

Conference report

Advances in the Psychology of Entrepreneurship

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University of Sheffield, Management School, Sheffield, UK.

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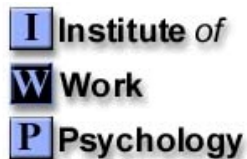
Ute Stephan, Sheffield University



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Werkgemeenschap
Arbeids- en Organisatie Psychologie



Rationale and aim

This small group meeting brought together researchers working in the field of work, organisational, and vocational psychology and entrepreneurship, in order to stimulate theoretical developments and cross cultural collaboration. Understanding psychological processes explaining entrepreneurial career choice and entrepreneurial success in its broadest sense is highly relevant. First, entrepreneurs are important for our society. Entrepreneurship contributes to employment creation, productivity and economic growth. At the same time, entrepreneurship has the potential to deliver innovative solutions to social and environmental problems. The numerous programmes for entrepreneurs and SMEs launched by the European Commission are recognition of entrepreneurship's importance for Europe. Second, for the individual entrepreneur, entrepreneurship seems to be a highly satisfying career choice, one that arguably incorporates many aspects characterizing ongoing changes in the world of work, such as increased uncertainty, responsibility, time-pressure and insecurity. Thus, insights into the psychology of entrepreneurship can help work and organisational psychologists understand the effects of the ongoing changes in the world of work. Finally, entrepreneurs as founders, owners and managers of their organisations shape not only fundamentally the main goals of their business, its organisational culture and core business practices; they also shape the work environment for their employees and thereby can have profound influences on their employees well-being and performance. The psychology of entrepreneurship is a relatively young research field that has much to offer to the understanding of successful entrepreneurship in all its facets (economic, social, personal and societal). It has made some progress in the past couple of decades, yet opportunities to contribute are vast as a lot remains unclear. This small group meeting aimed to contribute to the development of the field through critically reflecting on papers representing current state-of-the-art research and key note presentations outlining strengths and weaknesses of current psychology of entrepreneurship research as well as setting directions for future research.

Format

The format of the meeting was a small scale workshop taking place over three days beginning Friday morning and lasting through Sunday noon. Twenty-five scholars hailing from a wide range of countries participated. We received a total of 25 high quality submissions, which were independently reviewed against methodological and theoretical criteria. Subsequently, fourteen papers were selected for presentation at the Small Group Meeting (SGM). Each paper presentation during the SGM lasted twenty minutes, was then discussed by a pre-allocated discussant for another five minutes, followed by a ten minute discussion with all participants. We had asked participants to insert open questions in their research with the final papers submitted to the meeting. These open questions helped discussants and participants to provide useful feedback. The contributions for the meeting were clustered around five topic streams, which we created based on the submission to the meeting:

- 1) Advancing research on entrepreneurial careers: Entrepreneurship as a Career Choice;
- 2) Cognitions and decisions;
- 3) Leadership and entrepreneurship;
- 4) Actions and self-regulation;
- 5) Performance in family firms.

Six keynote presentations were planned. Unfortunately two keynotes were cancelled last minute (one on the day of the presentation) due to personal circumstances. Nevertheless, the SGM participants saw excellent keynote presentations by four senior experts (Prof. Dr. John Arnold, Prof. Dr. Per Davidsson, Prof. Dr. Christian Korunka and Prof. Dr. Lorraine Uhlaner). Challenges in

publishing research on psychology of entrepreneurship were discussed during an additional “meet-the-editors” session with (field, associate, consulting) editors of leading psychology (Human Relations, Journal of Vocational Behavior, Journal of Occupational and Organizational Psychology, Organizational Psychology Review) and entrepreneurship journals (Journal of Business Venturing, Small Business Economics). At the end of each day, the presentations of that day were discussed from a practitioners’ perspective and two Ph.D. students shared their impressions from an early career perspective.

Program and Abstracts

DAY 1 - Friday, June 29th

Welcome to the EAWOP Small Group Meeting

Dr Marjan Gorgievski & Dr Ute Stephan
Background and aims of the meeting

Opening KEYNOTE “Design & Methods in Entrepreneurship: Challenges and Opportunities for Psychology”

Professor Per Davidsson, QUT Business School, Brisbane Australia

Entrepreneurship is a fascinating phenomenon of immense societal importance. As representatives of a mature discipline, scholars with a solid background and anchoring in psychology can make many valuable contributions to our understanding of this phenomenon, drawing on theories, methods and research traditions that have already been established in various branches of psychology. However, in order to maximize these contributions, psychologists who migrate into this area would do well to try to systematically avoid (repeating) common mistakes in prior entrepreneurship research, and to identify and concentrate on those areas where psychologists arguably have the greatest comparative advantage for developing knowledge about entrepreneurship. This keynote address builds upon my – an amateur, “semi-psychologists” – personal reflections about these challenges and opportunities for psychologists interested in entrepreneurship. Among traps to avoid I will discuss a) ambiguity and inconsistency in the definition of entrepreneurship; b) overfocusing on person-based explanations (“fundamental attribution error”), and c) the use of overly heterogeneous samples. Among opportunities I will address drawing on disciplinary expertise in i) experimental and ii) multi-level designs, as well as in iii) the operationalization of theoretical constructs. Further, psychological research traditions may usefully feed into investigations beyond one person-one venture designs by addressing issues of iv) entrepreneurial teams (i.e., small groups) and v) entrepreneurial careers. On the individual level, psychologists are well equipped to investigate vi) non-financial, individual outcomes of entrepreneurship. Finally, recent research has ventured into the genetic drivers of entrepreneurial behavior. Here, psychologists can act as vii) competent critics as well as viii) help bridging the gap between genetic bases and overt behaviors by identifying psychological moderators and mediators.

KEYNOTE “Entrepreneurship and Career Theory”

Professor John Arnold, University of Sheffield, UK

Much career theorizing over the last fifteen years or so has emphasized the need for individuals to take charge of their own development, and avoid relying on organizations to do it for them (as if that was ever a good idea!). Some of the states of mind and behavioural strategies involved in career self-management are described in terms that are reminiscent of entrepreneurship and/or autonomy and independence. In this presentation I will review some of this theory and research, and invite participants to reflect with me on its utility for understanding the work lives and achievements of entrepreneurs.

Track 1: Entrepreneurship as a Career Choice

PAPER: An entrepreneurial Big Five profile matters, but why?

Authors: Martin Obschonka, University of Jena, Germany, M. Stuetzer, QUT Business School, Brisbane, Australia, & M. Goethner, University of Jena, Germany

Discussant: Sebastiaan Fisher

There is convincing evidence that a specific constellation of Big Five personality traits within the person relates to entrepreneurship. According to this research, an entrepreneurial personality profile can be assessed by the goodness-of-fit between the individual Big Five profile and an entrepreneurial reference type (high values in extraversion, conscientiousness, and openness, and low values in agreeableness and neuroticism). It is less clear, however, *why* such a trait profile matters for entrepreneurial activity. In this study, we apply the Giessen-Amsterdam model to examine pathways through which an entrepreneurial Big Five profile might affect entrepreneurial outcomes. The model states that the Big Five traits should exert an effect through more specific traits, such as self-efficacy, locus of control, and risk-taking. In the present study, we examined these specific traits as mediators between the entrepreneurial Big Five profile on the one side, and entrepreneurial intentions, behavior, and success on the other. We analyzed longitudinal data from the German Socio-Economic Panel (GSOEP) and the Thuringian Founder Study (TFS). In the GSOEP data, we found the positive relationship between an entrepreneurial Big Five profile and self-employment status to be mediated by risk propensity and locus of control. The potential founder survey of the TFS revealed that the positive relationship between the trait profile and founding intentions is mediated by entrepreneurial self-efficacy. Furthermore, the Big Five profile showed an indirect effect on actual founding behavior 18 via entrepreneurial self-efficacy. Finally, in a sample of nascent entrepreneurs, we found the Big Five profile to positively predict generalized self-efficacy, which in turn predicted the progress of the start-up projects in the venture creation process, but only for those nascent entrepreneurs who had prior work experience in small and young firms. In sum, the results indicate that an entrepreneurial Big Five profile gets expressed via more specific entrepreneurial traits.

PAPER: Who Wants to Be an Entrepreneur? The Relationship between Vocational Interests and Individual Differences in Entrepreneurship

Authors: Gorkan Ahmetoglu, Goldsmiths, University of London, UK, P.I.L. Almeida, UCL, London, UK & T. Chamorro-Premuzic, UCL, London, UK

Discussant: Michiel Crommelinck

Psychology has made a major contribution to the field of entrepreneurship, with individual differences being at the forefront of research for decades. Although a number of domains (including personality, cognitive ability, and motivation) have been examined in the field, very few research efforts have focused on interests. Yet several authors have suggested that interests are a complementary, and even a necessary, component in the individual differences structure. Accordingly, this study attempts to fill this void by examining the relationship between entrepreneurship and vocational interests. Specifically, it investigates whether there is an association between vocational interests (as measured by Holland's RIASEC model), entrepreneurial potential (as assessed by META; Ahmetoglu, Leutner, & Chamorro-Premuzic, 2011) and entrepreneurial activity, both within and outside organisations. The analysis of the results reveals predictable associations between Holland's taxonomy of vocational interests and entrepreneurial outcomes. Furthermore, incremental validity tests show that vocational interests (RIASEC) predict entrepreneurial activity even when entrepreneurial potential (META) is taken into account. However, the results also reveal that META is by far the strongest and most consistent predictor of entrepreneurial activity, accounting for most of the variance in these outcomes. Findings are discussed in terms of their implication for selection and vocational guidance.

PAPER: The influence of individual values on entrepreneurial intention

Authors: Juan Antonio Moriano, UNED Madrid, Spain, F. Linan, Universidad de Sevilla. Spain & I. Jaen, Universidad de Sevilla, Spain

Discussant: Deirdre O'Shea

From a cognitive perspective, the theory states that intentions are the best predictors of any planned behavior, including entrepreneurship. Understanding factors that may influence entrepreneurial intentions gives the possibility of better understanding entrepreneurship at its very beginning. Nevertheless, the identification of individual values and the effect they exert on the decision to become an entrepreneur is clearly an under-researched area of study. The study examines the value-intention link in entrepreneurship on a sample of 3415 Spanish university graduates. Schwartz's Portrait Value Questionnaire (PVQ) is used to measure values. Results confirm the positive effects of openness to change and self-enhancement values dimensions on the development of entrepreneurial intention in Spain.

PAPER: Psychosocial characterization of social entrepreneurs: A comparative study in Antofagasta, Chile

Authors: Mariana Bargsted Aravena, Universidad Católica del Norte, Chile

Discussant: Gorkan Ahmetoglu

Social entrepreneurship is a topic of growing interest that demands empirical studies on different aspects. It is any kind of project, services and goods oriented to create social value. This is an exploratory study aimed to identify a distinctive psychosocial profile of social entrepreneurs in Antofagasta, Chile. We conducted a factorial study in which we distinguished social entrepreneurs, volunteers, philanthropists and commercial entrepreneurs in several psychosocial variables: personal values, entrepreneurship orientation (proactivity, entrepreneurial self-efficacy, risk tendency, and control locus), social motivation, empathy orientation, and career identity. Our work hypothesis was that social entrepreneurs present a particular profile related to values of benevolence and self-direction, high entrepreneurship orientation, hetero-centered empathy, a social motive similar to altruism, and career identity based on service and entrepreneurship. We found evidence to maintain our hypothesis and, therefore, it was possible to characterize social entrepreneurs.

TRACK2: Cognition and Decisions

PAPER: Business opportunity recognition and decision to launch a venture

Authors: Susana C. Santos & Antonio Caetano, ISCTE-IUL, Instituto Universitário de Lisboa, Portugal

Discussant: Dominika Dej

The present research aims to present a bi-dimensional model of the processes of business opportunity recognition and decision to launch a venture. Integrating evidence from the prototype literature, their organization of clusters based on meaning similarity, and on business opportunity recognition as pattern recognition theory (Baron, 2006; Baron and Ensley 2006), we suggest that the prototypical features of the business opportunity and decision to launch a venture will be organized in subgroups with similar content. We develop four theoretical propositions and two hypotheses. We conducted a study on an entrepreneur sample (n = 173). The questionnaire on the prototype measures for business opportunity and decision to launch a venture was adapted from Baron and Ensley (2006). This research is a step forward and showed that (a) the business opportunity prototype includes two dimensions: business opportunity utility and business opportunity distinctiveness; and (b) the decision to launch a venture includes two dimensions: exogenous decision to launch a venture and endogenous decision to launch a venture. The importance of business opportunity recognition and decision to launch a venture on the entrepreneurial process is

stressed by the relevance that both have on the process. They refer, respectively, to the first and second stages of the entrepreneurial process, and consequently, there is no entrepreneurship without business opportunity recognition and decision to launch a venture. It is important to focus on understanding these two stages, in order to develop better training and to improve successful business opportunities ideas and decisions to launch a venture.

PAPER: Beyond form and substance: how the colors used in business plans influence venture investment decisions

Authors: Richard Chan, Peking University, HSBC School of Business, China & H.D. Park, Drexel University & University of Missouri – Kansas City, USA

Discussant: David Achtzehn

Decision makers consciously process and interpret informational cues, but they are also non-consciously influenced by irrelevant, peripheral cues. We explore how the use of color, a prominent peripheral cue, in business planning documents influences new venture investment decisions. Blue and red are often associated with positive and negative outcomes respectively. We predict that the greater use of red in business plans would reduce the amounts invested in new ventures, while more blue would increase it. Using a major business plan competition as our empirical setting, we found that the use of red in business plans was associated with lower amounts invested in new ventures. However, we failed to find a positive relationship between the use of blue in business plans and levels of investment. Our study illustrates that in addition to informational cues, peripheral cues can also influence the initial selection and evaluation of new venture investment opportunities.

KEYNOTE: “Group dynamics and entrepreneurship: Applying social/organization psychology to the study of owning groups”

Professor Lorraine Uhlaner, EDHEC Business School, France

Whereas the entrepreneur is often viewed as the ‘lone ranger,’ much entrepreneurial activity takes place in groups—Groups of owners (both family and nonfamily) make up nearly half of all established private firms. Yet, with the exception of the family business literature, entrepreneurship research typically refers to the single “owner-manager” or “entrepreneur” (in the singular) as the target of study. The field of psychology, more generally, almost completely ignores owners. However, study of owning groups provides a great opportunity for applying a variety of social and organization psychology concepts and theories, including organizational commitment, organizational citizenship behavior, pro-social behavior, stewardship theory, social identity theory, and research on teams. In my presentation, I will present some examples of such applications to current research topics including psychological ownership, commitment (both family and ownership), responsible ownership behavior, family governance practices, and relational governance.

Reflections from Practitioner Perspective

Josette Dijkhuizen, Entrepreneur, The Netherlands

Reflection from an Early Career Perspective

Sylvia Acquah & Sarah Agahi, Doctoral Researchers

DAY 2 - Saturday, June 30th

TRACK 3: Leadership and entrepreneurship

PAPER: Linking leader personal initiative to innovation project success: The role of entrepreneurial strategic orientation for business innovation projects

Authors: Sebastian Fisher, Leuphana University, Germany

Discussant: Mariola Laguna

As put forward in the call for papers for the EAWOP small group meeting, entrepreneurs as founders, owners and managers of their organizations shape the core business practices, and by that the work environment for their employees. In this paper, we want to explore how entrepreneurs' personal initiative affects the success in business innovation projects, done by employees. We suggest that the entrepreneurial, strategic posture of the business mediates the relationship, because it suggests which actions are appropriate in innovation projects. Hypotheses were tested in a sample of 39 entrepreneurial businesses in Germany, including data from 61 entrepreneurs and 563 employees. Results indicate that personal initiative predicts entrepreneurial orientation facets of innovativeness, risk taking, and proactiveness positively. Additionally, the entrepreneurial orientation facets of innovativeness, autonomy and competitive aggressiveness influence success in innovation projects positively, whereas risk taking influences success in innovation projects negatively. Interestingly, indirect effects via competitive aggressiveness and risk taking are negative, indicating that success in innovation projects would benefit from higher competitive aggressiveness and less risk taking of entrepreneurs. Last, personal initiative predicts success in innovation projects after entrepreneurial orientation is controlled for. In sum, this project brings together literature on active performance and entrepreneurial success with literature on predictors for team innovation success. We are able to provide entrepreneurs with insights on how to lead their business, and we advance theoretical understanding on multilevel influences in entrepreneurial, small businesses.

PAPER: When you are good to mama, mama's good to you: Exploring employment relationships in high-tech start-ups using the psychological contract

Authors: David Achtzehn, Loughborough University, UK

Discussant: Susana Santos

Human capital in new ventures is believed to be a critical success factor, yet the literature on the working environment in entrepreneurial firms remains surprisingly scarce. This article explores the employment relations in young, growth orientated, high-tech firms in Berlin and London, paying particular attention to the relational and often intrinsically motivated nature of the relationship. The paper proposes the psychological contract as an appropriate analytical framework to gain a deeper insight into the motivations and expectations of employees working in innovative start-ups. The results stress the unique context of the entrepreneur as an employer, the short career capital window they face and the distinct management strategies they embrace. Often a parental management style similar to the philosophy of "Queen Latifah" in the musical Chicago is adopted as a motivation as well as control mechanism. The findings also suggest that a "fun culture" and an opportunity for personal growth frequently compensate employees for a lack of guidance and professionalism. The article helps to inform prospective employees about the benefits and challenges of joining a start-up and encourages entrepreneurs to further tailor their management and compensation strategies. In addition, the article is an original attempt to enhance the theory of psychological contracts by linking it to the field of entrepreneurship for the first time.

PAPER: How do entrepreneurs' emotional intelligence and transformational leadership orientation impact new ventures' growth?

Authors: Ronit Yitshaki, Bar-Ilan University, Israel

Discussant: Juan Antonio Moriano

This study examines the interrelations between entrepreneurs' emotional intelligence (EI), transformational leadership behaviors and growth. Based on data collected from 99 entrepreneurial firms, the findings show that entrepreneurs' EI has an indirect impact on growth. Entrepreneurs' EI is positively related to entrepreneurs' intellectual stimulation and individualized consideration and entrepreneurs' charismatic-inspirational behaviors. However, only entrepreneurs' charismatic-inspirational behaviors impacts growth. The findings extend the literature by suggesting that entrepreneurs' EI is a "latent" emotional capability that impacts their transformational leadership orientation. It is also suggested that by employing charismatic-inspirational behaviors, entrepreneurs' demonstrate their ability to *enlist* and *manage* followers' emotions and hence influence growth.

PAPER: Entrepreneurs' social skills moderating effects on the relationship between their employees' psychological job demands and psychological health: A multi-level study.

Authors: Dominika Dej, Dresden University of Technology, Germany, M. Zaba, Dresden University of Technology, Germany, M. Shemla, Dresden University of Technology, Germany, & U. Stephan, University of Sheffield, UK

Discussant: Anna Jenkins

This study examines the influence of entrepreneurs' personal characteristics on the relationship between job demands and employees' work outcomes. The participants were 34 entrepreneurs and 384 employees. Using a hierarchical linear modeling (HLM) approach, we found a negative relationship between psychological job demands (level 1) and psychological health (level 1). We found that this relationship was moderated by entrepreneurs' social skills (level 2) and mediated by employee perceived leader social support. These finding suggest that social skills, which have been shown to impact entrepreneurial success, seem also to be crucial for employees' work outcomes. Interventions targeting entrepreneurs' social skills may contribute to employee well-being in small and medium-sized companies.

Track 4: Entrepreneurs' Action- & Self-Regulation

PAPER: Feedback seeking in times of uncertainty: a multi wave study among nascent entrepreneurs

Authors: Michiel Crommelinck, Ghent University, Belgium & F. Anseel, Radboud University Nijmegen, The Netherlands

Discussant: Richard Chan

Uncertainty is fundamental to entrepreneurship. In this paper we take a first step towards understanding the proactive tactics used by entrepreneurs to manage uncertainty as we examine how nascent entrepreneurs' feedback-seeking behaviors impact uncertainty over time. In addition, we investigate characteristics of entrepreneurs, the feedback received, and the business idea as moderators. A longitudinal data collection project with four measurement waves is currently being conducted using a sample of 500 nascent entrepreneurs in Belgium.

PAPER: Affect and goal engagement in entrepreneurs: moderating role of positive orientation

Authors: Mariola Laguna, The John Paul II Catholic University of Lublin, Poland, G. Alessandri, Sapienza University of Rome, Italy & G. Caprara, Sapienza" University of Rome, Italy

Discussant: Mariana Bargsted

The paper aims to explain the mechanisms of entrepreneurs' engagement in entrepreneurial activity and in family life. It contributes to the understanding of the role of job-related and family-related affects and positive orientation in goal engagement. This study is one of the first efforts to examine personal goals as a multilevel construct that allows the analysis of intrapersonal processes. The participants of the study were 246 entrepreneurs; each of them owned a firm and either was married or had a stable partner. The Personal Projects Analysis method and three scales assessing three components of positive orientation (self-esteem, life satisfaction, and optimism) were used. The respondents were asked to list their current 5 personal goals concerning work and 5 concerning family domains; then, they rated them according to 10 dimensions which allow assessing goal engagement and goal-related affect. For the data analyses multilevel structural equation modeling was used, differentiating between the goal's level and the individual's level. The findings show that positive and negative goal-related affect exerted unique and opposite effects on engagement in goal realization. Whereas positive affectivity sustains individuals' striving to achieve particular goals, negative affectivity makes them refrain from personal investments in goal realization. Yet, the contribution of positive affectivity to engagement in the realization of family goals can be further strengthened by positive orientation, both at the individual's and at the goal's level.

Challenges in Publishing Research on the Psychology of Entrepreneurship - Meet the Editors Session

Professor John Arnold, consulting editor with: JOOP, Journal of Vocational Behavior, Human Relations, and Organizational Psychology Review

Professor Per Davidsson, Field Editor Management and Entrepreneurship, Journal of Business Venturing

Professor Lorraine Uhlaner, Associate editor of Small Business Economics Journal.

Reflection from Practitioner Perspective

Josette Dijkhuizen, Entrepreneur, The Netherlands

Reflection from an Early Career Perspective

Sylvia Acquah & Sarah Agahi, Doctoral Researchers

DAY 3 - Sunday, July 1st

Keynote: "Conflicts, family and performance in family firms"

Christian Korunka, University of Vienna, Austria

Many researchers in the growing field of family business research ask for a broader theoretical base including psychological theories (e.g., Pieper, 2010). The current study serves as an example of a psychological approach to family business research. The effects of relationship conflict and family climate on business performance and the moderating role of family climate on the relationship conflict – business performance relation are analysed. A sample of 392 family businesses (online questionnaire survey) was available for statistical analyses. Negative effects of relationship conflict and positive effects of family climate on business outcomes were confirmed. Adaptability and cohesion - two aspects of family climate – could be confirmed to moderate the relationship conflict – business performance relationship.

Within the EAWOP small group meeting, we would like to stimulate a discussion regarding possible research topics and links between psychological entrepreneurship research and the growing field of family business research.

Track 4: Entrepreneurs' Action-& Self-Regulation Part 2

PAPER: Managing grief: a key to re-entry after firm failure

Authors: Anna Jenkins, Jönköping International Business School, Sweden

Discussant: Ronit Yitzhaki

Using transactional model of stress and coping developed by Lazarus and colleagues as an overarching theoretical framework, this paper investigates the how entrepreneurs cope with firm failure. I hypothesize that feelings of grief and financial loss influence the relative use of different coping strategies. In turn, I hypothesize that the choice of coping strategies influences re-entry into self-employment and subsequent feelings of grief. To test these hypotheses I developed a unique, longitudinal database of entrepreneurs who recently filed for firm bankruptcy. The findings largely support the hypothesized relationships. I found that it is the relative use of active and avoidant coping strategies that has implications for whether entrepreneurs re-enter self-employment. The findings contribute to the emerging stream of literature on entrepreneurial failure and the habitual entrepreneurship literature by providing valuable insights into the role of coping after firm failure.

PAPER: The role of emotion regulation and future oriented emotions in the motivation of entrepreneurs

Authors: Deirdre O'Shea, University of Limerick, Ireland & F. Buckley, University of Limerick, Ireland

Discussant: Martin Obschonka

Drawing on research and theory on emotions regulation, coping and future-oriented emotions, the present research investigated the role of reappraisal, anticipated positive emotions and the coping strategy related to the suppression of competing activities in the motivation of early stage entrepreneurs. Specifically, the research considered the motivational variables of entrepreneurial self-efficacy and work engagement, as these are key drivers in the persistence of entrepreneurial endeavours. The data was collected using a mixed method design comprising an interview and questionnaire with 64 early stage entrepreneurs in Ireland. The results were analysed using partial least squares structural equation modelling. The findings suggested that the strategy of suppressing competing activities mediated the effect of entrepreneurial self-efficacy on work engagement. Furthermore, there was some evidence for the emotion regulation strategy of reappraisal moderating the effect of anticipated positive emotions on entrepreneurial self-efficacy. The research is one of the first studies to examine the role of cognitive emotion regulation strategies on the motivation of entrepreneurs, and demonstrated the importance of future oriented emotions and emotion regulation for entrepreneurial self-efficacy and work engagement. Directions for future research and practical implications are also discussed.

Reflection, Summary and Next Steps. Dr Ute Stephan & Dr Marjan Gorgievski

Lessons learned

Summarizing, the following lessons could be learned from the presented work.

1) The personality approach to entrepreneurship that focuses on the question of who becomes an entrepreneur is still very much alive. It is evolving, arguably quite slowly, from a static black-box approach toward a dynamic process-approach. For example, research models are expanded by adding specific rather than global personality traits, using a person-oriented rather than a variable-oriented approach and including vocational interest and personal values in addition to character and abilities (e.g. papers Obschonka et al., Moriano et al.).

2) The idea of the existence of “one entrepreneurial profile” was challenged in several studies (e.g., keynote Arnold, papers Bargstead et al., Ahmetoglu et al.). For example, not only Holland’s entrepreneurial type, but also people with other vocational interests intended to start businesses. By no means do all who are self-employed hold an entrepreneurial career anchor (Feldman & Bolino, 2000). It seems more plausible that different types of people pursue different goals and hence follow different entrepreneurial career patterns.

3) Explaining variation within the population of entrepreneurs as opposed to treating entrepreneurs as one homogeneous group (e.g. keynote Davidsson, paper Bargstead et al, paper Ahmetoglu et al.). The personality approach is also used to explain specific entrepreneurial outcomes, such as successful business innovation and growth. The focus within this line of research is on lower order personality aspects and more specific processes, for example relations between risk taking and innovation success, or the impact of emotional intelligence on business growth through charismatic leadership. This makes it easier to identify possible mechanisms behind the findings.

4) Important lessons can be learned from moving the focus from the entrepreneur and business success to entrepreneurs as leaders and their relationship with their employees (e.g., papers Dej et al., Fischer et al.; Achtzehn; Yitshaki et al.) or leaders of owner teams (keynotes Uhlaner, Korunka, see also point 7). In a multi-level study, Dej et al. showed how entrepreneurs’ personalities can influence employees’ job characteristics, and moderate relations between job characteristics and employee performance and well-being outcomes (Dej et al.). While another study highlighted how entrepreneurs’ personality influences their firms strategic orientation and subsequently how successful employees work on innovation projects. Employment relations in entrepreneurial companies may particularly interest work-and organizational researchers. A qualitative study (Achtzehn) presented during this small group meeting indicates working for entrepreneurial firms has specific motivational aspects which are worth further investigation.

5) Two presentations at the meeting highlighted cognition is a key component of the entrepreneurial process and an area where psychologists can make unique contributions. Research on business opportunity recognition is embedded in cognitive psychology, and is unraveling the processes of how people perceive and interpret business opportunities. Opportunity recognition is an essential aspect of entrepreneurship during all stages. The research presented at the meeting showed new dimensions of this process as well as how opportunity recognition relates to the decision to start a new venture (Santos et al.). Another study (Chan et al.) emphasized that investors make their investment decisions not just based on informational cues, but base their decisions also on peripheral cues, such as the font colors used in a business plan.

6) Self-regulation emerged as an important aspect of entrepreneurship that helps entrepreneurs to launch their businesses, achieve work-life balance, cope with and re-start after firm failure, and more generally stay motivated (papers by Crommelick et al., O’Shea & Buckley; Jenkins; Laguna et al.) . The

SGM contributions on this topic were methodologically rigorous, using either longitudinal or multi-level approaches. Results showed the importance of different self-regulation processes, such as the role of feedback seeking in order to reduce uncertainty. Other topics were (cognitive) emotion regulation in order to improve goal striving and engagement in both the work and private domain, the importance of suppressing competing activities and reappraisal as a mediator of the relation between entrepreneurial self-efficacy and work engagement, and dealing with grief after business failure.

7) Even fewer psychologists engage in family business research than in more general entrepreneurship research. In family businesses, yet other psychological processes are being investigated as predictors of performance than in research on psychology of entrepreneurship in general. These processes involve social interactions and aspects of two systems, the business and the family. The keynote by Uhlaner highlighted the unique contribution that organizational psychology can make to understanding family business. Korunka presented a study showing the relation between relationship conflict and business performance was moderated by family climate (adaptability and cohesion) – leveraging insights from organisational climate research.

Emerging research agenda

Needs assessment. In the entrepreneurship literature there is growing consensus on what topics should be central to entrepreneurship research. These generally relate to new business entry, business growth and opportunity recognition, but also individuals and teams, business environments and organizing principles (Busenitz, West, Shepherd et al, 2003). The field of work and organization psychology still ignores business owners and entrepreneurs and in contrast almost exclusively focusses on employees, maybe because for work and organizational psychology, the focus on some of these topics may not be self-evident. It would be good to assess what topics need study from a psychological perspective. Relatedly, psychology of entrepreneurship researchers would need to pay more attention to ways in which their research findings can benefit entrepreneurs and professionals working with entrepreneurs.

Specific topics emerged during the small group meeting.

Defining the sample of interest. Psychologists would need to avoid ambiguity and inconsistency in the use of the “E-words” (Davidsson, this meeting). Different definitions of entrepreneur(ship) are in use, and researchers are not always clear on whether they focus on the self-employed, entrepreneurs or entrepreneurship (Arnold, this meeting). It is helpful to distinguish two underlying dimensions: whether one owns a firm yes or no, and whether one is opportunity/value-seeking yes or no (Uhlaner, this meeting). Arguably, a “real entrepreneur” owns a firm and is opportunity/value-seeking, e.g. by introducing innovative products into the market and growing his/her firm. Another issue that needs attention is that almost half of all private enterprises (and by definition all public enterprises) are owned by two or more people. Hence it is likely that “the entrepreneur” is not a lonely ranger, but rather part of a dynamic group, which should not be ignored. Psychological entrepreneurship research should go beyond research on the individual entrepreneur (Uhlaner and Korunka, this meeting), and include, for example, entrepreneurial teams or families.

Outcomes. Research outcomes should go beyond the question of who becomes or who intends to become an entrepreneur, and how we can explain objective or financial business success. Other outcomes matter as well, and may even better fit the interest and expertise of psychologists. Such outcomes are, for example, subjective success and well-being (viability), who becomes what type of entrepreneur (e.g. innovative or imitative, small scale vs. growth-seeking, social vs. for-profit), or aggregated performance over multiple tasks, i.e. entrepreneurial *career* success rather than *business*

success (Davidsson and Arnold, this meeting). Additionally, if psychologists wish to predict objective financial career success, they are wise to acknowledge that many other variables in the company environment and company structure play a role (heterogeneity of the sample).

Entrepreneurship from a career perspective. There is still a lack of interest in entrepreneurial careers from a lifetime perspective. A deeper understanding of how such different career patterns develop is lacking. This means there is a lot of scope for adapting career material into the entrepreneurship domain (Arnold, this meeting), in order to understand more about: 1) how entrepreneurship may help express different career orientations and personal goals and 2) the consequences of these orientations and goals for business behaviours and success. Specific themes from career psychology that seem particularly useful in an entrepreneurship context are “the boundary-less career”, the “Protean” career and “career anchors”. To date, there is not much evidence that people who hold attitudes favouring boundary-less or Protean careers have more successful or nicer lives because of it. However, perhaps these attitudes are a good predictor of being a (successful, happy) entrepreneur.

Personality approach. The personality approach to entrepreneurship needs to become more dynamic. Fruitful avenues may be to look at configuration models rather than additive, black box models or a applying a person versus variable approach (Ahmetoglu et al., and Obschonka et al., this meeting). Personality research could be expanded by including also personal interests and values as predictors (Ahmetoglu et al, Arnold, this meeting). Research may even include genetics (Davidsson, this meeting). A process approach to personality also means looking at interactions between entrepreneurs’ characteristics and the external business environment or between entrepreneurs and employees (e.g., Dej et al., this meeting). Finally, research could look at reciprocal relationships between personality and entrepreneurs’ experiences over time.

Family business. There are many links between entrepreneurship research and family business research and many topics in the realm of family business research are explicitly psychological and thus potentially interesting for psychology of entrepreneurship researchers. Examples are managing conflicts, emotions, gender, family interactions, governance/leadership, and success (Korunka, this meeting). Building on organizational behavior and social psychology, psychologists could expand existing entrepreneurship (but also finance) theories, for example by including psychological aspects of the owners (motives, beliefs, perceptions, behaviors, patterns of interaction) which are currently largely ignored (Uhlener this meeting). Also from a small group or team perspective psychologists could contribute to family and entrepreneurship research.

Cross cultural aspects. Few studies presented at this meeting explicitly addressed cross-cultural aspects and tested cross cultural validity of their findings. Questions concerning generalizability across samples (e.g. developed vs. developing countries) remain open.

Methodological issues. In order for psychology of entrepreneurship to develop as a research field, a larger variety of methodological designs would need to be employed. Several issues have been put forward (Davidsson, this meeting). Studies would need to employ longitudinal, multi-level designs in order to unravel dynamic processes, and this is something psychologists are very good at. Multi-level designs also allow for taking heterogeneity of the population into account. Systematically including other levels of influence in the design, such as the firm environment in addition to entrepreneurs’ personality in order to predict entrepreneurial success is an important tool when dealing with heterogeneity that may otherwise obscure the influence of psychological variables. Another remedy would be to focus on specific entrepreneurial samples to decrease the possible influence of environmental variables. Finally, there is a need for more experiments. Studies could, for example, focus on the Person x Situation Interaction and experimentally manipulate the situation to see what makes *any* individual act entrepreneurially.

During the meeting, participants discussed further steps of how we could advance research on the psychology of entrepreneurship. The consensus among participants was to assemble a special issue and funds permitting to repeat the Small Group Meeting in two years' time. Subsequently, we developed a special issue proposal informed around the gaps that became apparent during the SGM and building on the lessons learned and notions of the emerging research agenda set out above. The proposal was accepted by Applied Psychology: An International Review (APIR). The call for papers will be issued in summer 2013. Among other things, publishing the special issue with APIR hopefully further strengthens the cross-cultural dimension of psychology of entrepreneurship research.

Evaluation

The small group meeting received good evaluations. Participants (N=15) would recommend this meeting to their friends and colleagues and scored the meeting between 4 (agree) and 5 (strongly agree) on all criteria: 1) meeting was useful, 2) meeting was enjoyable, 3) sufficient opportunity to learn, 4) sufficient time for networking, 5) the expectation that this meeting will lead to the establishment of a strong research network, 6) organization was good, 7) the facilitation and moderation was good, 8) facilities were good, 9) food and drinks were good. The overall rating of the meeting was 8.92 on a ten point scale.

Table 1. Evaluation of the small group meeting

Criterion	rating
1) This conference was very useful.	4.57
2) I found this conference very enjoyable.	4.64
3) I learned a lot from this conference.	4.50
4) I would recommend this conference to my colleagues/other researchers in the field.	4.57
5) This conference will contribute to the establishment of a strong research network.	4.43
6) There was sufficient time for networking during this conference.	4.57
7) This conference was well organized.	4.86
8) The facilitation and moderation of the conference was good.	4.64
9) Facilities were good	4.36
10) Food and drinks were good	4.86
Overall evaluation (1-10)	8.92

The participants indicated the most valuable aspects of the small group meeting were the small group size, the quality of the key-notes and paper presentations, plenty of time for discussion and getting feedback on the papers. The close connection with the keynote speakers was especially valued. Point for improvement was that participants wanted more time for leisure and informal contact and time together to discuss future projects and collaboration.

Conclusion

From the meeting it can be concluded there are a growing number of good quality studies on topics related to the psychology of entrepreneurship. The diversity of research topics as well as research methods and scientific rigor of psychology of entrepreneurship studies has definitely improved since

the publication of a special issue on the topic in EJWOP in 2000. However, the topics and theoretical background of many studies is still rather management oriented, and studies could build even more on psychological theories and address psychological processes. The meeting highlighted that participants were typically the only ones in their research groups investigating entrepreneurship and hence the opportunity for exchange with like-minded psychologists during this small group meeting was extremely valued. We would like to see even more psychologists to apply their theories and methods in the field of entrepreneurship, thus focusing on the individuals and teams generating employment rather than solely at employees. In addition, the methodological approaches of researchers working in the area of psychology of entrepreneurship would need to become more diverse. Even though multi-level, multi-source and longitudinal designs are used more and more often, many studies to date still rely on cross-sectional, single-source survey data. Finally, researchers working in the field of psychology of entrepreneurship need to pay closer attention to cross-cultural aspects of their work – i.e. studying the entrepreneur or entrepreneurial team in relation to their context (business and cultural environment).