

HAPPY AND PROACTIVE?

THE ROLE OF HEDONIC AND EUDAIMONIC WELL-BEING IN BUSINESS OWNERS'

PERSONAL INITIATIVE

This manuscript is in press at *Entrepreneurship: Theory and Practice*. It is a post-review prepublication version of the manuscript. Please refer to *Entrepreneurship: Theory and Practice* for the proof-read final version of the manuscript.

Cite as:

Hahn, V. C., Frese, M., Binnewies, C., & Schmitt, A. (in press). Happy and Proactive? The Role of Hedonic and Eudaimonic Well-Being in Business Owners' Personal Initiative. *Entrepreneurship: Theory & Practice*.

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Author note. This article was supported by a research grant of the Deutsche

Forschungsgemeinschaft (German Research Foundation, Az FR638/23-2) to Michael Frese that we gratefully acknowledge.

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ABSTRACT

This two-year-study with 122 business owners examined the link between affective well-being and task-oriented as well as relationship-oriented personal initiative (PI). We tested two complementary models explaining the link between well-being and PI: a) broaden-and-build theory and b) self-regulation as limited resource approach. In line with current research on well-being, we differentiated between hedonic and eudaimonic well-being using life satisfaction and vigor as indicators. Hierarchical regression analyses showed that only vigor predicted both forms of PI. Our results support the self-regulation approach and indicate that eudaimonic well-being is the relevant affective well-being dimension for proactive behavior.

(96 words)

INTRODUCTION

Entrepreneurship refers to “behaviors that include demonstrating initiative and creative thinking, organizing social and economic mechanisms to turn resources and situations to practical account and accepting risk and failure” (Hisrich, 1990, p. 209). In the same vein, some researchers have argued that personal initiative (PI) is central to entrepreneurship (Frese, 1995). PI is described to consist of three facets—self-starting action, proactive and future oriented behavior, and overcoming barriers on the way towards the goal (Frese, 2009). Accordingly, empirical evidence shows that entrepreneurs show higher degrees of initiative than employees or managers (Utsch, Rauch, Rothfuß, & Frese, 1999). Moreover, entrepreneurs’ PI is related to business success in Africa and in China (Krauss, Frese, Friedrich, & Unger, 2005; Zhao, Frese, & Giardini, in press).

However, being self-starting, proactive and overcoming barriers may be draining and,

therefore, a frequent image of laypeople and entrepreneurship researchers alike is that the work of an entrepreneur is very stressful and exhausting. Entrepreneurs have been suggested to have “extreme experiences” and to suffer from job stress, unpredictability, and ambiguity and that, therefore, the emotional experience of these issues is of importance (McMullen & Shepherd, 2006; Schindehutte, Morris, & Allen, 2006). Entrepreneurs are exposed to certain stressors that employees usually do not experience. This makes the study of job stress and health of entrepreneurs particularly pertinent. The situation of entrepreneurs is also characterized by the necessity to show a high degree of PI (Frese, 2009). Surprisingly, there are only very few studies examining the issue of well-being of entrepreneurs and even less studies that look at the consequences of entrepreneurs’ well-being on central entrepreneurial behaviors such as taking initiative.

In the present study, we propose that entrepreneurial well-being is crucial for entrepreneurs’ PI. Specifically, we focus on two dimensions of entrepreneur’s affective well-being, namely hedonic and eudaimonic well-being (Ryan & Deci, 2001). Hedonic well-being refers to happiness in terms of pleasure attainment and pain avoidance (Ryan & Deci, 2001). Eudaimonic well-being is defined as an individual’s being fully functioning and self-realized (Ryan & Deci, 2001). Although both dimensions of affective well-being have been shown to be relevant for various outcomes, we suggest that the hedonic and eudaimonic well-being facets may not be equally important for entrepreneurs’ PI. With this study, we test this assumption and examine the links between hedonic well-being and eudaimonic well-being on the one hand and entrepreneurial PI on the other hand.

Our study makes several contributions to prior research on entrepreneurs and well-being. First, we introduce the concepts of eudaimonic and hedonic well-being into entrepreneurship and

thereby go beyond previous research on well-being in this field which has merely focused on entrepreneur's job satisfaction (Blanchflower, 2000; Hundley, 2001) or entrepreneurial stress (e.g., Buttner, 1992; Prottas & Thompson, 2006). Second, we contribute to the well-being literature by examining differential relations between eudaimonic and hedonic well-being with personal initiative in entrepreneurs. By examining well-being in the area of entrepreneurship, we are able to examine the eudaimonic perspective in more detail. Entrepreneurship is characterized by high work involvement, strong achievement motive and willingness to perform, extended work hours, and a high engagement in work—in short, entrepreneurs are often characterized to be passionate in their work (Cardon, Wincent, Singh, & Drnovsek, 2009; Locke & Baum, 2007). Therefore, entrepreneurs should be particularly inclined to take advantage of their affective well-being to perform behaviors that benefit their businesses. Thus, it is important to examine eudaimonic well-being in the group of entrepreneurs. Third, by focusing on the link between two dimensions of affective well-being and PI, we answer calls to examine the role of affect both in proactive behaviors and in the entrepreneurial process (Baron, 2008). Previous research on proactivity has emphasized cognitive influences on proactive behaviors such as cost/benefit calculations, uncertainty reduction, and experienced efficacy (Grant & Ashford, 2008). Less attention was paid to the role affective experiences play for proactive behaviors. To date, only few studies have examined the role of affect in proactive behaviors (Den Hartog & Belschak, 2007; Fritz & Sonnentag, 2009; Grant, Parker, & Collins, 2009).

In the following, first, we shall provide a framework to understand PI. Next, we discuss the function of affect in entrepreneurship, particularly the role of affective well-being for entrepreneurial PI.

Personal initiative as entrepreneurial behavior

PI is defined as “a behavior syndrome resulting in an individual’s taking an active and self-starting approach to work” (Frese, Kring, Soose, & Zempel, 1996, p. 38). Specifically, PI is characterized by three behaviors: First, self-starting behavior, second, proactive behavior, and third, overcoming barriers. These three concepts imply: First, entrepreneurs must start something new to create and exploit opportunities (Shane & Venkataraman, 2000); thus, self-starting behavior is of high importance. Entrepreneurs need to accomplish work without getting explicit instructions. They have to develop self-set goals, use active planning strategies, actively explore the environment to be able to create and exploit opportunities (Frese, 2007).

Second, proactivity means to have a long-term focus and not to wait until a demand is explicitly made to which one must respond. This long-term focus relates to future opportunities and to stressors and preparing for them so that the entrepreneur assembles resources to be ready to quickly capitalize on future opportunities (Dimov, 2007; Hamel & Prahalad, 1994). In the context of entrepreneurship, proactivity has been shown to be relevant for business success. Accordingly, entrepreneurial orientation includes the proactiveness dimension (Lumpkin & Dess, 1996; Miller & Friesen, 1978). Empirically, proactiveness has been of particular importance to explain organizational success of business owners (Krauss et al., 2005; Rauch, Wiklund, Lumpkin, & Frese, 2009; Van Gelderen, Frese, & Thurik, 2000). Given the relevance of proactive behaviors in the entrepreneurial process and for entrepreneurial success, it is important to identify predictors of proactive behaviors in entrepreneurs.

Third, overcoming barriers and persistence have been conceptualized to be an important part of entrepreneurship since Schumpeter (1935). Persistence implies that one needs to deal with one’s emotions in the face of obstacles because goal seeking is frequently frustrated when new things are attempted as in the case of the PI activities of entrepreneurs. It is important to

acknowledge that costs can be associated with high persistence—not only financial but also emotional costs (DeTienne, Shepherd, & De Castro, 2008; Shepherd, Wiklund, & Haynie, 2009).

In our study, we focus on two forms of PI which are both important for entrepreneurial success: Task-oriented PI and relationship-oriented PI. Whereas task-oriented PI means that business owners take a proactive and self-starting approach to seizing opportunities and preparing for challenges (Frese et al., 1996), relationship-oriented PI means that business owners take a proactive and self-starting approach to improving and expanding their business relationships to produce social networks (König, Frese, Steinmetz, Rauch, & Wang, 2007; Zhao et al., in press). Numerous studies showed that entrepreneurial success is increased by better and larger social networks (Hoang & Antoncic, 2003).

Two dimensions of affective well-being: Hedonic and eudaimonic well-being of entrepreneurs

Affect is a neglected concept in entrepreneurship research and scholars urged to pay more attention to the role of affect in the entrepreneurial process (Baron, 2008). Baron (2008) suggested that affect influences whether and how entrepreneurs recognize opportunities, acquire human and financial resources for their ventures, and respond effectively in highly dynamic environments because affect influences the information individuals attend to, how they process this information and their motivations. However, only few studies have directly examined the role of affect and emotions in the entrepreneurial process and for entrepreneurial outcomes. For example, Foo and colleagues examined the role of affect for effort in new venture creation and in entrepreneurial opportunity evaluation (Foo, in press; Foo, Uy, & Baron, 2009). Cardon and Kirk (2010) focused on the role of passion—described as strong positive emotion—on entrepreneurial persistence. Baron, Tang, and Hmielseki (2010) investigated the effect of dispositional positive

affect on firm performance.

With this study, we examine the role of affect in entrepreneurship within a broader well-being framework. Specifically, we investigate whether two dimensions of entrepreneurs' affective well-being are differentially associated with PI. Current well-being research involves two general perspectives with respect to the definition of well-being (Ryan & Deci, 2001). The hedonic viewpoint focuses on subjective well-being which is defined as the presence of positive affect and greater life satisfaction, as well as the absence of negative affect (e.g., Diener, 2000). In line with this view, life satisfaction is commonly used as an indicator of hedonic well-being (Ryan & Deci, 2001). In contrast, the eudaimonic perspective defines well-being in terms of the degree to which a person is fully functioning. Vigor—also named vitality—is a common operationalization of eudaimonic well-being (Ryan & Deci, 2001). Vigor is an affective construct that refers to the subjective feeling of energy and aliveness (Peterson & Seligman, 2004; Ryan & Frederick, 1997). Given these two dimensions of well-being, it is important to examine whether or not they have different functions for entrepreneurs.

Explaining the link between affective well-being and entrepreneurial PI: Two perspectives

We consider two perspectives to explain the link between affective well-being and PI: The broaden-and-build theory and the limited-resources view of self-regulation. *The broaden-and-build theory* is frequently used to explain the link between happiness—which refers to hedonic well-being—and a range of positive outcomes, such as PI (Lyubomirsky, King, & Diener, 2005). The broaden-and-build theory states that positive emotions broaden people's momentary thought–action repertoires and build their enduring intellectual, physical, and social resources (Fredrickson, 1998, 2001). These resources make it possible to show a high degree of PI. Frequently experiencing high positive emotions, i.e., being in state of good hedonic well-

being, allows the broadening of the behavior repertoire; the frequent use of broadened behavior repertoires in turn allows to build up psychological resources (Lyubomirsky et al., 2005). These psychological resources (e.g., skills, creative approaches to life, and confidence to deal with problems) are crucial for showing effortful behaviors such as taking initiative. For example, an entrepreneur who feels happy can build up psychological resources (e.g, self-efficacy) during pleasant episodes and thereby prepares for future challenges. Consequently, happy entrepreneurs with great life satisfaction should show increased levels of PI.

H1a: Entrepreneurs' life satisfaction is positively associated with task-oriented PI.

H1b: Entrepreneurs' life satisfaction is positively associated with relationship-oriented PI.

We argue that the broaden-and-build model, which is frequently used to explain the link between happiness or hedonic well-being and a range of positive outcomes, may not be sufficient to completely justify why affective well-being and PI should be related. We propose the *limited resources view of self-regulation* as complementary perspective to explain the relation between affective well-being, eudaimonic well-being in particular, and PI. Self-control, particularly self-regulation is “the exertion of control over the self by the self” (Muraven & Baumeister, 2000, p. 247). Self-regulation refers to the ability to control and override one’s thoughts, feelings, and behavior (Gailliot et al., 2007). Muraven and Baumeister (2000) have argued that self-regulation is a limited, depletable resource. People have a limited capacity for self-regulation, i.e., they have a limited supply of self-regulatory energies. Self-regulation is assumed to behave “like a muscle” in that the regulation of behavior requires energy which gets depleted by exertion (Muraven & Baumeister, 2000).

The conceptualization of self-regulation as limited resource implies that when self-

regulation has been invested, subsequent self-regulation will suffer. Consequently, efficient self-regulation is dependent on the availability of sufficient self-regulatory energies. Empirical research supports this view of self-regulation as limited resource (Baumeister, Bratslavsky, Muraven, & Tice, 1998). In this study, we will focus on vigor as indicator of an individual's self-regulation energies (Sonnentag & Jelden, 2009). Vigor represents an individual's eudaimonic well-being. Thus, an individual's self-regulation energies can be seen as indicator of an individual's fully functioning, i.e., their eudaimonic well-being.

Engaging in PI requires entrepreneurs to invest extra effort to recognize problems and action opportunities, to think about solutions to these problems, and to initiate and sustain action. Setting goals, overcoming barriers, and being persistent in the face of obstacles—all components of PI—are effortful behaviors which require self-regulatory energies. Fulfilling their tasks and duties as entrepreneurs consumes their energy, thereby limiting their resources to fulfill subsequent tasks. High levels of vigor operate as energetic resources to perform behaviors that require self-regulation such as engaging in task-oriented and relationship-oriented PI. Due to their passion for work (Cardon et al., 2009; Locke & Baum, 2007), entrepreneurs should be particularly inclined to invest their energetic resources into their work to take initiative. Additionally, entrepreneurs have high job control (Prattas & Thompson, 2006). Therefore, they should be particularly able to capitalize on their high levels of vigor because they can arrange tasks in such a way that the increased resources can be used most effectively. Thus, we propose that entrepreneurs with high levels of vigor, i.e., entrepreneurs with high eudaimonic well-being, are more likely to engage and sustain self-regulatory efforts to take initiative and persist in the face of obstacles at work than those with low energy. Accordingly, we state that vigorous entrepreneurs with high levels of eudaimonic well-being will show more task-oriented and

relationship-oriented PI.

Empirical research on recovery from job stress provides support for our hypothesis. Employees who are highly recovered, i.e., who have successfully replenished their self-regulatory resources, show higher task-oriented PI (Binnewies, Sonnentag, & Mojza, 2009a, 2009b, 2010).

Hypothesis 2a: Entrepreneurs' vigor is positively associated with task-oriented PI.

Hypothesis 2b: Entrepreneurs' vigor is positively associated with relationship-oriented PI.

METHOD

Sample and Procedure

We conducted a survey study with two measurement points covering a time period of two years to test our hypotheses. This study was part of a larger research project on psychological success factors of German entrepreneurs that comprised personal interviews with business owners as well as surveys. The reasons for a two year interval were a combination of practical and theoretical reasons. While there is little knowledge or theorizing on time factors in applied psychology (Mitchell & James, 2001; Sonnentag & Frese, in press), it is a common assumption that changes in performance (such as personal initiative), in well-being or other potential dependent variables take a certain amount of time to develop. These changes are typically appearing in the range of a year or two (Frese, Garst, & Fay, 2007). The other reason was pragmatic and was due to the funding of the project.

For inclusion in our study, business owners had to meet two criteria: First, they had to own (with shares of at least 10%) and manage their businesses. Second, they were required to have at least one employee. There is a qualitative difference between owners who work alone

and owners who have employees since the step from working alone to having employees implies a change in self-perception, responsibility, and managerial demands (Frese & de Kruif, 2000). Third, we sampled from four industries –construction, information technology, automobile, and the hotel and catering industry. We sampled from the Rhein-Main region in the center of Germany using yellow pages as well as lists provided by the German chambers of commerce to contact potential participants by telephone. In addition, we included some business owners as a result of a peer-nomination procedure including contacts recommended by other business owners. Of the 697 owners who met participation criteria, 290 (42%) participated in the study and were interviewed. One-hundred-ninety-seven business owners (68%) of those who were interviewed completed a questionnaire which comprised the variables of interest for this study. We tested whether participants who did not complete the questionnaire differed from those who completed the questionnaire and thus could be included in our sample. We found no differences regarding demographical (gender, age) and business data (industry branch, number of employees) between the two groups.

We excluded eight business owners because of missing data regarding study variables. Of the remaining 189 business owners who responded to the questionnaire at Time 1, 122 (64.6%) completed the second questionnaire at Time 2 two years later. We tested for systematic drop-out from Time 1 to Time 2. We did not find significant differences with respect to demographical (gender, age) and business data (industry branch, number of employees) and with respect to life satisfaction and vigor.

The final sample consisted of 122 owners, 99 men and 23 women. On average, business owners were 45.3 years old ($SD = 9.1$ years). Regarding family status, 71.3% were married, 15.6% were single, 8.2% were divorced or widowed, and 4.9% indicated another type of family

status. The majority (73.5%) of participants had at least one child. The business owners had on average 13 employees ($SD = 19.2$ employees) and worked 57.9 hours per week ($SD = 11.8$). Forty-one percent of the participants indicated that their business belonged to the construction industry, followed by the information technology industry (23.0 %) and the hotel and catering industry (25.0 %); the remaining 11.0 % indicated that their business belonged to the automobile industry.

Measures

Demographic variables, business data, vigor and life satisfaction were assessed at Time 1. Task-oriented PI and relationship-oriented PI were measured at Time 2.

Personal initiative. Task-oriented PI was measured with the seven-item scale of Frese, Fay, Hilburger, Leng, and Tag (1997), which is a well-validated measure frequently used to assess employees' and entrepreneurs' PI. A sample item was "I actively attack problems". Cronbach's alpha was .85. Relationship-oriented PI was measured with five items which were adapted from a measure used by Zhao et al. (in press). This scale captures how much an individual takes a proactive and self-starting approach to improve and expand business relationships. A sample item was "Whenever there is a chance to socialize with new business partners, I take it." Cronbach's alpha was .85. Both scales ranged from 1 (*strongly disagree*) to 5 (*strongly agree*).

Life satisfaction. For assessing hedonic well-being we used Pavot and Diener's five-item Satisfaction With Life Scale (1993). A sample item was "I am satisfied with my life". Both scales ranged from 1 (*strongly disagree*) to 7 (*strongly agree*). Cronbach's alpha was .84.

Vigor. Gauging vigor we used a scale from Ryan and Frederick (1997) developed to assess subjective vitality, i.e., "a positive feeling of aliveness and energy". Instead of the original

seven-item scale we used a six-item version which demonstrates better validity (Bostic, Rubio, & Hood, 2000). The scale ranged from 1 (*strongly disagree*) to 7 (*strongly agree*). A sample item was “I feel energized”. Cronbach’s alpha was .88.

We conducted confirmatory factor analyses (CFAs) to examine if the two affective well-being dimensions and the two measures of PI were best represented by a four-factor model. Specifically, we tested the four-factor model against a one-factor model and against various three- and two-factor models. Results from CFAs showed that the four-factor model fit the data better than the one-factor model ($\Delta\chi^2 = 1039.8$, $\Delta df = 6$, $p < .001$), than all possible two-factor models ($\Delta\chi^2 \geq 444.8$, $\Delta df = 5$, $p < .001$), and than all possible three-factor models ($\Delta\chi^2 \geq 245.4$, $\Delta df = 3$, $p < .001$).

Control variables. Gender, age, years in present industry, subjective business success, and industry type were included as control variables. We controlled for gender because prior research has shown that male and female entrepreneurs differ in their levels of entrepreneurial orientation and social capital (e.g., density of social networks; Runyan, Huddleston, & Swinney, 2006), which may influence their levels of task-oriented and relationship-oriented PI. Additionally, male entrepreneurs report a higher career and achievement orientation than female entrepreneurs (DeMartino, Barbato, & Jacques, 2006). Such orientations were found to be related to PI in previous studies (Fay & Frese, 2001). Accordingly, we controlled for potential motivational differences between male and female entrepreneurs which might influence the relations with personal initiative.

Second, we controlled for age. Increased age is associated with decreased cognitive resources and lower self-regulatory resources (Avolio & Waldman, 1990; Kanfer & Ackerman, 2004) which are necessary for taking personal initiative. Additionally, increased age might be

associated with increased social embeddedness in a local region or business community which might influence an entrepreneurs' relationship-oriented PI.¹

Third, PI may be affected by experience—higher job knowledge comes with longer experience and more knowledge in which areas initiative is useful and required. Therefore, we included number of years in present industry as indicators of relevant experience.

Fourth, subjective business success was included as control variable since entrepreneurs' business success might be related to both entrepreneurs' affective well-being and PI². Subjective business success was measured with a 10-item scale by Wicklund and Sheperd (2003) assessing business development (“How did your company develop during the last three years relatively to your two most important competitors?”) in various fields (e.g., customer satisfaction, sales growth). The scale ranged from 1 (*much worse than our competitors*) to 5 (*much better than our competitors*). Cronbach's alpha was .79.

Finally, we included industry type (automobile, construction, hotel and catering, information technology) as control variable. Different industries present different environmental contexts which may vary in their degree of volatility, uncertainty, and pace of change and hence require or trigger different levels of PI.

RESULTS

Means, standard deviations, reliabilities, and correlations between study variables are displayed in Table 1.

Insert Table 1 Here

Hypotheses 1a and 1b stated that life satisfaction was positively associated with task-oriented and relationship-oriented PI respectively. Hypotheses 2a and 2b stated that vigor was positively associated with task-oriented and relationship-oriented PI. To test these hypotheses,

we used hierarchical regression analyses with task-oriented PI and relationship-oriented PI as outcome variables. In a first step, we entered gender, age, years in present industry, business success, and industry type as control variables into the regression models. In a second step, we entered life satisfaction. In a third step, we entered vigor to examine whether vigor explains incremental variance over and above life satisfaction on the one hand and examine the concomitant effect of both well-being facets on PI on the other hand. Results are displayed in Table 2.

Insert Table 2 Here

When entering the control variables in the first step, years in the present industry and business success were significant predictors of task-oriented PI. None of the control variables was associated with relationship-oriented PI. For both task-oriented and relationship-oriented PI, entering life satisfaction in the second step did not explain incremental variance over and above the control variables. Entering vigor in the third step explained incremental variance in task-oriented PI ($\Delta R^2 = .03, p < .05$). Only vigor was a significant positive predictor ($\beta = .22, p < .05$), whereas life satisfaction was not. Similarly, for relationship-oriented PI, entering vigor in the third step explained additional variance beyond the control variables and life satisfaction ($\Delta R^2 = .04, p < .05$). Only vigor was a significant positive predictor ($\beta = .25, p < .05$) of relationship-oriented PI, whereas life satisfaction was not associated with relationship-oriented PI. Thus, Hypothesis 1a and 1b received no support, whereas Hypothesis 2a and 2b were supported.

DISCUSSION

Although scholars acknowledged that entrepreneurs undergo extreme emotional experiences in their daily work lives and thus their well-being may be impaired, few studies have examined the role of affective well-being for entrepreneurs' actions. With this study, we

addressed this gap and examined the role of affective well-being for entrepreneurial PI. Specifically, we aimed at testing two complementary explanations for the link between affective well-being and PI. We offered broaden-and-build theory and the self-regulation as limited resource view as explanatory mechanisms for the link between affective well-being and PI. It is particularly useful to test this theory in entrepreneurship because business owners are—due to their very high levels of job control and great passion—particularly inclined to take advantage of their affective well-being to show higher levels of PI. Testing the concomitant effect of life satisfaction and vigor on task-oriented and relationship-oriented PI, we found that only vigor was positively associated with task-oriented and relationship-oriented PI, whereas life satisfaction showed no relations with both forms.

In line with the self-regulation approach, we found that vigor was positively related to both forms of initiative supporting the perspective that high levels of vigor enable business owners to maintain self-regulatory efforts to engage in task-oriented and relationship-oriented PI. High levels of vigor provide business owners with the energy and willpower that is necessary to take initiative. Additionally, we could rule out the alternative explanation that business success might cause a spurious relation between affective well-being and PI by controlling for business success in our analyses. Business success might increase business owners' affective well-being on the one hand and make them continue pursuing their proactive approach to business since taking PI leads to business success (Krauss et al., 2005; Zhao et al., in press). Interestingly, we found that business success was associated with subsequent task-oriented PI, but not with relationship-oriented PI. Future research should examine why the relations between business success and both forms of PI differ.

Our results are in line with related studies that examined the relation between positive

affect and proactive behaviors. Vigor is one aspect of positive affect (Ryan & Frederick, 1997). For example, studies by Den Hartog and Belschak (2007), Foo and colleagues (2009) and Fritz and Sonnentag (2009) showed that positive affect is positively associated with effort and proactive behaviors.

In contrast to the predictions of the broaden-and-build-model, our results did not show significant positive relations between life satisfaction and task-oriented and relationship-oriented PI respectively. Prior research suggests that hedonic well-being is associated with a wide range of positive performance outcomes because happy people—that is, people who are high in life satisfaction—build up personal resources which they can subsequently invest at work (Lyubomirsky et al., 2005). However, in our study, the broaden-and-build-model received limited support. As we proposed, the broaden-and-build model was not sufficient to explain the link between affective well-being and PI; taking PI seems to require more than mere hedonic feelings. Our results are in favor of the perspective that an individual's energetic or self-regulatory resources are necessary for engaging in PI. Although hedonic feelings were shown to be associated with performance (Lyubomirsky et al., 2005); in the case of PI, we need the limited-resources view of self-regulation as complementary explanation. Our results underline the importance of entrepreneurs' vigor or energetic resources for taking PI. Recent proactivity research (Parker, Bindl, & Strauss, 2010) supports this view by suggesting that activated positive affect such as vigor is more important for stimulating proactive behaviors than inactivated positive affect (e.g., feelings of contentment).

According to the circumplex model of affect, an activation or arousal dimension is distinguished from a valence dimension (Russell, 1980). Considering life satisfaction as a proxy of positive valence and vigor as a proxy of high activation, our analyses tested the concomitant

effect of positive valence and activation on PI as proactive behavior. Our findings support the idea that it is not the valence dimension that predicts proactivity; rather, it is the activation dimension of the affective circumplex that predicts proactive behaviors. Thus, our results can give insight into affective mechanisms responsible for proactive behaviors. With regard to entrepreneurship research, we suggest that future research on affect in entrepreneurship should consider the two dimensions of affect—valence and activation—when examining the effects of affect on entrepreneurial outcomes.

The pattern of results of our study can also be explained in the light of the differential adaptive functions hedonic and eudaimonic feelings have. Vittersø, Søholt, Hetland, Thoresen, and Røysamb's (2009) propose that hedonic and eudaimonic feelings have different adaptive functions: Whereas the role of hedonic feelings is to regulate stability and homeostasis, eudaimonic feelings are produced to regulate change and growth, i.e., to motivate behavior in challenging environments. Taking initiative refers to change-oriented behaviors. Accordingly, it makes sense that vigor as eudaimonic feeling is associated with PI whereas life satisfaction as hedonic feeling is not related to PI.

Strengths, limitations, and implications for future research

One limitation of our study is the sole use of self-reports to measure the variables of interest. This might have inflated the relationships between study variables because of common method bias (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003). However, we tried to minimize this problem by temporally separating the predictor variables from the outcome variables. We assessed the two dimensions of affective well-being two years before measuring task-oriented and relationship-oriented PI. Future research should include measures from other sources or the interview-based measure of personal initiative (Frese et al., 1997)

Although we assessed affective well-being before measuring PI, in a strict sense we cannot assume a causal relation between well-being and PI. Therefore, future research should assess vigor and PI at various time points and test for reversed and reciprocal effects of PI on vigor and vice versa. We assume that taking initiative may lead to increased levels of vigor because taking initiative has the potential to satisfy basic psychological needs. Self-determination theory predicts that activities which satisfy psychological needs for relatedness, competence, and autonomy will result in energy maintenance or enhancement (Ryan & Deci, 2008). For example, when taking task-oriented initiative and thereby resolving problems, a business owner may feel competent and hence satisfy his or her need for competence. Similarly, taking active approaches to build business networks—i.e. taking relationship-oriented PI—may satisfy business owners' need for relatedness.

The concept of vigor refers to an entrepreneur's feelings of physical strength, emotional energy, and cognitive liveliness (Shirom, 2004). Thus, it refers to different energetic resources: physical, emotional, and cognitive ones. These different types of energetic resources might be differentially relevant for task-oriented and relationship-oriented PI. For example, emotional resources might be more relevant for regulating emotions during social interactions with customers and business partners which is necessary for relationship-oriented initiative. In contrast, cognitive liveliness might be more relevant for anticipating obstacles and coming up with creative solutions which is necessary for task-oriented initiative. In this study, we used a general measure of vigor which did not differentiate between the different kinds of energetic resources. Future research should separately assess different kinds of energetic resources and examine their associations with both forms of PI. We assume that the predictive validity of vigor might be higher when taking into account specific types of energetic resources for specific forms

of PI.

Considering further implications for future research, it may be worthwhile linking the concepts of vigor and entrepreneurial passion. While vigor has received little attention in entrepreneurship research so far, the concept of entrepreneurial passion has been in the focus of many researchers (Cardon et al., 2009). Entrepreneurial passion and vigor are related constructs. Entrepreneurial passion is an intense positive emotion which has been conceptualized as (emotional) energy (Cardon et al., 2009). Scholars suggest that entrepreneurial passion has a motivational effect that stimulates entrepreneurs to show high levels of initiative and persistence in the face of obstacles (Bierly, Kessler, & Christensen, 2000; Bird, 1989). Future research should investigate how entrepreneurial passion and vigor complement each other and interact in the prediction of PI. We assume that vigor could additionally boost the motivational effect of passion on entrepreneurial behaviors.

Regarding theoretical advancements, future research could extend the study of affect to other active performance concepts that share common features with PI, including proactive and elaborate planning and deliberate practice as active approach to entrepreneurial learning (Frese, 2009). Similarly to PI, these concepts refer to behaviors that are defined as being self-started, proactive, and persistent (Frese, 2009). Both proactive and elaborate planning strategies and deliberate practice—individualized, self-regulated and effortful activities aimed at improving one's current performance level (Ericsson, Krampe, & Tesch-Römer, 1993) —have been shown to be predictive of entrepreneurial success (Frese, Krauss et al., 2007; Unger, Keith, Hilling, Gielnik, & Frese, 2009).

Practical implications

Since vigor is associated with taking personal initiative, business owners should try to

create and maintain high levels of vigor at work. Job stressors might impair entrepreneurs' well-being (Rau et al., 2008) and deplete their energetic resources (Sonnentag & Jelden, 2009); thus, business owners may find stress management interventions helpful to learn how to reduce perceived stress at work and thus increase their vigor levels (Richardson & Rothstein, 2008). In addition, business owners' off-work activities and experiences influence their vitality levels at work (Sonnentag & Niessen, 2008). Self-determination theory predicts that activities which satisfy psychological needs for relatedness, competence, and autonomy will result in energy maintenance or enhancement (Ryan & Deci, 2008). Recreational tasks that provide need satisfactions can foster vitality (Reis, Sheldon, Gable, Roscoe, & Ryan, 2000). Additionally, being outdoors and in nature was shown to be related with subjective vitality (Ryan et al., in press). Recovery processes after work were shown to be related to the experience of vigor and positive activation on the following day (Sonnentag, Binnewies, & Mojza, 2008; Sonnentag & Niessen, 2008). In particular, mastery experiences, which refer to challenging off-job experiences that provide opportunities for learning and success (e.g. sports, learning a new hobby), were associated with state positive activation the next morning (Sonnentag et al., 2008). As business owners tend to work very long hours (Prottas & Thompson, 2006), they should be encouraged to take enough time off from work to recover from work-related stress and thus foster and maintain high levels of vigor at work.

CONCLUSION

Our study contributes to both entrepreneurship and proactivity research by examining the role of affective well-being within these domains. We provided evidence that taking initiative is associated with vigor as indicator of eudaimonic well-being among entrepreneurs and provided an additional explanation for this link. Feeling contented—i.e. high levels of hedonic well-

being—might not be sufficient for engaging in PI whereas feeling alive and full of energy predicts PI. Thus, it is not the satisfied and contented, but the vigorous entrepreneur who takes initiative.

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Footnotes

¹We thank an anonymous reviewer for this suggestion.

²We thank an anonymous reviewer for suggesting this idea.

Table 1

Means, Standard Deviations, and Correlations between Study Variables

	Mean	SD	1	2	3	4	5	6	7	8	9	10	11
1 Life satisfaction Time 1	4.98	1.08	(.84)										
2 Vigor Time 1	4.98	1.04	.46**	(.88)									
3 Task-oriented PI Time 2	3.96	.53	.15	.28**	(.85)								
4 Relationship-oriented PI Time 2	3.64	.66	.14	.24**	.43**	(.85)							
5 Gender ¹	1.19	.39	.13	.23*	.10	-.01	-						
6 Age	45.34	9.10	.13	.24**	.08	.10	.07	-					
7 Years in the same industry	15.68	10.64	.07	.10	.20*	.14	-.06	.58**	-				
8 Business success Time 1	3.47	.41	.31**	.27**	.22*	.04	.00	-.25**	-.16	(.79)			
9 Industry Dummy 1 ²	.41	.49	-.04	.04	-.08	-.18	-.06	.12	.12	-.10	-		
10 Industry Dummy 2 ³	.11	.32	.04	-.13	.04	.06	-.17	.03	.04	-.02	-.30**	-	
11 Industry Dummy 3 ⁴	.25	.43	-.05	.08	.12	.15	.36**	.10	-.02	-.05	-.48**	-.21*	-

Note. Cronbach's alphas are displayed in parentheses on the diagonal. ¹male = 1, female = 2; ²0 = information technology, automobile, hotel & catering, 1= construction; ³0 = information technology, hotel & catering, construction, 1= automobile; ³0 = information technology, automobile, construction, 1= hotel & catering.

* $p < .05$. ** $p < .01$.

Table 2

Hierarchical Multiple Linear Regression Analyses Predicting Task-Oriented and Relationship-Oriented Personal Initiative

Predictor	Task-oriented Personal Initiative Time 2			Relationship-oriented Personal Initiative Time 2		
	Step 1	Step 2	Step 3	Step 1	Step 2	Step 3
Gender	.09	.08	.05	-.05	-.07	-.10
Age	-.03	-.04	-.10	.05	.02	-.04
Years in same industry	.26*	.24*	.26*	.13	.13	.14
Business success	.26**	.24*	.19 ⁺	.07	.03	-.03
Industry Dummy 1	.02	.03	.02	-.13	-.12	-.13
Industry Dummy 2	.09	.09	.11	.04	.04	.06
Industry Dummy 3	.14	.15	.15	.12	.14	.13
Life satisfaction Time 1		.06	-.02		.13	.05
Vigor Time 1			.22*			.25*
R ²	.13	.14	.17	.07	.08	.13
F	2.52*	2.24*	2.55*	1.21	1.30	1.79 ⁺
Δ R ²		.003	.03		.02	.04
Δ F		.37	4.42*		1.79	5.31*

Note. Standardized regression coefficients β are displayed.

⁺ $p < .1$. * $p < .05$. ** $p < .01$.