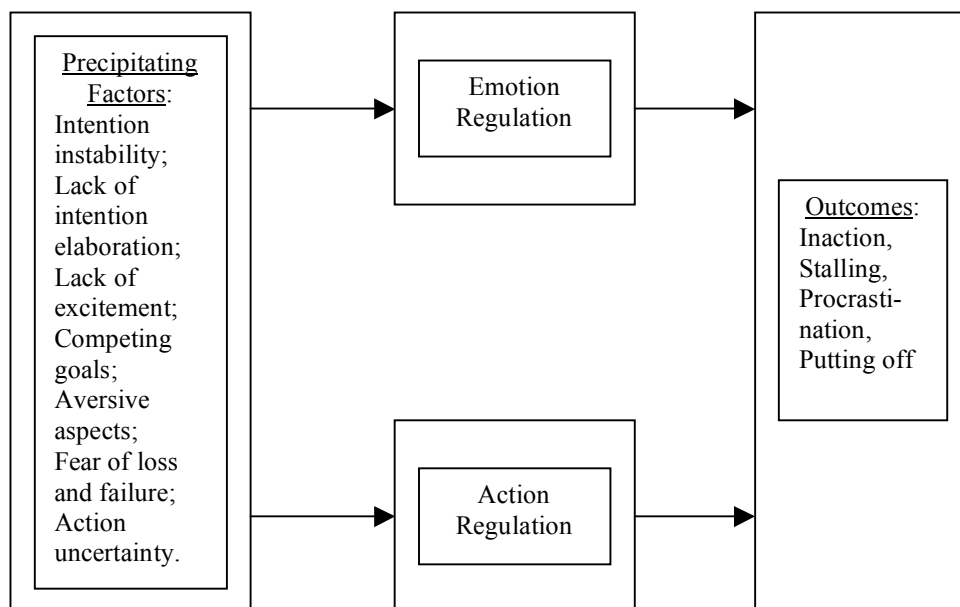


Figure 1 depicts the constructs that have been described. Dual processes in emotion and action regulation can result in action. Direct, non-conscious activation of avoidance system will lead to withdrawal. Hedonistic emotion and mood regulation can cause inaction when stalling helps to escape or neutralize a negative affective state. Action uncertainty and poorly developed action scripts prevent automatic action from taking place. Conscious action control processes can result in inaction when novelty, uncertainty, risk and complexity contribute to regulation overload, regulation uncertainty, and depletion of regulatory strength. In the next section, we will analyse remedies to overcome the factors causing the unintentional intention – action gap.

Remedies

As stated in the introduction, there can be many good reasons for EIs to delay action. The intention – action gap is in many cases intentional, for example, when the EI wants to gain experience or resources first, or when the EI plans to take action 5 years later. More problematic are those instances where the EI truly wants to start a business, but keeps postponing to take action. Here we are concerned with the EI who wants to overcome these barriers. As our focus is on strategies and behaviors that can be employed to prevent procrastination, we do not consider personality factors.

In the cases of intention instability, lack of intention elaboration, and lack of excitement refraining from action may perhaps not be such a bad choice. Starting a business takes commitment and resources: if desired only sometimes, if superficially decided upon, or if not generating excitement, the EI may want to reconsider the validity of the intention. Further, having inactive goals or intentions can be adaptive in later situations where they will be activated (for example, after being fired). Even the other causes of entrepreneurial inaction can be sound reasons to discard the entrepreneurial intention: perhaps other goals are more important, or reached better by other avenues than business ownership; aversive aspects can be a serious threat to work satisfaction; fear of loss and failure may be well-founded; and action uncertainty can signal a very unpredictable market and/or a lack of enterprising skills and knowledge.

Dealing with competing goals. Effortful, ambitious and challenging goals like setting up a business needs to be protected from competing goals and distractions in order to be successful. Prioritization is a first step as the EI needs to reach clarity about whether the entrepreneurial intention is really on the top of the list. If so, time management techniques need to be employed to allocate time, energy and other resources to entrepreneurial goal pursuit. Entrepreneurship can be a long range goal and is at risk at being overridden by short term, urgent goals (Frese, 2007). Time management techniques aim to facilitate the achievement of long run, important goals (Covey, 1989).

Implementation intentions (Gollwitzer, 1999) help to initiate action as well as to shield actions from distractions. Implementation intentions supplement goal intentions by specifying the where, when and how of behavior. For example when the goal is to approach a possible financier at a networking function, the implementation intention might be formulated as “as soon as the financier stands alone, I will approach this person and start a conversation”. By specifying the situational cues that trigger action, behavior is automatized. The control of the

action is passed on from the person to the environment and cognitive processing capacity is freed up which can now be used to deal with other aspects of the situation. There is by now a solid body of evidence showing the effectiveness of implementation intentions (Sheeran, 2002).

Dealing with aversive aspects. Its holistic nature is one of the essences of businesses that are new and small (Gibb, 1993). All aspects of the business, from strategy to the coffee machine, need to be attended to or delegated. One way to deal with aversive aspects is to make them more attractive, for example, if the EI offers herself a reward if the aversive task has been accomplished. The other way is to find other people willing to do the aversive job, either because they don't find it aversive or because they are paid for it.

Overcoming fear: courage. Research summarised in Rachman (2004) investigated the factors that made it possible for people in risky professions such as bomb-removal experts, fire brigades, combatants, and astronauts, to do their task. He defined courage as acting in spite of being afraid, distinguishing it from taking unconsidered risks (recklessness) or not feeling fear (fearlessness). Courage turned out to be determined by three factors: exposure, skills and knowledge, and situational demands. Exposure, in other words just doing it, helps parachutists (on average after five successful jumps), public speakers, bomb-removal experts to get rid of their fear, as long as no disasters occurred. Trial-and-error behaviors and experimentation are crucially important for entrepreneurship, especially when one is uncertain or when much learning needs to take place.

The second determinant, skills and knowledge, is a primary source of confidence and will be further discussed under action uncertainty. Situational demands, finally, refer to features in the environment that induce actors to behave in a courageous way. For example, in a group of 4 combatants, where each member of the team has been assigned specific tasks whereupon the others are dependent, there is a strong pressure to perform. Role models also help to perform courageously. In the context of setting up a business, situational demands can be created in a team by assigning actions in such a way that others depend on it.

Lowering action uncertainty. Skills and knowledge, both theoretical and practical, will help to reduce action uncertainty. When turned into scripts, they can be processed automatically, leaving conscious capacity for other tasks. Again, implementation intentions can help. Here, plans are made as precise as possible from an action regulation perspective, with environmental cues specified that trigger the action that needs to be taken. Again, it is the shift from conscious to unconscious processing that is aimed for. Action uncertainty can also

be gradually reduced by experimentation. The experience gained can lead to learning-by-doing, reducing uncertainty in the process.

Practice of self-regulatory strength. The capacity for conscious processing can be increased. (Baumeister et al., 2006). Reporting on their research program, Baumeister et al. (2006) show that the exercise of self-regulatory strength leads to improvements in self-control that extend to domains unrelated to the practice. If self-regulatory strength is practised in one area, it generalizes to other, unrelated areas. In comparison to a control group, those who adhered to a two month physical exercise program did not only get fitter, they also did better on a visual tracking task, decreased impulsive spending, and washed their dishes more often. Those who signed up and adhered to a money management program not only spent less, also did better on a subsequent visual tracking task, showed better maintenance of household chores, and ate healthier food in spite of the increase costs. The implication of this research is profound, because it suggests that one can become better at enterprising behavior, including taking action, by means of the practice of completely unrelated exercises.

Conclusion

A recent article by Haynie, Shepherd, Mosakowski, and Eagly (2009) proclaimed meta-cognitive abilities as the core feature of what they labeled the entrepreneurial mindset. Meta-cognition are cognitions about cognitions. While it is certainly true that meta-cognition has many benefits, it is also a scarce resource. For entrepreneurial action the continuous use of meta-cognition may not only exhaust self-regulatory strength and cognitive capacity, it may also stifle the ability to take action if hyperflexibility means an ever-increasing array of options to choose from. Cognitive, meta-cognitive, and subconscious processes are all needed in order to bridge the intention – action gap.

Future research on the realization of entrepreneurial intentions will be able to make more precise predictions if the factors that contribute to the UIG are taken into account. Measuring intentions repeatedly, assessing intention elaboration, taking into account the affective attributes of goal intentions such as excitement and enthusiasm, considering competing goals and intentions, and measuring aversion, fear and uncertainty on the action level will all help to gain a better understanding of intention – behavior relationships. The relative strength of the determinants of the UIG, their interrelationships, and the relative effectiveness of the remedies proposed are all matters that need better understanding.

References

- Ajzen, I. (1988), *Attitudes, Personality, and Behaviour*, Dorsey Press, Chicago.
- Ajzen, I. (1991), "The theory of planned behaviour", *Organizational Behaviour and Human Decision Processes*, 50, 179-211.
- Anderson, C.J. (2003). The psychology of doing nothing: Forms of decision avoidance result from reason and emotion. *Psychological Bulletin*, 129(1), 139-167.
- Armitage, C.J. and Conner, M. (2001), "Efficacy of the theory of planned behaviour: A meta-analytic review", *British Journal of Social Psychology*, 40, 471-499.
- Austin, J.T., and Vancouver, J.B. (1996). Goal constructs in psychology: Structure, process, and content. *Psychological Bulletin*, 120, 3, 338-375.
- Bagozzi, R.P., Dholakia, U.M., and Basuroy, S. (2003). How effortful decisions get enacted: The motivating role of decision processes, desires, and anticipated emotions. *Journal of Behavioral Decision Making*, 16, 273-295.
- Bargh, J.A., and Chartrand, T.L. (1999). The unbearable automaticity of being. *American Psychologist*, 54(7), 462-479.
- Baron, R.A. (1998). Cognitive mechanisms in entrepreneurship: Why and when entrepreneurs think differently than other people. *Journal of Business Venturing*, 13, 275-294.
- Baron, R.A. (2004). The cognitive perspective: A valuable tool for answering entrepreneurship's basic "why" questions. *Journal of Business Venturing*, 19, 221-239.
- Bateman, T.S., and Crant, J.M. 1999. Proactive behavior: Meaning, impact, recommendations. *Business Horizons*, 42, 3, 63-70.
- Baumeister, R.F., and Heatherton, T.F. (1996). Self-regulation failure: An overview. *Psychological Inquiry*, 7, 1, 1-15.
- Baumeister, R.F., Gailliot, M., DeWall, C.N., and Oaten, M. (2006). Self-regulation and personality: How interventions increase self-regulatory success, and how depletion moderates the effects of traits on behavior. *Journal of Personality*, 74, 6, 1773-1802.
- Baumeister, R.F., Sparks, E.A., Stillman, T.F., and Vohs, K.D. (2008). Free will in consumer behavior: Self-control, ego depletion, and choice. *Journal of Consumer Psychology*, 18, 4-13.
- Baumeister, R.F., Vohs, K.D., DeWall, C.N., and Zhang, L. (2007). How emotion shapes behavior: Feedback, anticipation, and reflection, rather than direct causation. *Personality and Social Psychology Review*, 11, 167-203.
- Brenner, O.C., Pringle, C.D. and Greenhaus, J.H. (1991), Perceived fulfilment of organizational employment versus entrepreneurship: Work values and career intentions of business college graduates, *Journal of Small Business Management*, 29, 62-73.
- Brockner, J., Higgins, E.T., & Low, M.B. (2004). Regulatory focus theory and the entrepreneurial process. *Journal of Business Venturing*, 19(2), 203-220.
- Carter, N.M., Gartner, W.B., & Reynolds, P.D. (1996). Exploring start-up event sequences. *Journal of Business Venturing*, 11(3), 151-166.
- Carver, C.S., and Scheier, M.F. (1998). *On the self-regulation of behavior*. Cambridge: Cambridge University Press.
- Carver, C.S., Sutton, S.K., and Scheier, M.F. (2000). Action, emotion and personality: Emerging conceptual integration. *Personality and Social Psychology Bulletin*, 26(6), 741-751.
- Chaiken, S., & Trope, Y. (1999). *Dual-process theories in social psychology*. New York: Guilford Press.
- Covey, S. (1989). *The seven habits of highly effective people*.
- Dimov, D. (2007). From opportunity insight to opportunity intention: The importance of person- situation learning match, *Entrepreneurship Theory & Practice*, 31(4), 561-583.
- Doran, G.T. 1981. There's a S.M.A.R.T. way to write management's goals and objectives. *Management Review*, 70, 11, 35-36.
- Elliott, A.J. (2006). The hierarchical model of approach-avoidance motivation. *Motivation and Emotion*, 30, 111-116.
- Frese, M. (2007). The psychological actions and entrepreneurial success: An action theory

- approach. In: Baum, J.R., Frese, M., & Baron, R.A. (eds.), *The psychology of entrepreneurship*. Mahwah, New Jersey: Lawrence Erlbaum.
- Frese, M., and Fay, D. (2001). Personal initiative (PI): A concept for work in the 21st century. *Research in Organizational Behavior*, 23, 133-188.
- Frese, M., and Zapf, D. (1994). Action as the core of work psychology: A German approach. In: H.C. Triandis, M.D. Dunette, & J.M. Hough (Eds), *Handbook of industrial and organizational psychology* (vol. 4, 2nd edition, pp. 271-340). Palo Alto, CA: Consulting Psychology Press.
- Frijda, N.H. (1988). The laws of emotion. *American Psychologist*, 43(5), 349-358.
- Gable, S.L., Reis, H.T., and Elliott, A.J. (2000). Behavioral activation and inhibition in everyday life. *Journal of Personality and Social Psychology*, 78(6), 1135-1149.
- Gartner, W.B., and Carter, N.M. (2003). Still trying after all these years: Nascent entrepreneur "semi-survivor" bias in the PSED. Paper presented at the Academy of Management meeting, Seattle, 1-6 August.
- Gibb, A.A. (1993). The enterprise culture and education. *International Small Business Journal*, 11, 3, 11-34.
- Gollwitzer, P.M. (1999). Implementation intentions. Strong effects of simple plans. *American Psychologist*, 54, 7, 493-503.
- Greve, A. (2001). Traps and gaps in action explanation. *Psychological Review*, 108, 435-451.
- Griffin, D., and Kahneman, D. (2003). Judgmental heuristics: Human strengths or human weaknesses? In: Aspinwall, L.G., and Staudinger, U.M. (eds.), *A psychology of human strengths: Fundamental questions and future directions for a positive psychology*. Washington: APA.
- Haynie, J.M., Shepherd, D., Mosakowski, E., and Eagly, P.C. (2009). A situated metacognitive model of the entrepreneurial mindset. *Journal of Business Venturing*, forthcoming.
- Kehr, H.M. (2004). Integrating implicit motives, explicit motives, and perceived abilities: The compensatory model of work motivation and volition. *Academy of Management Review*, 29(3), 479-499.
- Krueger, N.F. jr., Reilly, M.D. and Carsrud, A.L. (2000). Competing models of entrepreneurial intentions, *Journal of Business Venturing*, 15, 411-432.
- Kuhl, J., & Beckmann, J. (1994). *Volition and personality: Action versus state orientation*. Seattle, WA: Hogrefe & Huber Publishers.
- Loewenstein, G.F., Weber, E.U., Hsee, C.K., and Welch, N. (2001). Risk as feelings. *Psychological Bulletin*, 127(2), 267-286.
- McClelland, D. C. (1961). *The achieving society*. New York: Van Nostrand.
- McMullen, J.S., and Shepherd, D.A. (2006). Entrepreneurial action and the role of uncertainty in the theory of the entrepreneur. *Academy of Management Review*, 31, 1, 132-152.
- Mitchell, R.K., Smith, J.B., Morse, E.A., Seawright, K.W., Peredo, A.M., and McKenzie, B. (2002). Are entrepreneurial cognitions universal? Assessing entrepreneurial cognitions across cultures. *Entrepreneurship Theory & Practice* 26 (4), 9-33.
- Mitchell, R.K., Smith, J.B., Seawright, K.W, and Morse, E.A. (2000). Cross-cultural decisions and the venture creation decision. *Academy of Management Journal* 43 (5), 974-994.
- Mitchell, R.K., Busenitz, L.W., Bird, B., Gaglio, C.M., McMullen, J.S., Morse, E.A., and Smith, J.B. (2007). *Entrepreneurship Theory & Practice*, 31(1), 1-27.
- Mohiyeddini, C., Pauli, R., and Bauer, S. (2009). The role of emotion in bridging the intention-behaviour gap: The case of sports participation. *Psychology of Sport and Exercise*, 10, 226-234.
- Multon, K.D., Heppner, M.J. and Lapan, R.T. (1995). An empirical derivation of career decision subtypes in a high school sample. *Journal of Vocational Behavior*, 47, 76-92.
- Muraven, M.R., and Baumeister, R.F. (2000). Self-regulation and depletion of limited resources: Does self-control resemble a muscle? *Psychological Bulletin*, 126, 247-259.
- Nabi, G., Holden, R. and Walmsley, A. (2006). Graduate career-making and business start-up: A literature review. *Education + Training*, 48, 5, 373-385.

- Parker, S. K. (2000). From passive to proactive motivation: The importance of flexible role orientations and role breadth self-efficacy. *Applied Psychology: An International Review*, 49, 447-469.
- Rachman, S.J. (2004). Fear and Courage: A Psychological Perspective. *Social Research*, 71, 1, 149-176.
- Rank, J., and Frese, M. (2008). The impact of emotions, moods and other affect-related variables on creativity, innovation and initiative. In: Ashkenasy, N.M., and Cooper, C.L. (eds.), *Research Companion to Emotion in Organizations*. Cheltenham: Edward Elgar, p103-119.
- Reynolds, P.D. (2000). National Panel Study of U.S. Business Startups: Background and Methodology, In: Katz ed. *Advances in Entrepreneurship, Firm Emergence and Growth*, vol. 4: Databases for the study of entrepreneurship, Amsterdam: Elsevier Science.
- Sarasvathy, S.D. (2001). Causation and effectuation: Toward a theoretical shift from economic inevitability to entrepreneurial contingency. *Academy of Management Review*, 26, 2, 243-263.
- Schmeichel, B.J., and Baumeister, R.F. (2004). Self-regulatory strength. In: Baumeister, R.F., and Vohs, K.D. (eds.), *Handbook of self-regulation. Research, theory and applications*. New York: Guilford Press, pp. 84-98.
- Shapiro, A., & Sokol, L. (1982). Social dimensions of entrepreneurship. In: C. Kent, D. Sexton and K. Vesper (eds). *The encyclopedia of entrepreneurship*. Englewood Cliffs: Prentice-Hall, 72-90.
- Sheeran P (2002). Intention-behaviour relations: A conceptual and empirical overview. *European Review of Social Psychology*, 12(1), 1-36.
- Steel, P. (2007). The nature of procrastination: A meta-analytic and theoretical review of quintessential self-regulatory failure. *Psychological Bulletin*, 133(1), 65-94.
- Sutton, S. (1998), Predicting and explaining intentions and behaviour: How well are we doing? *Journal of Applied Social Psychology*, 28, 15, 1317-1338.
- Van Eerde, W. (2000). Procrastination: Self-regulation in initiating aversive goals. *Applied Psychology: An International Review*, 49, 3, 372-389.
- Van Gelderen, M.W., Brand, M., van Praag, M., Bodewes, W., Poutsma, E., and van Gils, A. (2008). Explaining entrepreneurial intentions by means of the Theory of Planned Behaviour. *Career Development International*, 13, 6, 538-559.
- Vohs, K.D., and Baumeister, R.F. 2004. Understanding self-regulation. In: Baumeister, R.F., and Vohs, K.D. (eds.), *Handbook of self-regulation. Research, theory and applications*. New York: Guilford Press.
- Wofford, J.C., Goodwin, V.L., and Premack, S. (1992). Meta-analysis of the antecedents of personal goal level and of the antecedents and consequences of goal commitment. *Journal of Management*, 18, 3, 595-615.
- Zhu, J., and Thagard, P. (2002). Emotion and action. *Philosophical Psychology*, 15(1), 19-36.