The Use of Time Perspective to Prevent Entrepreneurial Burnout

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Abstract

Motivation: Since, entrepreneurs' reward-effort-imbalance is based on the perception of entrepreneurs, the time perspective was added to the ERI model in order to test how a high future time perspective might help to prevent burnout.

Problem statement: ERI is caused by perceived high effort but low reward. Yet ERI leads to burnout among entrepreneurs. That has an negative effect on entrepreneurs mental health and performance.

Approach: A critical literature review was conducted to check if entrepreneurs' strong future time perspective could prevent burnout by the ability to accept low reward in the present and skipping immediate reward for the sake of future reward. Therefore the time perspectives were measured by ZTPI and burnout was measured by MBI. In addition, twelve semi structured interviews with student entrepreneurs were conducted to test how time perspectives influence the development of entrepreneurial burnout.

Results: The literature review supported the hypothesis, but the high future time perspective scores didn't correlate with low burnout scores. The results of the semi structured interview couldn't show that either. However, some support was found that student entrepreneurs with a higher preference of future reward had lower burnout scores than student entrepreneurs who preferred immediate reward.

Conclusions: The results showed that time perspectives did affect the development of burnout among entrepreneurs: It showed that preferring immediate reward more than future reward leads to higher burnout risk. However, most results are not significant nor are the results generalizable.

Keywords: entrepreneur, burnout, effort-reward imbalance, time perspective, performance

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1.0. Introduction

As entrepreneurs are faced with volatile environments, entrepreneurs need to think and act flexibly to handle changing tasks, which require different skills (Miller & Sardais, 2013). Hence, entrepreneurs have to adjust their mindset and actions to cope with uncertainty and large variety of tasks. Especially uncertainty, high risk, high effort but low reward are essential issues that influences entrepreneurs' work. These factors might lead to high stress levels and burnout, especially when entrepreneurs don't perceive an balance between their effort and reward. (Miller & Sardais, 2013); (Hatak, Rauch, Fink, Baranyi , 2015); (Cardon & Patel, 2015) . Since entrepreneurs have a higher risk to suffer from burnout and burnout influences the performance of entrepreneurs, this study is addressing the development of burnout among entrepreneurs in depth. Therefore, the primary aim of this study is to enlarge the concept of entrepreneurship beyond the accepted theories in order to face the development of burnout among entrepreneurs. For that sake time perspective theories are lent from the field of psychology and added to entrepreneurial research (Philip Zimbardo & John Boyd, 2008). Accordingly, the impact of psychology of time, in the shape of individual time perspective, on the development of entrepreneurs cognitive processes and choices are evaluated. Scientific researchers from different fields tried to evaluate the effect of time on the behavior of individuals for several decades (Stolarski, Bitner, Zimbardo, 2011). Yet just a few researchers linked time to the development of burnout of entrepreneurs. However to the best of my knowledge the psychological time perspectives have not been linked to entrepreneurship yet, especially not to explore stress levels or burnout among entrepreneurs. In order to illustrate the potential link between the individual time perspective and the development of burn-out the Effort-Reward Imbalance model (ERI) is used and evaluated (Siegrist, 1996). So far, the Effort-Reward-Imbalance Model (ERI) model was among others, used to explore and measure the development of stress among entrepreneurs (Hatak et al., 2015). The ERI model illustrates that high levels of effort, combined with low reward, causes high stress levels and burnout symptoms.

In addition, since reward is dependent on the expectations of the concerned person, the perception of missing or low rewards might lead to dissatisfaction and stress. Now, it is assumed that persons who adapt or already use a future time perspective (F) intensively might not expect any rewards in the present but might be rather able to skip gratification in the present, and thus won't miss rewards. The future time perspective is one of five time perspectives of psychology of time. It is a psychological pattern that determines one's anticipations, plans and beliefs in what is possible and what will most likely happen. It is also affected by current reconstruction of the past and the interpretation of the present (Zimbardo & Boyd, 2015). Now, if persons with a strong future time perspective might be able to manage their expectations in the present so that they accept missing rewards and skip immediate gratification, then a high future time perspective could help to prevent an imbalance between reward and effort and help to prevent high stress levels. Beside the time perspectives from Philip Zimbardo (2015) and the ERI model of Siegrist (1996), the literature review also crucially depends on other papers such as Bluedorn and Martin (1996) "The time of entrepreneurs" to create a basis for this review.

Bluedorn and Martin (2006) are among the first authors who focused on the time perspective of entrepreneurs. Hence, they did not set the development of the field of entrepreneurship into a timeframe, but rather used time as a dimension in the decision making processes of entrepreneurs. Bluedorn and Martin (2006) used two time dimensions and measured entrepreneurs temporal depth of the past and the future and its effect on entrepreneurs' preferences, capability and stress level. Since Bluedorn & Martin (2006) were the first authors who considered the influence of time in the decision making process of entrepreneurs and empirically validate their positions, their paper will be used as a theoretical base for this study. Even though their results are very valuable for this barely explored field, they are still limited, though. Therefore, they stressed the need for further research in the field of time perspectives and entrepreneurship. To illustrate the theoretical background, the relation between entrepreneural orientation which is affected by stress and burnout, and the firm's

performance will be elaborated in the following section. Moreover, to justify the importance of this topic it is necessary to realize the scientific effort that has been made to understand the causes of entrepreneurial success. Scientific literature from 1980's to this date showed different approaches to assess the factors that influence the performance and success of entrepreneurs (Jantunen, Puumalainen, Saarenketo & Kyläheiko, 2005); (Bluedorn & Martin, 2008); (Begley & Boyd, 1987). Whereas some authors explore the social environment and networks of entrepreneurs (Witt, 2004), other authors try to find the key drivers of successful entrepreneurs in their personality traits and their psychology (Pollack, Vanepps, Eric & Hayes, 2012); (Begley & Boyd, 1987); (Rauch & Frese, 2007). The latter group also includes research focusing on the issue of burnout among entrepreneurs due to the impact of burnout on the performance of the enterprise (Hatak et al., 2015); (Bakker et al., 2005). Especially "self-employed people experience greater stress than employees" (Cardon & Patel, 2015, p. 1). High stress levels can do mental damage to entrepreneurs and negatively affect the performance of the company. Since most of the current literature about entrepreneurial stress focus on approaches about how to deal with the consequences of high stress levels and burn-out symptoms after they occurred, this study is rather intended to find methods to prevent the development of burnout symptoms among entrepreneurs beforehand. The aim is to fill this gap in order to contribute to the theories of entrepreneurial success factors.

Miller and Sardais (2015) already stressed entrepreneurs' needs for adaptation and suggested, "to explore further this temporal reconciliation of conflicting demands" (p. 17). However, this thesis aims to illustrate the effect of entrepreneurs' perceived time on their action, but in a different context. It is rather focused on the ability of entrepreneurs to adjust their time perspective to the required circumstances in order to face and ideally to prevent the development of high stress levels and burnout symptoms before burnout do damage to entrepreneurs. Thereby a decrease in entrepreneurial performance could be prevented as well. Hence, the ability to adjust one's own mind set and actions is not just important to perform properly but might also be necessary to prevent fatal damages to

entrepreneurs' health. The effect of perceived time on entrepreneurs' behavior was identified and researched in just a few scientific papers (Bluedorn and Martin, 2006). So, hereby I would like to contribute to the barely explored field by adding the time perspective (TP) theory of Zimbardo and Boyd (2016) to the ERI model (Siegrist, 1996). This expansion of this theoretical context might lead to a potential method for burnout prevention among entrepreneurs.

1.1 Background, Problem & Research Question

In order to understand the relevant theoretical background it is necessary to introduce the dimensions of time perspective. The time perspectives are not referring to the time that can be measured objectively but are rather categorized in psychological time dimensions. Several different perspectives are discussed in literature. First, Past Negative (PN) time perspective is described as reflecting "a pessimistic attitude towards the past and possibly the experience of traumatic life events." (Drake, Duncan, Sutherland, Abernethy, Henry, 2008, p. 2). A strong past-negative perspective is linked to depression, anxiety and discontent (Stolarski et al., 2011). The belief in progress and in achieving goals independently is rather weak.

In contrast to PN, Past Positive (PP) is a positive interpretation of the past that is associated with appreciation, being aware of good times and the feeling of being rooted in a sustained environment (Stolarski et al., 2011). Following, while the Present Hedonistic (PH) time perspective is described as: "people live in the moment – seeking pleasure, novelty, and sensation, and avoiding pain", the Present Fatalistic (PF) time perspective is associated with a lack of hope and can be some kind of learned helplessness (Zimbardo, Sword, Sword, 2012, p. 36). People with a strong Present Hedonistic time perspective are less keen to forgo current joy and pleasure for the sake of future reward. Furthermore this dimension also correlates positively with 'ego undercontrole, novelty seeking and sensation seeking. (Zimbardo & Boyd, 2015, p. 529). In contrast to that, the present fatalistic (PF) dimension

correlates positively with aggression, anxiety and depression. The fifth-time perspective is the ongoing focus on long-term consequences and developments. Anticipatory behaviour and trust in achieving once goals in the future are two very important feature of that time perspective. It is the Future (F) perspective that suggests : "that behavior is dominated by a striving for future goals and rewards." (Zimbardo & Boyd, 2015, p. 26). People who utilize especially the future time perspective, are willing to postpone gratification in the present to achieve reward in the future instead. Besides the time perspective (TP) the ERI model is very important for the theoretical framework.

1.2 ERI Model

Before the time perspectives (TP) can be linked to the ERI model in this study, the ERI model has to be explained. According to Siegrist (1996), the ERI model is a theoretical concept "proposed to assess adverse health effects of stressful experience at work" (p. 1) .The ERI model was developed from the person-environment fit and demand-control models. It is basically depicting the relation between perceived high effort and perceived low reward that leads to high level of stress. High effort is subdivided into extrinsic effort such as high work requirements and intrinsic effort, such as the desire for control. (Siegrist,1996). "The focus of this model is on reciprocity of exchange in occupational life where high-cost/low-gain conditions are considered particularly stressful" (Siegrist, 1996, p. 1). The background of the Effort-Reward- Imbalance will be illustrated in depth in the literature review.

1.3 Problem

The roles of entrepreneurs and startups are crucial for the economic development of an industry. So the consequences of declining performances of entrepreneurs due to mental issues such as burnout are not isolated from its industry. Accordingly, based on the theory that entrepreneurs suffer on average more from high level of stress and effort-reward-imbalance (ERI) than people who do not have to face high level of uncertainty, risk and commitment, the threats to entrepreneurs' mental health are not only important from medical but also from an economical perspective. Therefore, it is necessary that research is conducted in order develop methods that help to cope with this threat. Anyway, it is assumed that entrepreneurs with a strong past positive(PP), moderate present hedonistic (PH) and strong future (F) time perspective are able to cope better with high level of stress than entrepreneurs who rather use strong past negative (PN), strong present fatalistic (PF) or strong present hedonistic(PH), and weak future (F) time perspective. Thus, it is expected that entrepreneurs who suffer from an Effort-Reward Imbalance are not able to adjust their time perspectives to the changing circumstance. But entrepreneurs who are able to actively adjust their time perspective are expected to be less likely suffering from ERI then entrepreneurs who cannot adjust their time perspective to the changing circumstances. Since the risk of suffering from high level of stress seems to be higher among entrepreneurs, especially in SME's, than the average amount of people in other groups, the nature of those entrepreneurs who don't suffer from high level of stress or burnout becomes important for the exploration of successful entrepreneurs (Fernet , Torrès, Austin, St-Pierre, 2016). How does it affect the well-being of entrepreneurs? The development of high level of stress was related to the missing perception of incentives or valuation in contrast to high effort. (Hatak et al., 2015). Even though, Miller and Sardais (2013) used time to depict the entrepreneurs ability to cope with changing demands as well, they set it into a different context though. They claim that the entrepreneurial endurance and tenacity on one site and adaptiveness on the other site occur at the same time in the thoughts and actions of entrepreneurs. Furthermore, they state that an entrepreneurs can be optimistic and realistic at the same time to cope the uncertainty and turbulent tasks in his/her company by "bifurcating time"(p. 1). This theory is founded on the assumption that entrepreneurs are able to face uncertainty and turbulent situations by using contradicting perspectives simultaneously. However, they did not addressed their topic towards entrepreneurs suffering from high level of stress and burn-out symptoms. In consideration of this gap and the fact that he just used 2 isolated time dimension instead of the five dimensions of Zimbardo, that have an reciprocal effect on each other, Miller and Sardais's (2013) bifurcating time theory is perceived as quite limited for the purpose of this study. Next to the bifurcating time theory, the timeframe of entrepreneurs from Bluedorn & Martin (2006) is one of just a few research papers that actually linked entrepreneurs individual time frames to their decision making process and their stress level. However, they use simply two time frames, namely future and past to measure the effect on temporal depth on entrepreneurs tendencies. Temporal depth is defined as: "temporal depth (2000) and later refined its definition to the temporal distances into the past and future that individuals and collectivities typically consider when contemplating events that have happened, may have happened, or may happen [...]. Temporal depth is a broader concept than future time horizon because it includes distances into the past as well as into the future." (Bluedorn & Martin, 2008, p 3). This research paper already showed an effect of perceived time on entrepreneurs stress level, but unfortunately it did not distinguish on the crucial differences of the reconstructed past, interpreted present and expected future like Zimbardo did. Since the differences between a positive past time perspective and a negative past time perspective has an important impact on the cognitive processes of entrepreneurs the utilization of Zimbardo's time perspective (TP) is considered as more appropriate. Furthermore, Zimbardo (TP) also illustrate the interacting impact of the different time dimension on each other. So it is expected that the usage of (TP) will serve as a more sophisticated theory that might lead to multifaceted depiction of the effect of time on entrepreneurs stress level. Hence, there is currently still a research gap about the psychological time perspectives of entrepreneurs that could affect the development of ERI. Since Zimbardo et al. (2008) illustrated how perceived psychological time impacts human choices and expectations, psychology of time becomes crucial for the attempt to understand why some entrepreneurs suffer from burnout whereas others don't.

Might it be rooted in the ability to skip gratification and the corresponding expectations which are influenced by the personal psychological time perspective (Zimbardo & Boyd, 2015). The profound importance of psychological time to the cognitive processes, habits and addictiveness of individuals

and the resulting consequences of those processes gives time a vital role in the exploration of human behavior (Zimbardo & Boyd, 2015). In this case it will be taken into account to focus just on the group of entrepreneurs. Since our perception of time especially affects our choices and behavior, it might also influence our expectations (Zimbardo & Boyd, 2015). Hence the expectation of gratification could differ among entrepreneurs due to their time perspective and therefore also impact the development of high stress levels or burnout. A person who mainly use a future time perspective might not even expect any reward in the present. Could it be possible that the expectation of incentives and the disappointment in case of missing valuation is caused or rather just strengthened by more hedonistic or rather fatalistic time perspectives? Can entrepreneurs avoid the perception of missing reward by adjusting their time perspectives? Since the mental health of entrepreneurs can impact the performance of the firm, it is utterly important to pay attention to the mental condition of entrepreneurs. The interaction of individual traits and the circumstances in their environment need be considered to explore beneficial activities and condition. "One result of the entrepreneurs' burn-out can be a distinct decrease in performance (Maslach, 1982), which can endanger firm performance" (Hatak et al. 2015, p. 4).

Therefore, it is crucial to find out what might cause or contribute to the development of mental diseases or high stress levels. So, it was suggested in recent papers to do further research in order to identify what cause or contribute to the development of burn-out symptoms. "In this regard, our findings call for further research. On a practical level, identifying triggering factors for burn-out symptoms of different types of entrepreneurs allows focusing efforts more effectively and efficiently on the development of sustainable prevention strategies." (Hatak et al.2015, p.7) In order to do that it is necessary to check what kind of stress must be faced by entrepreneurs? Since an imbalance of ERI is associated with a higher risk of facing burnout it will be taken into account how time perspective affect the development of burnout. The following five hypotheses are stated for the purpose of answering the final research question.

H1: Entrepreneurs with a strong future time perspective suffer less from burnout.

H1.2: The preference of immediate reward leads to high burnout risk.

H2: Entrepreneurs with a balanced time perspective suffer less from burnout than entrepreneurs with an unbalanced time perspective.

H3: Entrepreneurs' preferences of future reward instead of immediate reward is positively related to low level of burnout.

H4: Entrepreneurs past negative and present fatalistic time perspectives leads to higher burnout scores than Entrepreneurs with a past positive and high future time perspective.

1.5 Research Question

An essential part of the literature review is to explore how a strong future time perspective could prevent the development of burnout or high stress levels of entrepreneurs.

How does psychological time perspectives affect entrepreneur's risk of suffering from burnout?

Hence, the crucial driver of this research paper are the following aspects. This research paper is motivated by the assumption that the personal time perspective of individuals also influences the expectation and the conscious delay of reward and gratification. Due to the fact that a low reward in combination with high effort in the ERI model causes high level of stress and increase the risk of burnout, it is assumed that the individual time perspective of an entrepreneur affects the perceived consequences of an imbalanced ERI. Most theories about entrepreneurs high level of stress attempt to deal with facing stress and burn-out after it occurred, but the application of time perspective adjustment can be used to focus on the prevention of burnout. I hope to contribute to the scientific theoretical comprehension of entrepreneurship and to attract the attention of other researcher to the topic of entrepreneurial burnout. So that other researcher can conduct quantitative methods in order to approve or reject the suggestions and the findings in this paper. It might also serve other researcher to expand the existing theories by adjusting new perspectives and theories to the above mentioned context. Regarding the practical contribution, this study might help entrepreneurs and HR managers

to either cope or help their employees to cope with high level of stress or ideally prevent the development of burnout by learning how to adjust their current time perspectives to changing situations.

2.0 Literature review

2.1 Entrepreneurial Performance

Several scholars conducted scientific research to examine entrepreneurial performance, success factors of entrepreneurs, and key factors that leads to their competitive advantages. Thereby different paths evolved in the way that researcher approached this topic in the last decades. But their common goal was to explore crucial coherences in entrepreneurship that leads to a better comprehension of successful entrepreneurship. A central issue in those studies were the key factors that increase the chance of running an successful enterprise. For that sake, some researcher focused on entrepreneurs personality traits, entrepreneurs ability to recognize and realize opportunities, the internal structure of the company and their external network or their technological knowledge. Whereas other researchers used a psychological perspective to examine the important psychological features of entrepreneurs and their effects on the performance, perceptional and cognitive processes related to their decision making were studied. Issues such as impulsiveness, dependency on reward, ADHS or burn-out among entrepreneurs were explored. Due to those different paths a varied body of entrepreneurial research evolved. In order to depict those different paths properly, the key findings of the research papers that were considered to be important and representative for the above mentioned paths will be illustrated and explained. Now, Rauch and Frese (2007) were chosen to represent the "personality traits path". It is about the usage of personality traits to predict entrepreneurial behavior. The following definition of personality traits was used in the research paper. "dispositions to exhibit a certain kind of response across various situations (Caprana & Cervone, 2000); personality traits are also enduring and show a high degree of stability across time." (Rauch & Frese, 2007, p. 4).

Rauch & Frese (2007) found that "need for achievement, generalized self-efficacy, innovativeness, stress tolerance, need for autonomy, and proactive personality" correlated significantly with business success (p. 1). However, the match between task and traits appears to be a fixed and predetermined. That creates the impression of individuals rather being passive and unable to impact their perception. Both, the dominant role of personality traits and the finding that entrepreneurs seems to be stress tolerant, seems to leave not much space for the implementation of time perspectives, since time perspectives adjustment to create a better temporary fit to the task is more flexible and adjudges the individual an active role. So, it is assumed that an entrepreneur does not fully depend on its personality traits. But since the time perspective theory distinguishes between balanced and unbalanced time perspectives the mentioned effect of stress tolerance on the success of a business might be seen as an invitation to find out how (TP) impact the ability to tolerate stress. Furthermore, "Internal locus of control is related to entrepreneurship because owners must believe that their own actions determine the rewards (business outcomes) they obtain (Rotter, 1966). Since people with a high internal locus of control feel that they are able to control outcomes, they should exert more effort and persistence towards intended outcomes, which, in turn, should help to start an enterprise and to maintain it successfully" (Rauch & Frese, 2007, p. 8). Now, that raises the question how entrepreneurs differ in their ability to keep striving for those rewards and how missing rewards affects entrepreneurs willingness to grudge no pains and accept high efforts. The crucial belief, that one's actions will result in the favored outcome most likely impacts the acceptance of missing rewards. Hence, it is assumed that time perspective of entrepreneur affect the personality trait of internal locus and that the active adjustment of entrepreneurs time perspective might enable entrepreneurs to cope with missing rewards that are known to be one factor that increases the likelihood of burn-out among entrepreneurs. Rauch et al. also noticed this gap and suggested further research in terms of "Other processes mediating the effects of personality traits include intentions, goals, and self-regulatory

processes". The active adjustment of one's time perspective is considered as a self-regulatory process in the context and will be used in this paper.

Besides the personality traits approach the abilities of entrepreneurs to recognize and realize opportunities are other important aspects from which scholars started to research success factors of entrepreneurs. Especially the role of companies structure and the knowledge about technology and the market were used to examine the ability of entrepreneurs to recognize entrepreneurial opportunities. The paper of Siegel and Renko (2012) and from Foss, Lyngsie and Zahra (2015) are regarded as adequate to represent this path. The most crucial aspects of the second paper will be used in order to depict how organizational design correlates with entrepreneurship value creation. Well, Foss et al. (2015) argues that "A firm's formal organizational structure reflects its level of expertise and the dispersion of that expertise throughout the organization" (p. 35). According to Foss et al. (2015) the structure affects the ability of opportunity realization, which is crucial for entrepreneurs to create and run an enterprise. Especially, decentralization and formalization increased the number of opportunity realization both "have a positive and significant association with opportunity realization." (Foss et al., 2015, p. 1). Siegel and Renko (2012) however, took the role of technical knowledge for opportunity recognition into consideration. And they found that there is a positive relationship between absorbed technological knowledge of entrepreneurs and the number of opportunity recognition. This might sound self-explaining, but it shouldn't be seen as an isolated factor that is not affected by other factors. It is simply one aspect of the whole package of factors that affect the ability of creating and running a business successfully. The next section will be about a different aspect that also belongs to the whole package of entrepreneurship.

The attention will be attracted to the characteristics of born-global firms and on the theory of international new ventures. The role of both aspects on successful entrepreneurship will be illustrated. So, first of all the definition of the born-global firms is necessary to understand this aspect. Tanev

(2012) defines a born global firm as "A born-global firm is a venture launched to exploit a global niche from the first day of its operations" (p. 5) That definition shows that the scholars paid more attention to the external environment, namely the global niche. Hence, the importance of external circumstances are, according to them, a primary driver of born-global firms entrepreneurs. That perspective specifically takes their network in to account, since being connected to ecosystems can improve the performance of the company. If it is an ecosystems that are located around universities or between local firms and their foreign sales subsidiaries or foreign sales subsidiaries and local clients, "Being part of such ecosystems results in a flow of technological knowledge, experienced people, and contacts with local venture capitalists that benefit the focal firm.", "facilitates direct contacts between engineers and clients to satisfy the specific needs of clients and provides a mechanism", and "help firms to obtain technological knowledge from the client or through the client's business partners" (Tanev ,2012, p.7). In addition to the external focus Tanev (2012) also highlighted the specific feature of an strong entrepreneurial mindset, that is typical for born-global firms. However, in order to maintain the networks those companies need to engage in long-term relationship management. Otherwise they could risk to decrease their performance by missing important knowledge from network members. Therefore, it is assumed that a proper future time perspective is required to take care of the network, that is indeed a source of competitive advantage. Anyway, Oviatt & McDougall (2005) set the success factors into the context of the theory of international new ventures. They highlighted the utter need for strategic alliances, the ability to recognize and realize opportunities, knowledge of partners and the ability to manage the network in order to access unique resources before the competition does. In contrast to Tanev(2012), Oviatt & McDougall (2005) point out both the internal and external success factors. The next section will cover the path of entrepreneurs psychological factors that have an impact on their performance.

Wiklund, Patzelt and Dimov (2016) stated that "the psychological perspective is one of the building blocks to the study of entrepreneurship" (p. 1). This is among others, one reason why cognitive

processes are taken into account in this study. In that paper the psychological perspective is related to behavioral features, such as impulsivity, novelty seeking and hyperfocus of entrepreneurs. Wiklund et al. (2016) conducted research in ADHD and entrepreneurship in order to illustrate the effect of ADHD on the productivity of entrepreneurs. Well, ADHD is defined as: "neurodevelopmental psychological disorder characterized by problems with focus, impulsivity and activity level" (Wiklund et al., 2016, p. 1). Since some of the features are associated with entrepreneurial behavior it was assumed that those harming characteristics could be useful for entrepreneurs. Based on the research of other scholars those characteristics were observed among entrepreneurs. Hence, it became interesting how ADHD affect entrepreneurial productivity. They found that impatience had an positive effect of entrepreneurs search for new opportunities and proactiveness. Furthermore, impulsivity increased the willingness of taking more risks and helps to cope paralysis that is caused by complex circumstances. But whether these ADHD features lead to productivity or unproductivity depends on the utter engagement of entrepreneurs, that is also known as hyperfocus. "Thus, hyperfocus is associated with passion, persistence, and time commitment related to certain tasks or activities" (Wiklund et al., 2016, p. 18). In the context of entrepreneurial stress, that raises the question if this hyperfocus and persistence might be the reason why some entrepreneurs do suffer more from high level of stress than other entrepreneurs? However, high impulsivity, risk taking and sensation seeking are also associated with the present hedonistic time perspective (PH). So in the short run PH might be good to start a business but could decrease the chance of the survival of the enterprise in the long run. So depending to the tasks both time perspectives Present Hedonistic (PH) and Future (F) are crucial for entrepreneurs. That assumption supports the hypothesis of this paper, namely: Entrepreneurs with a balanced time perspective suffer less from stress than entrepreneurs with an unbalanced time perspective. Nevertheless, this hypothesis will be tested later in this paper. Thus, the next part will cover other paths of entrepreneurial research, such as the effect of uncertainty and reward on entrepreneurs or learning sequences.

Bingham and Davis (2012) both were aware of the fact that entrepreneurs prior experience and the observation of their competitors actions had an effect on the choices and learning processes of entrepreneurs. Among certain circumstances those effects led to short-term or long-term consequences. Regarding the prior experience of entrepreneurs it was found that entrepreneurs were willing to use more resources when their prior actions were considered as successful. However, if it wasn't perceived as success those entrepreneurs were less willing to spent their resources but rather stopped and changed their course of action. But the prior experience has also an impact on the performance of entrepreneurs. "[...] our data suggest that particular learning sequences exist, that they are influenced by prior executive experience, and that they appear to be consequential to early performance." (Bingham & Davis, 2012, p. 13). That shows clearly how the past of an entrepreneur has an effect on the decision making process in the present, which is directed towards the future. Hence, the aspects of time perspectives are also important for the part of entrepreneurial research of those two scholars. Unfortunately, Zimbardo's time perspectives were not included in these papers. However, in this case the scholars focus especially on the performance of entrepreneurial firms 'executives that are affected by their previous international experiences. It was found that those executives with more experience performed better in their first two country entries. Now, this finding is also relevant to the body of entrepreneurial research. It supports the above mentioned assumptions about the effect of the past, especially the learning process, on the performance of entrepreneurs. Bingham and Davis(2012) finally conclude: "a key insight is that although the use of soloing sequences leads to higher performance than the use of seeding sequences in the shorter term (the time it takes for a firm to achieve its first two country entries), the pattern is reversed for performance in the longer term (time to the third and fourth entries)" (p. 17). The next and final part of entrepreneurial research body, which considered as important for this study, is about the effect of rewards and the issue of uncertainty on the performance of entrepreneurs.

Two research papers are viewed as adequate to represent this path of entrepreneurial research, namely from Ireland and Webb (2009) and Kuratko, Ireland, and Jeffrey (2009). The scholars conducted research about employees in entrepreneurial firms but not on entrepreneurs themselves. But since entrepreneurs' expectations regarding reward and high level of uncertainty affects their decision making process, these two papers are also useful to illustrate this path of entrepreneurial performance research. The core aspects of those papers are the role of reward and expectations on the decision making process and behavior of employees. Ireland and Webb (2009) highlighted the need for reward to cope uncertainty in the following manner: "actions taken to establish clear incentives——that is, to clearly define the relationship between desired behaviors and rewards——and provide continuous feedback can decrease this ambiguity" (p. 8). That might also be applicable to the cognitive processes of entrepreneurs. Besides the effect on ambiguity, rewards systems also impact the willingness to take higher risks and engage more entrepreneurial.(Kuratko et al., 2009). Thus the expectation and the experienced rewards are indeed crucial for entrepreneurial performances. Therefore, the aspect of reward will be used more in detail later in this study.

2.2 The impact of time perspective on burnout

Since the consequences of high stress levels are a decrease in well-being and higher health risks the long-term consequences of it might harm individuals permanently (Cardon & Patel, 2015); (Lewin-Epstein,1991). It also becomes clear how important it is to face the development and the consequences of stress by paying attention to the amount that companies pay each year for their employees due to harm of stress. Even the World Health Organization named stress "health epidemic of the 21st century" (Cardon & Patel, 2015, p. 1). Under some circumstances it might also lead to burnout. However, there are opposing theories about the experience and effect of burnout and stress on entrepreneurs. Whereas one theory is that entrepreneurs suffer more from higher level of stress than the average people from other groups (Cardon & Patel, 2015). Another theory claims that

entrepreneurs would even "report relatively low levels of stress [...] than other occupational groups" (Baron, Franklin, Hmieleski, 2016, p. 16). However, both theories state that a certain level of stress can affect the health and the firms performance. Cardon & Patel (2015) tried to evaluate if it is worthy accept the negative consequences of stress to keep the positive effect on the income of entrepreneurs. So, they also illustrate the positive effect of stress on the performance of the income of entrepreneurs beside the negative effect of stress on entrepreneur's health and how positive affect (PA) influences this relation. So, it was not assessed if and how stress and burnout could be faced. It was rather taken as given and not avoidable. But how is stress actually defined in this context? Cardon & Patel (2015) describe the occurrence and the relating circumstances of stress as: "Stress occurs when an individual is in a situation that is "relevant to his or her well-being and in which the person's resources are taxed or exceeded" (Folkman & Lazarus, 1985), typically by factors external to the Individual" (p. 5). In contrast to Cardon and Patel (2015), Baron and Franklin (2016) argued that the effect of stress on entrepreneurs is rather negative and decreases the performance of the firm. Stress for entrepreneurs was also assessed from another perspective namely by relating it to the Attraction-Selection-Attrition (ASA) theory. It is assumed that entrepreneurs can face stress easier than other people, but that it mainly depends on the relation between psychological capital and stress. Hence, it appears to be logic to implement the psychology of time dimensions as one aspect of psychological capital. But despite the differences in the findings of the above mentioned authors, it is still utterly important to cope or even prevent high levels of stress for entrepreneurs, because under some circumstances, it could lead to burnout. After all "In short, one key ingredient in entrepreneurial success may be the capacity to tolerate or cope effectively with stress" (Baron et. al, 2016, p. 3). Even though the special circumstances of entrepreneurs give them more freedom to schedule their work and tasks the way they want, it also demands the entrepreneur's ability to take the responsibility and face uncertainties to lead that company. Those long-term uncertainties and high level of dedication can influence the mental state of entrepreneurs. "high levels of engagement, in combination with the uncertainties associated with entrepreneurship, can impact negatively on entrepreneurs' physical

well-being and health-related quality of life (Wincent & Örtqvist, 2011), leading to the development of burn-out symptoms" (Hatak et al. 2015, p. 2). Hence, the development of burn-out among entrepreneurs needs to be faced. To do so, I will depict the ERI model in the following section.

Effort-Reward Imbalance model, (Siegrist, 1996)

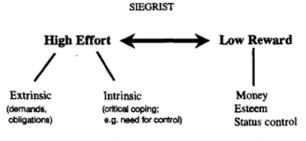


Figure 1. The effort-reward imbalance model at work.

The underlying assumption is that processed information that leads to ERI is neither consciously obvious nor adjustable to the individual. "Again, this theory would predict cognitive and behavioral adjustment to a high-cost/low-gain condition as a consequence of cognitive appraisal processes. A recent debate on cognitive theory of emotion revealed some limitations of this approach. There is growing evidence of rapid and direct pathways of affective information processing [...], are not subjected to conscious awareness" (Siegrist, 1996, p. 1). However, I claim that this thought is not adequate in this context anymore, since the development and scientific publication of Philip Zimbardo attribute individuals a rather active and self-regulating role in shaping his perception by applying time perspective adjustment. According to Zimbardo it is possible to adjust the individual set of time perspective, that ranges from past to future. The effect of such adjustment on the expectation of rewards of individuals, due to a strong future perspective will also be illustrated in order to evaluate a prevention of perceived low reward. The essential part of it is the dissonance between the expectation of entrepreneurs and the actual reward they perceive. "Yet, the realization of these diverse

entrepreneurial goals depends – aside from market-related factors – to a large extent on the entrepreneurs' dispositions, expectations and perceptions" (Hatak et al. 2015, p. 2). A strong future time perspective could prevent such a dissonance in first place. However, the ERI model has not been linked to the psychological time perspectives of Zimbardo so far. Might it be that a specific time perspective affects the relation between the ERI model and the development of burn-out symptoms among entrepreneurs? A strong future time perspective could lead to conscious sacrifices of gratification in the present for the sake of greater benefits in the future. Thereby low reward would be perceived as normal and not as unexpected. That could prevent the development of dissatisfaction, but rather prepare the mind for a longer period of lower reward. For that sake, the theory behind psychology of time and the time perspectives will be outlined in the next part.

2.3 Time perspective

A time perspective is not the time that is measured by a clock but rather in psychological time categories. A time perspective is defined as: "The characteristic ways in which individuals partition the flow of their personal experiences into time bound categories, or time zones, is a relatively stable characteristic, a robust response style that becomes part of the personality (Zimbardo and Boyd, 1999, p. 3)." In this case I would like to highlight the future time perspective and set it into a contrast to the present fatalistic and present hedonistic time perspectives in order to illustrate the effect of the individual time perspective on the ability to postpone gratification in the present to expect higher satisfaction in the future. Entrepreneurs behavior is associated with high impulsiveness (Wiklund, Patzelt & Dimov, 2016) and according to Stolarski et al.(2001) the ability to reduce the perceived value of gratification delay is higher among impulsive people than among people who are emotional more stable. That would mean that those entrepreneurs who are very impulsive should be able to postpone gratification easily. However this would be a limited view on the whole issue, that leaves the time perspectives of individuals out of consideration. Since entrepreneurs are also known to be novelty -

seeking persons (Wiklund et al. 2016), this rather creates the impression that some entrepreneurs might depend on hedonistic joy in the present. A profound evaluation should take all time dimensions into account because sensation seeking (present perspective) and the ability to postpone gratification(future perspective) seems to contradict each other. One single time dimension alone is not associated with the ability to postpone gratification, but rather a whole set of time dimensions that enables individual to delay gratification (Stolarski et al., 2011). Therefore Zimbardo's time 5 dimensions of psychology of time are implemented. Anyway, since a dissonance of expected reward and the perceived reward in the ERI model can increase the chance of suffering from burn-out symptoms, the primary focus will be directed to the future time perspective (F). To illustrate the assumed relation between time perspectives and an ERI (Effort-Reward-Imbalance) in the whole context, all time perspectives are outlined. The 5 dimensions of time perspectives of Zimbardo and Boyd are Past Negative (PN), Past Positive (PP), (PH) Present Hedonistic, (PA) Present Fatalistic and (F) Future. Philip Zimbardo, Richard Sword & Rosemary Sword also introduced a 6th time perspective in their book "The time cure: Overcomming PTSD with the new psychology of time perspective therapy" (2012). The book is rather about using methods to adjust the time perspective of patients in order to cope and treat PTSD (post-traumatic stress disorder). The 6th time perspective is called "Transcendental – future" and is described as: " Transcendental-future-oriented people have faith that a better time is coming after death, and plan for this afterlife during their current lifetime." (Zimbardo et al. 2012, p. 36). This paper also covers the ability of adjusting one's time perspective actively and consciously towards the different circumstances and tasks, but since the topic of PTSD and the 6th time perspective are not considered as crucial for this research yet, the 6th time perspective is not included in the following steps of this paper.

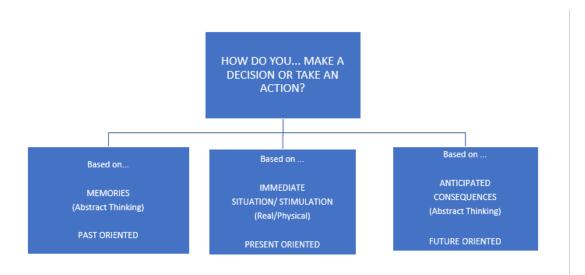
Now, Past Negative (PN) time perspective is defined as "reflects a pessimistic attitude towards the past and possibly the experience of traumatic life events." (Drake et al., 2008, p. 2). A strong past-negative perspective is linked to depression, suffer from anxiety and being unhappy (Stolarski et al., 2011). The believe in progress and in achieving goals independently is rather weak.

In contrast to (PN) Past Positive (PP) is a rather positive interpretation of the past that is associated with appreciation, being aware of the good times and the feeling of being rooted in sustained environment (Stolarski et al. 2011). Whereas, the Present Hedonistic (PH) time perspective is described as: "people live in the moment – seeking pleasure, novelty, and sensation, and avoiding pain"(Zimbardo, Sword, Sword, 2012, p. 36). the Present Fatalistic (PF) time perspective is associated with a lack of hope and can also be some kind of learned helplessness. (Zimbardo et al., 2012, p. 36). People with a strong Present Hedonistic time perspective are less keen to spare current joy and pleasure for the sake of future reward. Furthermore this dimension also correlates positively with "ego undercontrole, novelty seeking and sensation seeking" (Zimbardo & Boyd, 199, p.14). In contrast to that, the present fatalistic (PF) dimension correlates positively with aggression, anxiety and depression. The fifth-time perspective is the ongoing focus on long-term consequences and developments. Anticipatory behaviour and trust in the achieving once goals in the future are two very important feature of that time perspective. It is the Future (F) perspective.: "The Future scale suggests that behavior is dominated by a striving for future goals and rewards" (Zimbardo & Boyd, 2015, p. 26).

Individuals do not just perceive and act based on just a single time perspective, but rather on a full set, that most likely covers past, present and future. However, the combination of different perspectives and their intensity differ between people. Those perspectives affect the memories, the perception, expectation and planning of a person. Since, the time perspective also impact the motivation and the way individuals estimate possible outcomes time perspective influences the choices and action of a person (Zimbardo & Boyd, 1999).

2.4 Potential effect of time perspectives (TP) on Effort-Reward-Imbalance (ERI)

Bluedorn and Martin (2006) already stated that time, especially time depth has an effect on entrepreneurs work and stress level. They found out that: "Both future temporal depth and temporal flexibility were related to life stress as follows: (1) the greater the future temporal depth, the less life stress reported by the entrepreneurs; and (2) the greater the temporal flexibility the entrepreneurs perceived in their work, the less life stress they reported" (Bluedorn & Martin, 2006, p. 13). Furthermore, they suggested further research of time depth and time to improve research about entrepreneurship. The implementation of time perspective (TP) is considered not just as an extension of recent research in this field but also as an enrichment. So due to different features of the different time perspective, each time perspective affect cognitive processes differently. Therefore, expectations of individuals are also influenced by the time perspective. Especially, reward dependence is an aspect that is linked to the development of expectations. Reward dependence is defined as: "Conceptually similar to delay of gratification, it measures "extreme sensitivity to reward cues, particularly social approval, and greater resistance to extinction of behavior"." (Zimbardo & Boyd, 2015, p. 30). This attitude that indicates the ability to sacrifice is strongly associated with future time perspective (F). So, it is crucial not to confuse it with the need for reward in the ERI model, that does not categories rewards into future rewards (delay of current pleasure) and the present hedonistic pleasure that is aimed to be fulfilled immediately. It is rather used as a need of reward after a sacrifice was accepted. Once again, reward dependence is strongly identified with the future dimension (F). (Zimbardo & Boyd, 2015). Besides that (F) corresponds negatively with sensation seeking and novelty seeking. Therefore, it is expected that future oriented people manage delays of gratification and delay of immediate reward better than people who are more Present Hedonistic. Zimbardo et al.(2015) justifies this relation as follows: "the trade-offs for dealing with this pressured lifestyle derive from its rewarding consequences" (p. 41). People with a strong focus on (PP) Past Negative and Present Fatalistic (PF) time perspectives combined with a weak (F) Future perspective think and behave totally different than people with a stronger Past Positive (PP), Present Hedonistic (PH) and strong future perspective (F). The people with the first set of time perspective might have suffered from difficult conditions in the past that damaged them, such as a traumatic experience (Zimbardo, Sword & Sword, 2012) or spending time in an environment that couldn't be changed by them like a totalitarian system. They tend to focus on bad memories and think that they still couldn't achieve or change anything in the present. Therefore, the motivation to work towards a higher goal in the future is most likely weak as well. However, the second set of time perspectives (PP,PH and F) would rather lead to a higher quality of life due to the concealment and continuity that is caused by the positive past. The present hedonistic perspective enables to take some time to perceive joy in the present and the strong or moderate future perspective rather leads to postponing or sparing gratification in the present and planning and working for future gratification instead (Zimbardo & Boyd, 1999). However, individuals can be able to balance their time perspective. "Balance is defined as the mental ability to switch flexibly among TPs depending on task features, situational considerations, and personal resources rather than be biased toward a specific TP that is not adaptive across situations" (Zimbardo & Boyed, 2015, p. 50). Once an individual becomes aware of the effect and the consequences of time perspective on their behavior they might become also more sensitive to their own time perspectives. This could also increase their willingness to observe themselves and learn how to adjust their perceived time by reconstructing their past in a different manner and focusing rather on the positive aspects. Well, the above-mentioned sets are just examples and the single time perspectives could also be combined in different ways, but considering the development of expectation of rewards in the ERI model, a strong future time perspective might prevent an imbalance in high effort and low reward. Thereby it might prevent the development of burn-out. The Conceptual Time Perspective Model from Zimbardo, Sword and Sword (2011) below illustrates how the time dimensions are used for cognitive processes in order to evaluate and making choices.



Zimbardo, Sword and Sword (2012) p. 37 Figure: "Conceptual Time Perspective Model"

The Interplay between the reconstructed past and the anticipated future circumstances, that are a result of the use of a specific time perspectives enable an individual to postpone gratifications in the present. Thereby, the sacrifices and expected rewards are evaluated and compared to make the final decision. The impact of the time dimensions that are used in this process, each to some extent, also determine if and how expectations are created, weighted and managed (Zimbardo & Boyd, 2015). If the outcome is the ability to delay all gratification or rather the inability to overcome any temptation the reason is most likely the intensive use of one specific time dimension. "Temporal bias may include either habitual overuse or underuse of one or more of these temporal Frames" (Zimbardo & Boyd, 2015, p. 19). Hence, the intensive use of future time perspective enables a person to cope its expectations so that missing rewards wouldn't be perceived as such and might weaken or even prevent the evolvement of disappointments, high stress levels and an ERI. But that does not automatically mean that a person who use the future time perspective not intensively unconditionally uses the present perspective very intensively. It rather depends on the specific time perspectives of an individual (Zimbardo & Boyd, 2015). Deduced from that the same effect is assumed to appear among entrepreneurs. Well, the ability of an entrepreneur to change his/her time perspectives consciously and actively in a way that improves the fit to the changing, temporary situations in the environment is called achieving a balanced time perspective. That ability could prevent the development of ERI and burnout. In order to check if this occurs in practice, 12 student entrepreneurs were tested with the ZTPI, the Maslach Burn-Out Inventory–General Survey and an semi structured Interview.

3.0 Methods

A critical research literature review about scientific articles that focus on entrepreneur's high level of stress and burnout is conducted. The purpose of this study is to research methods that can be used to prevent the development of burn-out among entrepreneurs. In order to do so, Zimbardo's Time Perspective Theory (TP) and the ERI Model are linked. Therefore, scientific literature was searched by using the following terms: health risk of stress, burn-out & entrepreneurship, stress in entrepreneurship, psychology of time, stress and self-employment, effect of time perspective on wellbeing and entrepreneur's psychology. Even though research about the topic of entrepreneurial success was conducted for more than 3 decades, mostly articles that are not older than 10 years were used to keep the state of the topic relevant for the current society. Hence to contribute to the latest development of the topic of burn-out among entrepreneurs, which has an impact on entrepreneurial performance, in the sense of "on the shoulders of giants", most of the articles for this literature review are relative current. Scopus, Web of science, EBSCO and Google Scholar were used to find those articles. It was aimed to find articles that fulfill scientific standards and books about this topics. Furthermore, a semi structured interview was used to interview 12 student entrepreneurs in this qualitative study to explore how time perspectives affect the relation between an ERI and the evolvement of burnout of entrepreneurs. It is also aimed to check if entrepreneurs who are able to cope better with high burnout risk do have a different set of time perspectives than entrepreneurs who suffer more from high burnout risk. Since it was not expected to have a broad choice of different participating entrepreneurs, all entrepreneurs who agreed to participate were selected and used in this study. As there is a time schedule involved that excludes the possibility of finding and interviewing a statistically representative number of entrepreneurs, this is rather a pilot study.

The semi structured interviews are conducted within a period of 8 weeks. Also, there are no preferences in regard to the selection of the entrepreneurs based on characteristics yet, but it was aimed to interview different kind of entrepreneurs in order to get an realistic impression. After the interviews were conducted the recorded content of the entrepreneurs was transcribed. In addition to that 5 categories with 2 options each, were created in order to build codes. These 10 codes were used to illustrate the preferences and characteristics of each entrepreneur. Finally does codes were used analyze the hypothesizes.

The first category of codes is Perception of Effort in the business and consists of 2 codes, namely *work* (1W) and *pleasure* (1P). This category is meant to measure whether the *entrepreneurs' answers* showed that he perceives his work more than work or rather as pleasure. This category is important for the effort-reward model, since high efforts wouldn't most likely be seen as sacrifices if the entrepreneur receives satisfaction out of it. The opposite might happen if the entrepreneur perceives his effort as real work.

The second category is aimed to measure to what extend the entrepreneur shows some kind of *reward dependency* while the entrepreneur is talking about his company. This reward dependency includes all kind of social appreciation from his environment in and outside the company as well as the need of short term success to continue the business. The first code is *dependent (2d)* and the second code is *independent (2i)*. Those 2 codes are crucial because they are directly related to effort and reward. Those participants that show higher dependency from reward might be also more sensitive to skipping gratification or missing reward.

Well, the 3rd category is about the way entrepreneurs gives answers that indicate *the ability to manage or change his expectations beforehand. (3s) stands for strong* and *(3w) rather indicates weak ability* to do so. These two codes are primarily directed towards the independent adjustment of expectations in order to face low reward.

The 4th category is preference of *immediate reward (4i)* or preference of *future reward (4f)*. So, when the entrepreneurs explains that he prefers future reward or gives answers that shows he is using the imagination of future reward to motivate himself in the present instead of enjoying the present immediate reward than it will be definitely a (4f). These categories are essential for skipping gratification and perception of reward and effort in the present.

Now, the final category is meant to indicate the entrepreneurs' ability to cope with *missing reward* and is divided into the 2 codes *of strong (5s)* and *weak (5w)*. It depends on the answers of the entrepreneurs they give to the questions that clearly test this ability.

After the coding was conducted all codes were filled in excel and spss files so that it could be used to find correlations or significant differences by conducting quantitative tests in spss. Those tests were mainly independent sample t-test and bivariate correlations. These two Spss test were considered as adequate to check the correlations and differences between the Maslach - Burnout inventory scores, the ZTPI for the time perspective and the frequency of the codes.

So, I used the Zimbardo Time Perspective Inventory (ZTPI)¹ to understand what time perspective set the participants have and compare it to the results of the interview in order to explore correlation between the independent variables such as time perspective and the dependent variable, which is burn-out. Therefore it was planned to explore the preference and choices of entrepreneurs in regard

¹ http://positivepsychology.org.uk/measuring-balanced-time-perspective-using-ztpi/

to their time perspective and reward. Burn—out is measured in three categories, namely Exhaustion, Cynicism and Professional Efficacy. According to Zimbardo & Boyd (2015) ZTPI "provides a quantifiable measure of multiple time frames as individual temporal profiles, assesses broad dimensions of TP, and is built on a theoretical foundation combining motivational, emotional, cognitive, and social processes that are assumed to contribute to—and are, in turn, influenced by—the operation of TP" (p. 21). So, in practice respondents had to fill in answers in a Likert scale to questions about their attitude, experience and behavior in described circumstances. The outcome was used to illustrate the general psychological composition regarding their time perspectives (Zimbardo & Boyd, 2015).

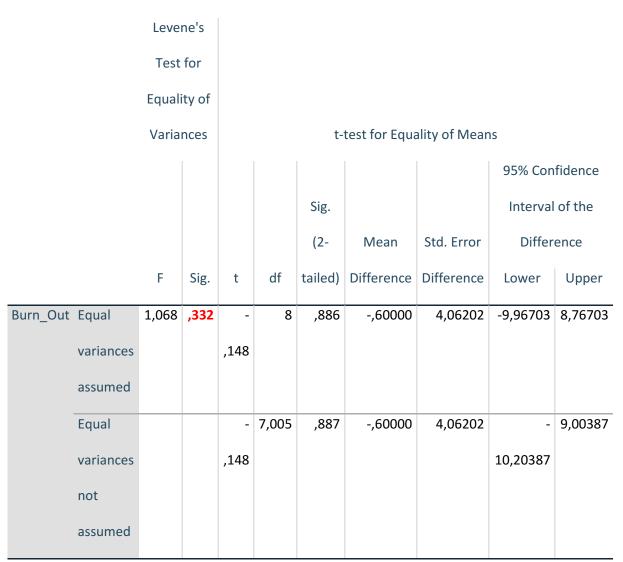
To measure the stress-level of the entrepreneurs the "Maslach Burn-Out Inventory–General Survey (MBI; Schaufeli et al., 1996)" MBI² was used, since it is a reliable for method to measure burn-out. The outcomes of both inventories were used to analyze the relation between burn-out as an indicator for long-term stress, ERI and the set of time perspective. From that it is aimed to derive a conclusion about a possible relation of the ERI and the time perspectives of entrepreneurs. A time perspective set is a combination of at least 3 out of the 5 time perspective dimensions, that contain past, present and future. Furthermore, the participant's experience of coping with stress will be considered as well. Following this, the results of the interview, the two inventories and the literature will be compared to check similarities, overlaps, correlations or differences in order to observe if the outcomes strengthen or rather weaken the hypothesis. It was especially aimed to compare the theory with the practice of entrepreneurs. So specific literature that also contains aspects of non-scientific methods , such as the book of Zimbardo. Sword and Sword (2011) were used as well.

² http://www.oxfordreference.com/view/10.1093/oi/authority.20110803100138259

4.0 Results

In total, 12 student entrepreneurs were interviewed within an semi-structured interview. In addition to the qualitative test, 2 quantitative tests, namely the Zimbardo Time Perspective Inventory (ZTPI) and the General Maslach-Burnout inventory were used to measure burnout and the time perspective of each student entrepreneur. These two inventories were used to test H1, H2, H4 and partially for H1.2 and H3. In addition to the inventories a semi structured interview was used to test H1.2 and H3. I used an independent sample t-test to test if Entrepreneurs with a strong future time perspective suffer less from burnout. Therefore, I created two groups, namely the group of entrepreneurs that have a future perspective below and those with a future time perspective above balanced future time perspective. A balanced future perspective is 3,69. The burnout scores of both groups were compared within the test and no support was found for H1. Besides the independent sample t-test I used Bivariate Correlation tests and Scatter Dots to test and depict H1.2, H2, H3 and H4. Some support was found for H1.2. No support was found for H2. But some support was found for both H3 and H4. However the results were not significant.

H1: An Independent sample t-test between entrepreneurs with future scores above balanced future TP (3,69) and entrepreneurs with future scores below balanced future TP to test H1. Both groups were tested on their Total Burnout Scores. No significant difference was found between the two groups.



Independent Samples Test

The total burnout score could not provide support for H1. Yet, it was considered to test every single of the three categories to find any support at all.

An Independent sample t-test between entrepreneurs with future scores above balanced future TP and entrepreneurs with future scores below balanced future TP was conducted. Both groups were tested on their exhaustion scores (one subcategory of burnout). No significant difference was found

between the two groups. The same t-test was used to test the other two units of burnout, namely between entrepreneurs with future scores above balanced future TP and entrepreneurs with future scores below balanced future TP was conducted. Both groups were tested on their Cynicism Score (one subcategory of burnout). No significant difference was found between the two groups Also for the 3rd unit of burnout, Professional Efficacy, was decided to conduct an Independent sample t-test between entrepreneurs with future scores above balanced future TP and entrepreneurs with future scores below balanced future TP. Both groups were tested on their Professional Efficacy Scores (one subcategory of burnout). No significant difference was found between the two groups.

The future time perspective score of the entrepreneurs correlate positively with Cynicism (0,154) and positively with Exhaustion (0,095). The scores of total professional efficacy shows even a negative correlation with future time perspectives. But all three don't correlate significantly with future scores. Entrepreneurs with a future time perspective that is above the balanced time perspective do not differ significantly in their burn-out level than entrepreneurs with a future time perspective that is below the balanced time perspective (3,69). Hence, no support was found for H1. It seems that high future time perspective rather increase burnout. (bivariate correlation graph in appendix)

H1.2: The preference of immediate reward leads to high burn-out risk.

Since the Present Hedonistic time perspective is associated with immediate pleasure and the future time perspective is associated with the ability of skipping gratification, a bivariate correlation test was chosen to test how the Present Hedonistic and the Future time perspective correlate with all three subcategories of burnout.

Correlations

				Total	Future Time	
		Total	Total	Professional	perspective	
		Cynicism	Exhaustion	Efficacy	score of	
		Score	Score Burn-	Score Burn-	each	
		Burn-Out	Out	Out	participant	Present Hedonistic
Total Cynicism Score Burn-Out	Pearson Correlation	1	,615 [*]	-,576 [*]	,154	,360
	Sig. (1- tailed)		,017	,025	,316	,125
	N	12	12	12	12	12
Total Exhaustion Score Burn-Out	Pearson Correlation	,615 [*]	1	-,325	,095	,512 [*]
	Sig. (1- tailed)	,017		,152	,384	,045
	N	12	12	12	12	12
Total Professional Effecacy Score	Pearson Correlation	-,576*	-,325	1	-,200	-,187
Burn-Out	Sig. (1- tailed)	,025	,152		,266	,280
	N	12	12	12	12	12
Future Time perspective score of	Pearson Correlation	,154	,095	-,200	1	-,497
each participant	Sig. (1- tailed)	,316	,384	,266		,050
	N	12	12	12	12	12
Present_Hedonistic	Pearson	,360	,512*	-,187	-,497	1
	Correlation Sig. (1- tailed)	,125	,045	,280	,050	
	N	12	12	12	12	12

*. Correlation is significant at the 0.05 level (1-tailed).

The outcome in the table above shows that the future time perspective scores correlate positively with Cynicism (0,360) and positively with Exhaustion (0,512). But it correlates negatively with Professional Efficacy (-0,187). The significant correlation shows that the higher the present hedonistic score of the entrepreneurs the higher the exhaustion of the entrepreneurs. However, the relation between future and exhaustion (H1) in this sample is also positive, but future is not as highly correlated with exhaustion as Present Hedonistic is. The correlation between Future and exhaustion is not significant either. But

the correlation between Present Hedonistic and the burn-out subcategory Exhaustion is positive and significant. Hence, the higher the preference of immediate reward the higher the exhaustion of entrepreneurs. Thus, the lower the preference of immediate reward the lower the exhaustion. Those results are considered as support found for H1.2

H2: To test if a balanced time perspective shows lower burnout scores than a unbalanced time perspective, entrepreneurs' total deviation from the balanced score of each time perspective were used as an independent variable in a bivariate correlation test with the dependent burnout scores.

		Coi	rrelations		
		Total			Participants
		Cynicism	Total	Total Professional	Deviation of all 5
		Score Burn-	Exhaustion	Effecacy Score	TP from Balanced
		Out	Score Burn-Out	Burn-Out	TP
Total Cynicism	Pearson	1	,615*	-,576*	-,352
Score Burn-Out	Correlation				
	Sig. (1-tailed)		,017	,025	,131
	Ν	12	12	12	12
Total Exhaustion	Pearson	,615 [*]	1	-,325	-,854**
Score Burn-Out	Correlation				
	Sig. (1-tailed)	,017		,152	,000
	Ν	12	12	12	12
Total Professional	Pearson	-,576*	-,325	1	,175
Effecacy Score	Correlation				
Burn-Out	Sig. (1-tailed)	,025	,152		,293
	Ν	12	12	12	12
Participants	Pearson	-,352	-,854**	,175	1
Deviation of all 5 TP	Correlation				
from Balanced TP	Sig. (1-tailed)	,131	,000	,293	
	Ν	12	12	12	12

Correlations

*. Correlation is significant at the 0.05 level (1-tailed).

**. Correlation is significant at the 0.01 level (1-tailed).

The table shows that the total deviation from all 5 balanced TP of each entrepreneur correlates negatively with Cynicism (-0,352) and Exhaustion (-0,854) but positively with Professional Efficacy (0,175). However, only the correlation between total deviation from all 5 balanced TP and exhaustion is significant at the 0.01 level. Hence, the higher the total deviation from all 5 TP, the lower the exhaustion of the entrepreneurs.

Therefore, the table shows that the higher the deviation from the balanced time perspective, the lower the scores for cynicism and exhaustion. Just Professional Efficacy has a positive correlation with the unbalanced TP, but it is not significant. All three stress categories combined also show that the correlation between the total amount of deviation from the balanced time perspectives is not positive. The deviation from a balanced time perspective does not increase the level of stress. However, the result is not significant. Hence no support was found for H2.

H3:

			Creating desire by imaginging future
		Burn_Out	reward
Pearson	Burn_Out	1,000	-,423
Correlation	Creating desire by imagining future reward	-,423	1,000
Sig. (1-tailed)	Burn_Out		,085
	Creating desire by imagining future reward	,085	
N	_Burn_Out	12	12
	Creating desire by imagining future reward	12	12

Correlations

The total score of burnout correlates negatively with future reward preferences (-0,423). However the correlation is not significant That shows that the higher the preferences of future outcome, the lower

the score of burn-out. That supports H3. Hence, there is a lower burnout scores if the entrepreneur prefers future time perspectives .These results do support H3. In order to see the correlations of each subcategory of burnout with the two independent variables, namely immediate reward and future reward, the correlation with each unit of burnout and the independent variables were conducted. The total score of Exhaustion, which is just one of three categories of burnout correlates negatively with immediate reward preferences (-0,399). However the correlation is not significant. The relation between immediate reward preferences and burnout is negative, but not significant. By testing just 'exhaustion 'of the entrepreneurs the results show that the higher the preferences of immediate reward and immediate reward leads both to lower exhaustion scores. But the difference of both reward preferences are too small. Hence, these results show some limited support for H3. Yet, H3 couldn't be approved. The following outcomes illustrate the coherences in more detail.

The total score of Cynicism score of burnout correlates negatively with immediate reward preferences (-0,549) at a significant level. Thus, the higher the preference of immediate reward, the lower Total Cynicism. That does not support H3. The scores of immediate reward preferences and the scores of Professional Efficacy are positively (0,679) and significantly(at 0,08 alpha level) correlated. Thus, the higher the preferences for immediate reward the higher Professional Efficacy. That aspect does not support H3. In addition, the codes of the transcribed answers of the semi structured interview, namely (4F) was used as future reward preferences to test H3. So, a negative relation between level of cynicism and future reward as well as immediate reward preferences was found. But it was not significant. Moreover, significant difference were found for Professional Efficacy and level of stress. Preferences of immediate desire has a positive relation with professional efficacy. But preferences of future reward has a negative relation, which is not significant. There is no significant difference regarding the exhaustion level of the entrepreneurs and their ability to focus on future reward or rather immediate

reward. The correlation is negative, but not significant. Hence, there is some support found for H3 but

it is not significant.

H4: Effect of Past Negative and Present Fatalistic time perspective on burnout was compared to the effect of past positive and future time perspective on Burnout.

			Correlat	ions		
				Total		
				Cynicism	Total	Total Professional
		past	present	Score	Exhaustion	Efficacy Score
		negative	fatalistic	Burnout	Score Burnout	Burnout
past negative	Pearson Correlation	1	,190	,577 *	,182	-,505 [*]
	Sig. (1- tailed)		,277	,025	,286	,047
	Ν	12	12	12	12	12
present fatalistic	Pearson Correlation	,190	1	-,242	-,289	,175
	Sig. (1- tailed)	,277		,225	,181	,293
	Ν	12	12	12	12	12
Total Cynicism Score BurnOut	Pearson Correlation	,577 [*]	-,242	1	,615 [*]	-,576*
	Sig. (1- tailed)	,025	,225		,017	,025
	Ν	12	12	12	12	12
Total Exhaustion Score BurnOut	Pearson Correlation	,182	-,289	,615 [*]	1	-,325
	Sig. (1- tailed)	,286	,181	,017		,152
	N	12	12	12	12	12
Total Professional Effecacy Score	Pearson Correlation	-,505*	,175	-,576*	-,325	1
BurnOut	Sig. (1- tailed)	,047	,293	,025	,152	
	N	12	12	12	12	12

*. Correlation is significant at the 0.05 level (1-tailed).

The scores of past negative time perspective correlate positively with Cynicism (0,557) at a significant level of 0,005 (0,025) and negatively with Professional Efficacy (-0,505) at (0,047). Thus the higher

the past negative scores of the entrepreneur, the higher cynicism and the lower professional efficacy. That supports H4.

			Correlations			
		Total	Total	Total		Future Time
		Cynicism	Exhaustion	Professional		perspective score
		Score Burn-	Score Burn-	Efficacy Score	past	of each
		Out	Out	Burn-Out	positive	participant
Total Cynicism Score Burn-Out	Pearson Correlation	1	,615 [*]	-,576 [*]	-,417	,154
	Sig. (1- tailed)		,017	,025	,089	,316
	Ν	12	12	12	12	12
Total Exhaustion Score Burn-Out	Pearson Correlation	,615 [*]	1	-,325	,090	,095
	Sig. (1- tailed)	,017		,152	,391	,384
	Ν	12	12	12	12	12
Total Professional Effecacy Score	Pearson Correlation	-,576*	-,325	1	,001	-,200
Burn-Out	Sig. (1- tailed)	,025	,152		,498	,266
	N	12	12	12	12	12
past positive	Pearson Correlation	-,417	,090	,001	1	-,039
	Sig. (1- tailed)	,089	,391	,498		,453
	N	12	12	12	12	12
Future Time perspective score	Pearson Correlation	,154	,095	-,200	-,039	1
of each participant		,316	,384	,266	,453	
	N	12	12	12	12	12

*. Correlation is significant at the 0.05 level (1-tailed).

The scores of past positive correlates negatively with cynicism (-0,417), positively with Exhaustion (0,090) and positively with professional efficacy (0,001). None of the correlations is significant. Thus, the higher past positive time perspective, the lower cynicism, but the higher exhaustion and

professional efficacy. That distorts the expected outcome. Hence, the only support for H4 is the negative correlation between past positive and cynicism. So, some support was found for H4.

5.0 Discussion and Conclusion

The essential goal of the study was to enlarge the concept of entrepreneurship beyond the accepted theories to face the development of burnout among entrepreneurs. The driving thought behind this is that an Imbalance of reward and effort in terms of ERI leads to burnout among entrepreneurs and that this imbalance is dependent on entrepreneurs' perception and expectations. Now, since the time perspective of psychology of time have an crucial impact on the perception and expectations of individuals and since Zimbardo & Boyd showed that especially future time perspective is utterly important in order to postpone gratification for the sake of future benefits, the question of how time perspective impact the development of disappointment and ERI was becoming interesting to understand burnout among entrepreneurs. So, the study is directed towards the question whether a strong future time perspective could help entrepreneurs to prepare their minds for a high effort and low reward in order to accept an imbalance in the present as normal, but with the constant expectations of bigger future rewards as a replacement for the low present reward. This would enable them to skip gratification in the present and possibly to cope with low reward in the short term in order to prevent the development of disappointment and finally to prevent an imbalance of ERI, which would lead to burnout. Hence, the question whether adjusting abilities in the sense of an balanced time perspective was important to adjusts one's own attitude and expectations to difficult circumstances such as an ERI, became central to the development of burnout among entrepreneurs as well. Due to the impact of burnout on entrepreneurs' and company's' performances the issue of burnout also affected the broad studies of success factors of entrepreneurship. Therefore, this study is set in the context of entrepreneurial performance, psychology of time and effort-reward-imbalance. A literature review was conducted and five hypothesizes were formulated in order to test if burnout could be prevented by a certain set of time perspective and how time perspective influences the development of burnout. So, the final research question is: *How does psychological time perspectives affect entrepreneur's risk of suffering from burnout?* The outcome from the Zimbardo Time Inventory was used to measure the five time perspective scores of each student entrepreneur and the Maslach-Burnout Inventory was used to measure the burnout scores of each student entrepreneur. These two inventories were used to test H1, H2, H4 and partially for H1.2 and H3. In addition to the inventories a semi structured interview was used to test H1.2 and H3. The first hypothesis was that 'entrepreneurs with a strong future time perspective suffer less from burnout. The literature review shows that H1 is logic and indeed possible, but the outcome of the tests couldn't approve this. Therefore, H1 was rejected. The literature review as well as the tests supports H1.2, namely 'The preference of immediate reward leads to high burn-out risk.' However, the results are not significant. Regarding the hypothesis that Entrepreneurs with a balanced time perspective suffer less from burnout than entrepreneurs with an unbalanced time perspective, there was support found in the literature review. Yet, in contrast to that, the outcome of the test could not approve H2. Hence, H2 was rejected.

The hypothesis 'Entrepreneurs' preferences of future reward instead of immediate reward is positively related to low level of burn-out' is underpinned by the literature review but just marginally supported the results in the tables. There was some support found through the outcome of the test. The correlation between 'preference of immediate reward' and 'Total Professional Efficacy' was positive and significant (0,008 at alpha 0,05). Furthermore, the correlation of 'present hedonistic time perspective' as an indicator for preferring immediate reward correlated positively (0,512) with 'Total Exhaustion' (0,045) at an significant level of 0,05 alpha. However, not all results are significant. The last hypothesis was that entrepreneurs past negative and present fatalistic time perspectives leads to higher burnout scores than entrepreneurs with a past positive and high future time perspective. The literature review supported H4. And the results of the test did support it as well. Therefore, some

support was found for H4. Past Negative correlated positively (0,577) with 'Total cynicism score Burnout' (0,025) at an alpha level of 0,05. However not all results are significant.

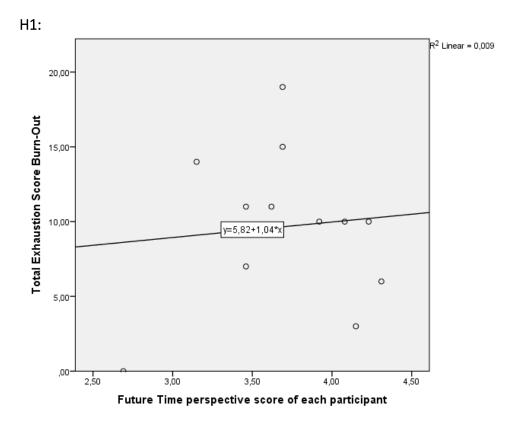
The literature review as well as the tests through the inventories and the semi-structured interview showed that the time perspective scores have indeed an effect on the development of burn-out. However, these findings need to be handled with care. Some support was found but not all results were significant. Furthermore, the results are not generalizable to other entrepreneurs due to the low number of entrepreneurs in this pilot study. But taken the limited generalizability into account it can be concluded that we found no support for a negative relation between strong future time perspective and burnout, through the qualitative tests. It also couldn't be approved by the qualitative tests that entrepreneurs with an balanced time perspective of all five categories are less likely to suffer from burnout then entrepreneurs with an unbalanced time perspective. But the literature review supported H2. Besides that, the study showed that, at least to some extent, that entrepreneurs with preferences of immediate reward had higher risk to suffer from burnout then entrepreneurs who prefer their rewards in the future. That hypothesis was important in order to test how the development of an ERI is influenced by the ability to skip gratification. Since, some entrepreneurs are in favor of future reward and thereby less sensitive to low reward then entrepreneurs who prefer immediate reward, the future time perspective of an entrepreneur, which is associated with skipping gratification is still essential to the development of burnout. In addition to that, the study also showed that higher past negative and present fatalistic perspective increased the scores for burnout more than past positive and high future time perspective did. Based on the literature review it was expected to find clear correlations that would approve the hypothesis that a strong future time perspective would prevent the development of burnout, due to the ability of entrepreneurs to skip gratification. That couldn't be found in the tests. Nevertheless, it was possible to find support for the assumption that there is a positive correlation between present hedonistic time perspective and burnout. That shows a gap in the theory of Effort-Reward Imbalance, namely that entrepreneurs with higher present hedonistic scores depend more on reward and therefore suffer more from an imbalance than entrepreneurs with a lower present hedonistic score. That clearly supports the theory that the individual time perspective has an impact on the development of burnout. But the outcome should be taken carefully into consideration, since there was just some support found for this as not all results were significant. All results might change if the number of studied entrepreneurs would be increased in order to get representative samples. So to sum the findings up, it can be concluded that it was possible to show that time perspective do affect the development of burnout. Nevertheless, it couldn't be supported that a strong future time perspective could prevent the development of burnout. This study indicates that the development of burnout among entrepreneurs and the role of time perspectives are diversified and complex . Every single part, namely the answers in the literature and the results of the tests contributed to a bigger picture, which definitely helped to explore some aspects of the impact of time perspectives on the development of burnout among entrepreneurs. Yet, more future search is necessary to explore the complexities involved in this phenomenon.

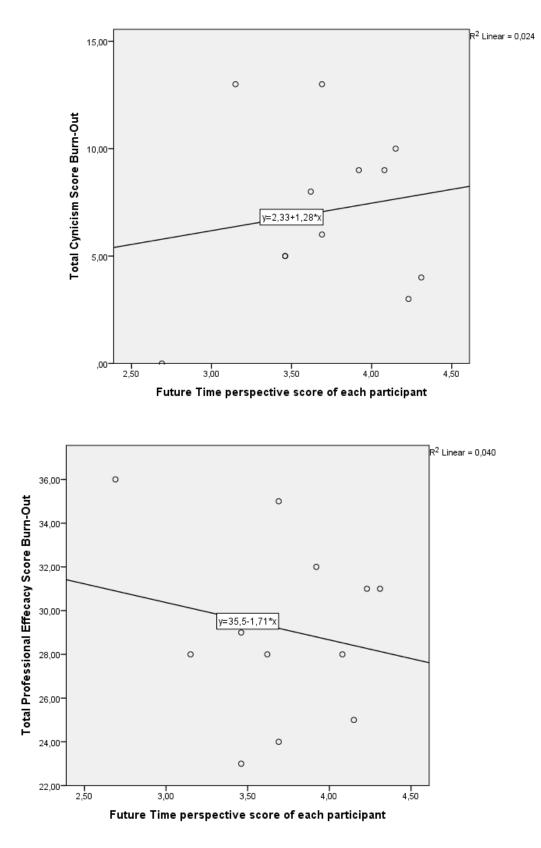
5.1 Limitations and future research

A crucial limitations is that this study is just based on 12 student entrepreneurs. Furthermore, unfortunately female entrepreneurs were not found for this study either. That makes this study less generalizable. In addition to that it might be that some entrepreneurs tried to depict themselves in more "professional" way by answering questions which measure the future time perspective in a manner that makes them appear to be more future oriented then they really are. Presuming that some entrepreneurs were able to notice which question measured future time perspective. Therefore, the think aloud method might help, in addition to the ZTIP, to test reward preferences and the time perspective of the entrepreneurs. Besides that, quantitative research should be conducted by future scholars in order to test how time perspective affect the development of burnout among a larger group of entrepreneurs so that the results will be more representative. The effect of each single time

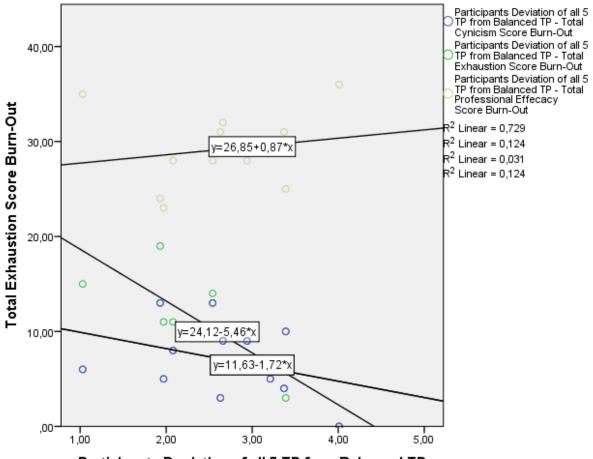
perspective on the other time perspective should also be taken into account. It might also be that other factors such perceiving its own work as entrepreneur as a hobby or the appreciation of entrepreneurs in the society distort the relation of reward and effort. Testing these and other factors might enable future researcher to include psychology of time into the whole package of the research paths that represent the current scientific base of entrepreneurial success. By exploring how the time perspective influences the development of burnout among entrepreneurs scholars might contribute to the theories of entrepreneurial performance and help to create a scientific base for the development of burnout prevention methods. Those methods might help to prevent mental damages to entrepreneurs and enable entrepreneurs to become more efficient instead.

Appendices

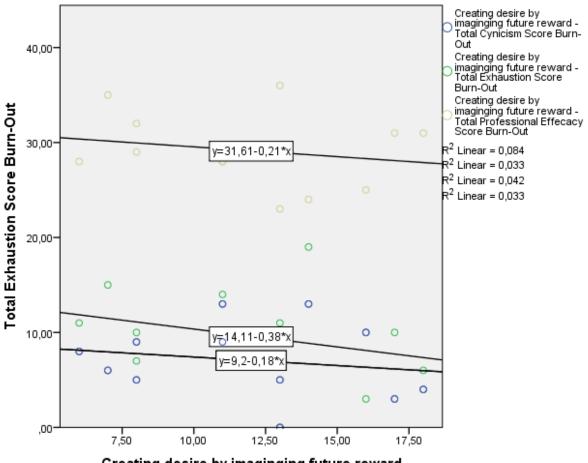






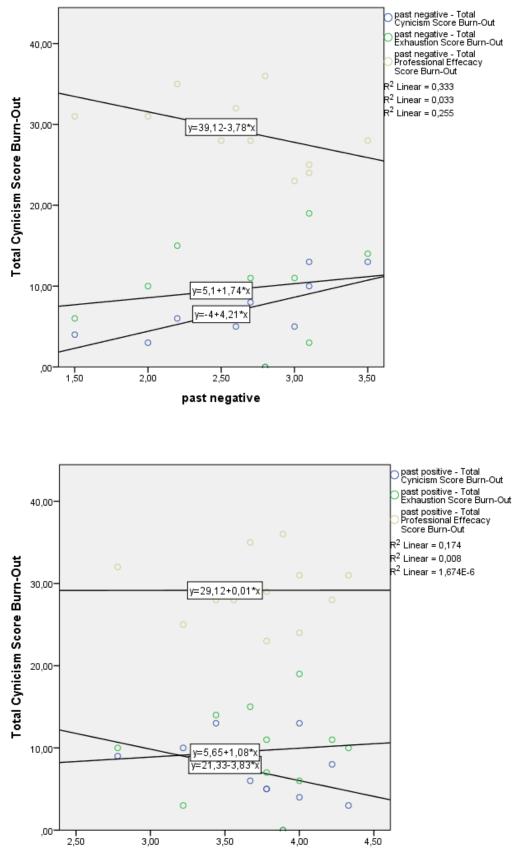


Participants Deviation of all 5 TP from Balanced TP

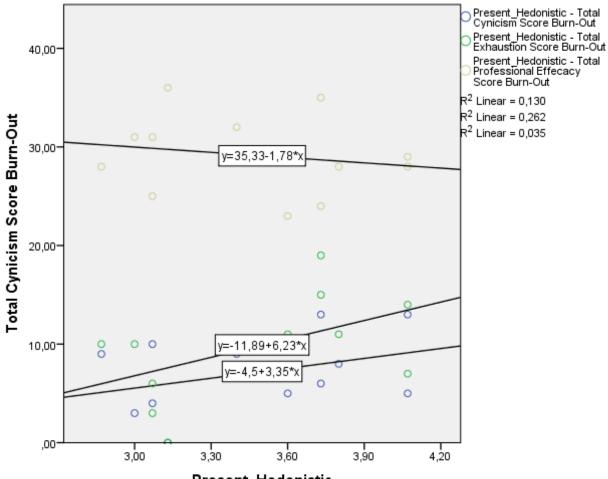


Creating desire by imaginging future reward

H4: Past negative and burn-out







Present_Hedonistic

For H1: (Table1-4) Table 1

Independent Samples Test

		Levene'	s Test								
	for Equality of										
		Variar	nces		t-test for Equality of Means						
									95% Co	nfidence	
						Sig.			Interva	l of the	
						(2-	Mean	Std. Error	Differ	ence	
		F	Sig.	t	df	tailed)	Difference	Difference	Lower	Upper	
Total	Equal	1,039	,338	,285	8	,783	,80000	2,81069	-5,68147	7,28147	
Exhaustion	variances										
Score Burn-	assumed										
Out	Equal			,285	6,484	,785	,80000	2,81069	-5,95498	7,55498	
	variances										
	not										
	assumed										

Table2

Independent Samples Test

			e's Test ality of							
		Varia	inces				t-test for Equ	ality of Means	3	
									95% Coi	nfidence
						Sig.			Interva	l of the
						(2-	Mean	Std. Error	Differ	ence
		F	Sig.	t	df	tailed)	Difference	Difference	Lower	Upper
Total	Equal	,238	, 639	-	8	,764	-,80000	2,57682	-6,74216	5,14216
Cynicism	variances			,310						
Score	assumed									
Burn-Out	Equal			-	7,048	,765	-,80000	2,57682	-6,88477	5,28477
	variances			,310						
	not									
	assumed									

Table 3

	Independent Samples Test									
		Leve	ene's							
		Tes	t for							
		Equa	lity of							
		Varia	inces			t	-test for Equa	ality of Means	S	
									95% Co	nfidence
						Sig.			Interva	l of the
						(2-	Mean	Std. Error	Differ	ence
		F	Sig.	t	df	tailed)	Difference	Difference	Lower	Upper
Total	Equal	,166	,694	-	8	,813	-,60000	2,44949	-6,24853	5,04853
Professional	variances			,245						
Effecacy	assumed									
Score Burn-	Equal			-	6,669	,814	-,60000	2,44949	-6,45084	5,25084
Out	variances			,245						
	not									
	assumed									

Table4

	Correlations							
		Total						
		Cynicism	Future Time	Total	Total Professional			
		Score Burn-	perspective score	Exhaustion	Effecacy Score			
		Out	of each participant	Score Burn-Out	Burn-Out			
Total Cynicism	Pearson	1	,154	,615 [*]	-,576*			
Score Burn-Out	Correlation							

	Sig. (1- tailed)		,316	,017	,025
	N	12	12	12	12
Future Time	Pearson	,154	1	,095	-,200
perspective score of	Correlation				
each participant	Sig. (1- tailed)	,316		,384	,266
	N	12	12	12	12
Total Exhaustion	Pearson	,615 [*]	,095	1	-,325
Score Burn-Out	Correlation				
	Sig. (1- tailed)	,017	,384		,152
	N	12	12	12	12
Total Professional Effecacy Score	Pearson Correlation	-,576*	-,200	-,325	1
Burn-Out	Sig. (1- tailed)	,025	,266	,152	
	N	12	12	12	12

*. Correlation is significant at the 0.05 level (1-tailed).

For H3:

	Correlations							
			Creating desire by	Creating desire by				
		Total Exhaustion	imagining immediate	imaginging future				
		Score Burn-Out	reward	reward				
Pearson Correlation	Total Exhaustion Score Burn-Out	1,000	-,399	-,290				
	Creating desire by imagining immediate reward	-,399	1,000	-,336				
	Creating desire by imaginging future reward	-,290	-,336	1,000				
Sig. (1-tailed)	Total Exhaustion Score Burn-Out		,099	,180				
	Creating desire by imagining immediate reward	,099		,142				

	Creating desire by imaginging future reward	,180	,142	
Ν	Total Exhaustion Score Burn-Out	12	12	12
	Creating desire by imagining immediate reward	12	12	12
	Creating desire by imaginging future reward	12	12	12

H3:

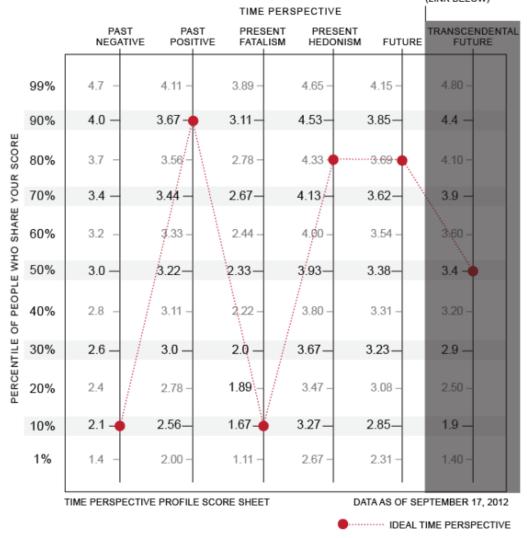
		Correlations		
			Creating desire by	Creating desire by
		Total Cynicism Score	imagining immediate	imaginging future
		Burn-Out	reward	reward
Pearson Correlation	Total Cynicism Score Burn-Out	1,000	-,549	-,182
	Creating desire by imagining immediate reward	-,549	1,000	-,336
	Creating desire by imaginging future reward	-,182	-,336	1,000
Sig. (1-tailed)	Total Cynicism Score Burn-Out		,032	,286
	Creating desire by imagining immediate reward	, <mark>032</mark>		,142
	Creating desire by imaginging future reward	,286	,142	
Ν	Total Cynicism Score Burn-Out	12	12	12
	Creating desire by imagining immediate reward	12	12	12

Creating desire by	12	12	12
imaginging future			
reward			

For H3:

Correlations					
		Total Professional	Creating desire by	Creating desire by	
		Efficacy Score Burn-	imagining immediate	imagining future	
		Out	reward	reward	
Pearson	Total Professional	1,000	,679	-,204	
Correlation	Effecacy Score Burn-				
	Out				
	Creating desire by	,679	1,000	-,336	
	imagining immediate				
	reward				
	Creating desire by	-,204	-,336	1,000	
	imaginging future				
	reward				
Sig. (1-tailed)	Total Professional		,008	,262	
	Effecacy Score Burn-				
	Out				
	Creating desire by	<mark>,008</mark>		,142	
	imagining immediate				
	reward				
	Creating desire by	,262	,142		
	imaginging future				
	reward				
Ν	Total Professional	12	12	12	
	Effecacy Score Burn-				
	Out				
	Creating desire by	12	12	12	
	imagining immediate				
	reward				
	Creating desire by	12	12	12	
	imaginging future				
	reward				

FOR TRANSCENDENTAL FUTURE RESULTS PLEASE TAKE THE TTPI (LINK BELOW)



³ Time perspective profile score sheet with scores of balanced time perspectives ZTPI

Semi-structured interview:

Interview questions:

1. Did you ever had a period of six month or longer, during which you had to face difficult circumstances? How did you deal with it?

2. If you have a difficult week ahead of you, how do you prepare?

³ http://www.thetimeparadox.com/zimbardo-time-perspective-inventory/

3. Do you have to delay gratification for the sake of your companies well- being? How do you feel about it?

4. How do you perceive your past (childhood, youth & the last years)?

5. To what extent do you think that being able to imagine the future outcome is necessary to work towards future goals?

6. To what extent do you tend to become impulsive when you need make a decision for your enterprise? Please describe briefly.

7. How does your past affect your choices? Please describe briefly?

8. What is according to your feeling closer to you, your past or your future?

9. What do you think about the following sentence: "Working in my own business feels not like work but like a pleasure."

10. Do you mind doing overtime for your business? Explain briefly

11. Do you get satisfaction from the work in your business?

12. How important is the appreciation of colleagues and family members for you work?

13. To what extent do you accept personal sacrifices and pain as a mean to justify the development of your business?

14. To what extent do you need short-term success in order to be willing to keep going for the long-term goals?

15. To what extent are you able to adjust your expectations relating to short-term reward to rather aim for long term satisfaction?

16. How do you handle the absence of expected pleasure?

17. Would you mentally be able to continue your business if you receive no reward for more than 1 year? Even if you had enough financial resources to continue your business. If yes, please describe how.

--- end of the interview—

References

• Bakker, A. B., Demerouti, E. & Euwema, C. (2005). Job resources buffer the impact of job demands on burnout. *Journal of Occupational Health Psychology*, 10 (2) 170-180

- Baron, R. A., Franklin, R. J. & Hmieleski, K. M. (2013). Why Entrepreneurs Often Experience Low, Not High, Levels of Stress: The Joint Effects of Selection and Psychological Capital, *Journal of Management*, *42* (3), 742-768
- Begley, T. M. & Boyd, D. P. (1987). Psychological characteristics associated with performance in entrepreneurial firms and smaller businesses. *Journal of Business Venturing*, 2, 79-93.
- Bingham, C. B. & Davis, J. P. (2012). Learning Sequences: Their Existence, Effect, and Evolution, Academy of Management, vol. 55 no. 3 611-641
- Bluedorn, A. C. & Martin, G. (2008). The time frames of entrepreneurs, *Journal of Business Venturing 23* 1-20. doi: 10.1016/j.jbusvent.2006.05.005
- Cardon, M. S. & Patel, P. C. (2015). Is stress worth it? Stress-Related Health and Wealth Trade-Offs for Entrepeneurs. *Applied Psychology: An International Review,* 64 (2), 379-420
- Drake, L., Duncan E., Sutherland F., Abernethy C. & Henry C. (2008). Time Perspective and Correlates of Wellbeing, *Time and Society*, 17 (1), 47–61.
- Fernet, C., Torrès O., Austin, S. & St-Pierre J. (2016). The psychological costs of owning and managing an SME: Linking job stressors, occupational loneliness, entrepreneurial orientation, and burnout, *Burnout Research 3 Elsevier*
- Foss, J. N., Lynsgie, J. & Zahra, S. A. (2014). Organizational design correlates of entrepreneurship: The roles of decentralization and formalization for opportunity discovery and realization, *Strategic Organization, Sage*, 13(1) 32–60
- Frese, M. & Gielnik, M. M. (2014). The psychology of entrepreneurship. *Annual Review of Organizational Psychology and Organizational Behavior*, *1*, *1-595*
- Hatak, I., Rauch A., Fink M. & Baranyi A. (2015). Doing well by being well: The interplay of physical well-being, burn-out symptoms and firm performance of necessity-, rationality- and opportunity-driven entrepreneurs, *Frontiers of Entrepreneurship Research 35 (2), 123-129*
- Ireland, R. D. & Webb, J. W. (2009). Crossing the great divide of strategic entrepreneurship: Transitioning between exploration and exploitation, 52, 469—479 doi:10.1016/j.bushor.2009.05.002
- Kuratko, D. F., Ireland, R. D. & Covin, J. G., (2009). Conceptualizing Corporate Entrepreneurship Strategy, *Entrepreneurship Theory and Practice*, 1042-2587
- Jantunen, A., Puumalainen, K., Saarenketo, S. & Kylaheiko. (2005). Entrepreneurial orientation, dynamic capabilities and international performance. *Journal of International Entrepreneurship*, 3, 223-243
- Lewin-Epstein, N. & Yuchtman-Yaar, N. (1991). Health risks of self-employment. *Work and Occupations*, 18 (3), 291-312

- Maslach, C., Jackson, S. E. & Leiter, M. P. (1982). Maslach Burnout Inventory, Third Edition
- Miller, D. & Sardais, C,. (2013). Bifurcating Time: How Entrepreneurs Reconcile the Paradoxical Demands of the Job, *Entrepreneurship Theory and Practice, DOI: 10.1111/etap.12049*
- Oviatt, B. M. & McDougall, P. P. (2005). Defining international entrepreneurship and modeling the speed of internationalization, *Entrepreneurship Theory and Practice*, 1042-2587, 537-553
- Pollack, J. M., Vanepps, M. Eric & Hayes A.F. (2012). The moderating role of social ties on entrepreneurs' depressed affect and withdrawal intentions in response to economic stress. *Journal of Organizational Behavior*, *33*, 789–810.
- Rauch A. & Frese M. (2007). Let's put the person back into entrepreneurship research: A meta-analysis on the relationship between business owners' personality traits, business creation, and success, *European Journal of Work and Organizational Psychology*, 16 (4), 353-385
- Siegel, D. S. & Renko, M. (2012). The role of market and technological knowledge in recognizing entrepreneurial opportunities, Market and technological knowledge, *Management Decision*, *Emerald* 50 (5), 0025-1747
- Siegrist, J. (1996). Adverse Health Effects of high-effort/low-reward conditions. *Journal of Occupational Health Psychology*, 1 (1), 27-41
- Stolarski M., Bitner J. & Zimbardo P.G. (2011). Time perspective, emotional intelligence and discounting of delayed awards, *Time and Society 20(3) 346–363*
- Tanev, S. (2012). Global from the Start: The Characteristics of Born-Global Firms in the Technology Sector, *Technology Innovation Management Review*, 2 (3), 5-8
- Vegchel, N., de Jonge J., Bosma H. & Schaufeli W. (2004). Reviewing the effort-reward imbalance model: drawing up the balance of 45 empirical studies. Elsevier: *Social Science & Medicine, 60 (5), 1117-1131*
- Wiklund. J., Patzelt. H. & Dimov. D. (2016). Entrepreneurship and psychological disorders: How ADHD can be productively harnessed, *Journal of Business Venturing Insights, (6), 14-20*
- Zimbardo P.G. & Boyd J.N.(2015). Putting Time in Perspective: A Valid, Reliable Individual-Differences Metric, *Springer International Publishing Switzerland 6* 14-20
- Zimbardo, P. & Boyd, J. (2008). An overview of time perspective types. Retrieved from <u>http://www.thetimeparadox.com/2008/08/03/an-overview-of-time-perspective-types/</u>
- Zimbardo, P., Sword, R. M. & Sword, R. K. M., (2012) Overcoming PTSD with the new psychology of time perspective therapy, Jossey-Bass: A Willey Imprint

- Zimbardo, P. G., Boyd, J. N., Keough, K. A., (1999). Who's Smoking, Drinking, and Using Drugs? Time Perspective as a Predictor of Substance Use, *Basic and Applied Social Psychology*, 21(2), 149–164
- Zimbardo, P. G. (2009). Secret Power of Time, Ted-Talks. Retrieved from <u>https://www.ted.com/talks/philip_zimbardo_prescribes_a_healthy_take_on_time?language</u> <u>=nl</u>