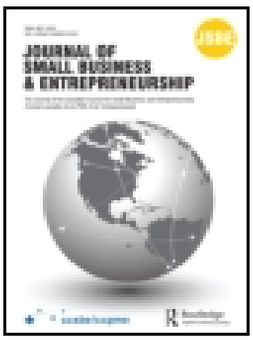

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Predicting self-employment intentions and entry in Germany and East Africa: an investigation of the impact of mentoring, entrepreneurial attitudes, and psychological capital

Martin Mabunda Baluku[a,b], Peter Onderi[c] and Kathleen Otto[a]

[a]Work and Organizational Psychology, Department of Social Psychology, Business and Methods, Philipps-University, Marburg, Germany; [b]Department of Educational, Social, and Organizational Psychology, Makerere University, Kampala, Uganda; [c]Department of Psychology, Maseno University, Maseno, Kenya

ABSTRACT

Self-employment is a feasible and in some contexts the most available form of employment especially for new entrants into the labor market. Understanding student's willingness to go into self-employment and the factors important to the process of becoming self-employed is therefore important. This paper explores the role of entrepreneurial mentoring, attitudes, and psychological capital in development of self- employment intentions among students. A two-year longitudinal survey of final year university students (288 German and 498 East African) was conducted. The follow-up survey (T2) of 103 participants was conducted within 6 months and 2 years after graduation. Results suggest that entrepreneurial mentoring, attitudes, and psychological capital are directly related to self-employment intentions. Attitudes mediated the relationship between mentoring and intentions. Furthermore, psychological capital moderated the effects of mentoring and attitudes on self- employment intentions. East African participants reported higher intentions (T1) and higher rate of entry into self-employment (at T2) compared to the German participants. Contrary to our assumption, however, psychological capital did not have substantial effects on self-employed entry. The implications of these findings are discussed.

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KEYWORDS
Cultural context; entrepreneurial attitudes and intentions; mentoring; psychological capital; self-employment entry

1. Introduction

The dynamics in the labor market have resulted in an increase in the number of people engaged in alternative forms of employment such as entrepreneurship and freelancing. All these can be said to be self-employed individuals. Self-employment includes 'employers and own-account workers' or 'owners of incorporated and unincorporated businesses' (Parker 2004, 6). The self-employed are particularly

CONTACT Martin Mabunda Baluku martin.baluku@staff.uni-marbug.de Work and Organizational Psychology, Department of Social Psychology, Business and Methods, Philipps-University, Gutenberg Str. 18, Marburg, 35032 Germany.

engaged in generating residual income (Patel and Thatcher 2014), moreover, they all face the risk of economic uncertainty (Dana 2009). Therefore entrepreneurs too can be regarded as self-employed, however, not all self-employed are entrepreneurs (Patel and Thatcher 2014). Despite the indication that the self-employed often earn less than their counterparts in salaried positions (Sevä, Larsson, and Strandh 2016), it is becoming a dominant and important form of employment in some contexts, for example in less developed countries (Falco and Haywood 2016; Gindling and Newhouse 2014). Since self-employment contributes to creating employment and wealth, it is a key driver of economic development (Fritsch and Wyrwich 2014; Praag and Versloot 2008; Valliere and Peterson 2009), hence the enormous efforts geared towards promoting entrepreneurship among young people, especially in less developed countries.

Explaining antecedents of entrepreneurial intentions and startup is one of the major domains in entrepreneurship research, resulting into several theoretical explanations, the dominant ones being the Ajzen's Theory of Planned Behavior (TPB) and Shapero's Entrepreneurial Events (SEE) model (Krueger, Reilly, and Carsrud 2000). Both models suggest that motivation for entrepreneurial activity is driven by social and personal factors. In the SEE, engagement in entrepreneurial activity is a function of certain information or events, dependent on perceptions of desirability and perceptions of feasibility (Shapero and Sokol 1982). On the other hand, the TPB proposes that entrepreneurial intention and behavior are a function of attitudes, perceived behavioral control, and perceived social norms (Ajzen 1991). In both models, there are exogenous variables that have indirect effects on entrepreneurial intention and activity through perceptions and attitudes (Krueger, Reilly, and Carsrud 2000; Zhang, Duysters, and Cloodt 2014).

In the present study, we posit that entrepreneurial mentoring is an exogenous and socialization factor (Starr and Fondas 1992) whose effect on self-employment intention and entry is mediated by entrepreneurial attitudes. It has been argued that although the impact of education on entrepreneurial intention has been investigated, this strand of research is one that is still evolving (Zhang, Duysters, and Cloodt 2014; Byabashaija and Katono 2011) moreover the findings tend to be contradictory across different contexts (Nabi et al. 2017). In this direction, we examine the effects of entrepreneurial mentoring on attitudes, intentions and entry in two different contexts: Germany (a developed country with predominantly individualistic culture) and East Africa (less developed with a predominantly collectivistic culture) (cf. Hofstede, Hofstede, and Minkov 2010; World Bank 2017).

Previous research on the antecedents of entrepreneurial intentions and startup, based on the models stated above have also underlined the role of personal factors. Importantly, research has so far examined the contributions of a few psychological constructs including personality and cognition (Liñán and Fayolle 2015). In addition, there are new constructs that represent psychological abilities that also affect the way individuals perceive and respond to reality. The present study particularly focuses on the role of psychological capital in the development of entrepreneurial intention, and in the movement from intention to actual self-employment entry.

Psychological capital is a state-like construct that represents four psychological resources including confidence or self-efficacy, hope, resilience and optimism (Luthans, Luthans, and Luthans 2004; Luthans and Youssef-Morgan 2017). Recent

research shows that this construct is related to several work-related variables including positive work attitudes (Avey et al. 2011; Newman et al. 2014; Luthans and Youssef-Morgan 2017). Extant research has so far applied psychological capital to explaining subjective outcomes of entrepreneurship including satisfaction, and psychological well-being (Baron, Franklin, and Hmieleski 2016; Baluku, Kikooma, and Otto 2018; Hayek 2012; Hmieleski and Carr 2008). Whereas there is evidence indicating that some facets of psychological capital including self-efficacy and optimism are important in entrepreneurial intentions and behavior (e.g. Storey 2011; Trevelyan 2008; Shinnar, Hsu, and Powell 2014; Piperopoulos and Dimov 2015); there is limited research focusing on the role of psychological capital in the development and implementation of intentions (e.g. Contreras, Dreu, and Espinosa 2017). Moreover, this study only focuses on the relationship between psychological capital and intentions. The present study posits that psychological capital is an intangible resource that moderates the link between antecedents (particularly mentoring and attitudes) and entrepreneurial intention; and that it plays a role in the implementation of intentions.

In this paper, we do not only focus on entrepreneurial intention, but also the movement from intention to the actual entry. For new businesses to be created, individuals have to act on their entrepreneurial intentions. This is highlighted in the propensity to act facet of the SEE (Shapero and Sokol 1982). Despite the essentiality of the movement from entrepreneurial intention to entry, it remains a major gap (Fayolle and Liñán 2014; Adam and Fayolle 2015). Whereas both intentions and entry are widely studied, they have rarely been studied together. In this direction, we particularly 'do continuous mentoring and one's amount of psychological resources determine whether an individual will implement entrepreneurial intentions?' Beyond psychological resources, financial investment is important in the course of starting one's own business; and has the potential of influencing the movement from intentions to entry given its impact on the exploitation of entrepreneurial opportunities (Kim, Aldrich, and Keister 2006). Availability or searching for resources is one of the ways of identifying prospecting entrepreneurs (Katz and Gartner 1988). We, therefore, further investigate the significance of availability or lack of financial capital in the movement from intention to entry into self-employment.

The paper is structured as follows. In the proceeding section, we present the theoretical framework on self-employment intentions and behavior. This part also includes literature explaining the role of mentoring, culture, attitudes and psychological capital in the development of self-employment intentions and entry and derives our hypotheses. In the third section, we describe the methodology we employed in conducting the study. In the fourth section, we present the findings on the association of mentoring, cultural differences, and psychological capital on attitudes as well as on self-employment intentions and entry. The last section focuses on the discussion of our results, highlighting the implications of our findings for research and interventions aimed at promoting self-employment.

2. Theoretical framework

Research on entrepreneurial intentions and processes in recent decades has largely relied on the theory of planned behavior (Ajzen 1985, 1991); which is by far one of

the most applied models for predicting social behavior (Ajzen 2011). This research has demonstrated that entry into entrepreneurship or self-employment follows intentions and is a planned process (Fayolle, Liñán, and Moriano 2014; Krueger 2003; Krueger, Reilly, and Carsrud 2000). According to this perspective, behavioral intention signifies the readiness to engage in a particular action; which intention is determined by attitudes towards the behavior, subjective norm and perceived behavior control (Ajzen 1991, 2011). Entrepreneurial intention, therefore, signifies interest in creating one's own business (Katz and Gartner 1988; Krueger, Reilly, and Carsrud 2000) and is a mediator between exogenous influences and entrepreneurial behavior itself (Krueger, Reilly, and Carsrud 2000). Most of the entrepreneurial intentions research over the last three decades has largely confirmed this basic assumption of TPB.

The TPB presents intentions as the mediating mechanism through behavior specific attitudes, subjective norm and perceived behavioral control affect actual behavior (Kautonen, van Gelderen, and Fink 2015). However, given the complex tasks and processes involved in a business startup, the influence relationship between intentions and entry may not be linear (Kautonen, van Gelderen, and Fink 2015). The TPB model suggests that the effects of intention on behavior are expected to be high when perceived control is also high (Ajzen 1991). This signifies the importance of psychological processes and resources not only in the formation of intentions but also in implementing the intentions. The TPB already suggests that perceived behavioral control is not only an antecedent of intention but also plays a critical role in the implementation of behavioral intentions (Ajzen 2002). A key component of perceived behavioral control is self-efficacy (Ajzen 2002) which is also among the important psychological resources that constitute psychological capital (Luthans and Avolio 2014; Harms and Luthans 2012). It is therefore likely that beyond self-efficacy, psychological capital, in general, is an important resource for prospecting entrepreneurs to translate intentions into action.

It is posited in the TPB that several personal and background factors such as personality, broad life beliefs, and demographic factors including sex, age, and education impact on influences that are proximal to intentions and behaviors (Ajzen 2011). In line with this assumption, we propose that socialization factors, particularly mentoring and culture influence entrepreneurial attitudes, intentions, and behavior, both directly and indirectly. The entrepreneurial socialization perspective posits that choice to become self-employed is influenced by predisposing characteristics and experiences, yet after the development of a firm decision to become an entrepreneur, socializing agents such as peers and seniors provide different resources, such as information, that assist in adjusting to the entrepreneurial role (Starr and Fondas 1992). In support of this view, Krueger (2007) demonstrates that movement from a novice to an expert entrepreneur requires a change in knowledge content and knowledge structure. Although Krueger attributes this change to critical development experiences, entrepreneurial education research highlights the contribution of training, role models, and mentors (Honig 2004; Pretorius, Nieman, and van Vuuren 2005; Van Auken, Fry, and Stephens 2006). Putting all the above theoretical propositions together, we postulate that mentoring is an important means through which individuals become

entrepreneurially aware leading to positive entrepreneurial attitudes and strong intention to go into self-employment.

However, the influence of mentoring on attitudes and intentions may be dependent on the amount individuals' psychological capital and vary among countries given differences in culture and other contextual issues. We further postulate that movement from self-employment intentions to entry also influenced by mentoring and psychological capital. Based on the arguments of Katz and Gartner (1988) regarding the properties of emerging organizations, resources (especially financial capital and information) are important for engaging in the entrepreneurial process. This is linked to entrepreneurial intention. Individuals with the intention to start a business require informational and knowledge support (St-Jean and Audet 2012). Nonetheless, one cannot implement entrepreneurial intentions and exploit opportunities without financial resources. Therefore, its effect on entrepreneurial entry cannot be ignored. Towards this direction, (Krueger, Reilly, and Carsrud 2000) observes that entrepreneurial intentions, besides being the immediate antecedent of entrepreneurial behavior and mediating the influence of exogenous factors, are also useful in understanding other antecedents including perceived availability or lack of resources. In the SEE, perceptions of feasibility are an important factor for intention and action towards starting a business (Shapero and Sokol 1982; Krueger, Reilly, and Carsrud 2000). This includes perceptions of financial visibility. Putting all these propositions together, we derive the following conceptual model.

2.1. Entrepreneurial attitudes and self-employment

The SEE posits that one of the determinants of a choice to engage in a given behavior is desirability (Shapero and Sokol 1982). This desirability is a reflection of the attitude towards a behavior; hence the desirability component of the SEE is similar to the attitude component of the TPB (Krueger, Reilly, and Carsrud 2000). Entrepreneurial attitudes have been confirmed as one of the major drivers of entrepreneurial intention and behavior (Autio et al. 2001; Kautonen, van Gelderen, and Fink 2015; Fitzsimmons and Douglas 2005; Robinson et al. 1991; Fayolle and Gailly 2015). Attitudes are a major motivating force and the central facet of the theory of planned behavior in predicting behavioral intentions (Robinson et al. 1991). The kind of attitude an individual hold towards entrepreneurship forms the basis for evaluating the expected outcomes which in turn determine the willingness to become self-employed.

There are two streams of research on entrepreneurial attitudes. One stream studies attitudes as a general concept (e.g. Fellnhofer and Puumalainen 2017; Fayolle and Gailly 2015). While the other stream focuses on specific attitudes including risk attitude, autonomy, competition, and attitudes towards entry requirements (e.g. Douglas and Shepherd 2002; McNally et al. 2016; Valtonen 2007). In the present study, our conceptualization is in line with the earlier stream that studies general attitude towards entrepreneurship. Much of the literature nonetheless, highlights the role of risk and autonomy in describing liking or dislike for entrepreneurship. The general finding that has been replicated in numerous studies is that intentions and entry in self-employment are associated with a higher risk attitude (Brachert, Hyll, and Titze

2014; Hu 2014; Brown et al. 2011; Schwarz et al. 2009; Gupta and York 2008; Douglas and Shepherd 2002; Skriabikova, Dohmen, and Kriechel 2014). This is because individuals with lower levels of risk attitude tend to prefer the stability of income (Di Mauro and Musumeci 2011) in salaried employment, yet income in self-employment is highly variable.

An increasingly important attitude in relation to choice of careers is autonomy or independence in the workplace. The self-determination theory posits that autonomy is one of the psychological needs that drive behavior in occupational situations (Deci et al. 2001; Deci and Ryan 2000; Ryan and Deci 2000). Therefore, individuals with a high need for autonomy tend to choose careers or work situations with a higher likelihood of satisfying this need. Yet changes in social roles and trends an the emphasis on self-reliance have increased the importance of freedom in work situations (Van Gelderen 2010). Consequently, autonomy has become an important consideration among the expected outcomes of a career or job (Croson and Minniti 2012; Douglas and Shepherd 2002). Satisfaction of this need is associated with higher satisfaction among the self-employed (Lange 2012).

Overall, as presented in the TPB, attitudes result from behavioral beliefs, which particularly regard the likely outcomes of the behavior (Ajzen 1985, 1991). This reflects and is quite similar to what Shapero and Sokol (1982) label as desirability; that is the attractiveness to engage in entrepreneurial activity. We posit that individuals who are attracted to entrepreneurship will report a stronger intention to start a business of their own, representing the willingness to pursue self-employment as a career.

H1. Entrepreneurial attitudes are positively associated with self-employment intentions.

2.2. Intentions as a predictor of self-employment entry

Recent systematic reviews of the literature have highlighted the gap in empirical research relating to the link between entrepreneurial intentions and entry and calls for investigations of this link have been made (Liñán and Fayolle 2015; Adam and Fayolle 2015; Fayolle and Liñán 2014; Nabi et al. 2017). An important proposition of the theory of planned behavior is that intentions are the best predictor of the likelihood that an individual will engage in behavior (Ajzen 1991; Ajzen 2011); therefore mediating mechanism between exogenous influences and entrepreneurial behavior (Krueger, Reilly, and Carsrud 2000). Towards this, the few studies that have examined the intention-behavior link have found that intentions predict big variances in behavior (e.g. Armitage and Conner 2001). In specific regards to entrepreneurial behavior, support for self-employment as an intentional behavior has been found by previous studies (e.g. Kautonen, van Gelderen, and Tornikoski 2013; Kautonen, van Gelderen, and Fink 2015; Kolvereid and Isaksen 2006). Consequently, it can be said that self-employment intentions have an influence on the likelihood of one becoming self-employed in the future. However, research shows that this relationship is stronger in the long-term than in the short-term (Stenholm 2011; Liñán and Fayolle 2015). We, therefore, hypothesize that

H2. Intentions (at T1) will predict the likelihood of being self-employed (at T2).

2.3. Mentoring and self-employment

Entrepreneurial mentoring is an intervention that typically aims at increasing startups and growth of nascent entrepreneurs. This emphasis stems from the assumption that learning entrepreneurial and business skills increase entry, survival, and success in business (St-Jean and Audet 2012; Matlay 2008). Mentoring in entrepreneurship implies that an institution or an experienced entrepreneur supports the development of a nascent or prospective entrepreneur (St-Jean and Audet 2012). Such support enhances career growth of the protégés (Gong, Chen, and Lee 2011) through the acquisition of the required vital skills (Beckett 2010; Xiao and North 2017). Certainly, prospective entrants and newly self-employed individuals require constant skills development and support to keep in pace with the fast changing competitive business environment; which is indeed very important for a startup performance (Xiao and North 2017).

Mentoring is often provided in varying forms depending on the needs of the mentee and competencies of the mentor. Mentoring may include supporting protégés through coaching, sponsorships, role modeling, experience sharing, hands-on or exposure training, linkage to useful business and professional networks, providing information about opportunities, counseling, friendship, encouragement and persuasion as well as giving advice and recommendations (Radu Lefebvre and Redien-Collot 2013; Gong, Chen, and Lee 2011; Rickard and Rickard 2009; Sullivan 2000; Beckett 2010; Kram and Isabella 1985). The entrepreneurial mentoring process is also regarded as a pathway to strengthening opportunity recognition and startup success of nascent entrepreneurs through enhanced technical, professional and visionary skills. Constant interactions with seniors or role models and those who are knowledgeable in entrepreneurial processes are likely to improve one's sense of professional identity (Radu Lefebvre and Redien-Collot 2013; St-Jean and Audet 2012; Terjesen and Sullivan 2011), thus positively impacting on entrepreneurial attitudes (Audet and Couteret 2012). Enhanced professional identity as an entrepreneur not only has the potential for strengthening attitudes and intentions among prospecting entrepreneurs but can also directly enhance motivation and effort towards startup.

Recent research and practice have concentrated on entrepreneurship education in universities and other learning institutions. The thinking is that specialized entrepreneurship training attracts students to entrepreneurial activities, hence increasing the likelihoods of starting business ventures (Ahmed, Chandran, and Klobas 2017; Fayolle, Gailly, and Lassas-Clerc 2006; Tkachev and Kolvereid 1999). Although such programs are effective in enabling students to develop entrepreneurial intentions and consequently business startups (Fayolle, Gailly, and Lassas-Clerc 2006; Tkachev and Kolvereid 1999; Xiao and North 2017; Garcia, Leles, and Romano 2017; Fayolle and Gailly 2015), entrepreneurial education is not necessarily superior to other forms of entrepreneurial training (Ahmed, Chandran, and Klobas 2017). Therefore, in our measurement of entrepreneurial mentoring, we do not limit ourselves to the formal education aspect, but also to coaching, role modeling, encouragement, counseling, exposure, and experience sharing that often occur in less formal arrangements. Recent research (Huq and Gilbert 2017) has also sought to advance entrepreneurial training to a combined model of education, mentoring and co-ownership; which

purportedly results in satisfactory entrepreneurial learning outcomes. A combination of entrepreneurial training, coaching, and exposure to entrepreneurial role models increase chances of choosing a career in entrepreneurship via strengthened attitudes and intention (Autio et al. 2001; Fayolle and Gailly 2015).

One stream in the mentoring literature particularly emphasizes coaching and role modeling as essential for enhancing skills and attitudes of protégés. Regarding coaching as a mentoring approach, it plays a double role in facilitating skills acquisition and catalyzing the entrepreneurial behavior of the prospective entrepreneur (Audet and Couteret 2012). Concerning role modeling, it is seen as a powerful tool for enhancing positive attitudes towards entrepreneurship among young people (Lafuente and Vaillant 2013). Bandura (1969) posited that role modeling involves forming thoughts, affect and behavior that identifies an individual with the model. This has the power to enable young people to develop a professional identity (Kram and Isabella 1985) as prospective entrepreneurs. In addition to learning and aiding and the development of self-concept, role models are a source of inspiration and behavior modification (Bandura 1977; Gibson 2004), which may be essential for decisions to become self-employed. In general, previous studies have revealed that individuals who participated in entrepreneurship learning or mentoring programs had increased intentions and a higher likelihood of startups (e.g. Bosma et al. 2012; Fayolle and Gailly 2015; Solesvik 2013; Xiao and North 2017). Participation in entrepreneurial training or having role models impacts on entrepreneurial attitudes and self-efficacy (Günzel-Jensen, Moberg, and Mauer 2017; Jabeen, Faisal, and Katsioloudes 2017; Karlsson and Moberg 2013), which are further linked to intention and behavior (Baluku, Kikooma, and Kibanja 2016; Byabashaija and Katono 2011; Fitzsimmons and Douglas 2005; Karlsson and Moberg 2013; Sequeira, Mueller, and McGee 2007). This suggests that the impact of mentoring on intentions and behavior is not direct, but rather through mediating mechanisms such as improved attitudes. We, therefore, hypothesize that:

H3a. Mentoring is positively associated with entrepreneurial attitudes.

H3b. Mentoring is positively associated with self-employment intention.

H3c. The association between mentoring and self-employment intention is mediated by entrepreneurial attitudes.

H3d. Mentoring is positively associated with self-employment entry.

2.4. The impact of context

It has been argued that contextual factors can account for the contradictions in findings relating to the impact of entrepreneurship education on outcome indicators (Nabi et al. 2017). Culture and economic development contexts are major circumstantial influences that are proximal to entrepreneurial behavior. In the TPB model, these contexts fit in the components of normative beliefs and perceived control; but also contribute to perceived desirability and perceived feasibility in the SEE model.

Extant research has identified aspects that constitute entrepreneurial and non-entrepreneurial cultures. Based on (Franke, Hofstede, and Bond 1991; Hofstede, Hofstede, and Minkov 2010; Hofstede 1984), entrepreneurial cultures are considered

to be low on power distance, individualistic, high on masculinity, low on uncertainty avoidance, and high on long-term orientation (Tlaiss 2014; Vinogradov and Kolvereid 2007; Lee and Peterson 2000; Mueller and Thomas 2001; Minkov and Hofstede 2012). Hence less entrepreneurial cultures tend to be collectivistic, high on power distance, high uncertainty avoidant, short-term orientated and high on feminism (Eroglu and Picak 2011; Hofstede and Minkov 2010; Minkov and Hofstede 2012). The differences in cultural orientations are also presented in the literature as accounting for the geographical differences in entrepreneurial activity and economic development (Liñán and Fernandez-Serrano 2014; Franke, Hofstede, and Bond 1991; Huggins and Thompson 2014). In the present study, we examine the impact of entrepreneurial mentoring on attitudes, self-employment intentions and entry in the contexts of individualistic and collectivistic cultures. Specifically, the study was conducted in Germany which is a highly individualistic and Uganda and Kenya from East African Community which is relatively low on individualism (Hofstede, Hofstede, and Minkov 2010). We posit that there are variations among countries in the impact of mentoring on entrepreneurial attitudes and intentions dependent on the cultural context. This is in line with (Rauch et al. 2013) to study culture as a moderator in entrepreneurship research and the gap in the extant literature concerning the contextual influences on the association between entrepreneurial learning and outcome indicators (Nabi et al. 2017).

Previous research associates entrepreneurship or self-employment with individualistic cultures (e.g. Lee and Peterson 2000; Mueller and Thomas 2001; Tlaiss 2014). Independence orientation is correlated to autonomy and risk-taking (Omerzel 2016; Kreiser et al. 2010). Particularly in relation to self-determination theory (Deci et al. 2001; Ryan and Deci 2000), the need for autonomy could be a motivating force for individualistic people to choose a career in self-employment. This offers them more likelihoods of career satisfaction than other employment alternatives (Kawaguchi 2002; Berglund, Johansson Sevä, and Strandh 2015). In relation to the impact of entrepreneurial learning, a recent study indicated that entrepreneurship education is more important for entrepreneurship activity in countries that are high (Oo et al. 2018).

On the other hand, there is an argument that collectivism is not necessarily bad for entrepreneurship. Entrepreneurial culture research from collectivistic contexts has illuminated the role of collectivism. Particularly, cohesiveness is highlighted as essential to implementing innovations (Rowley, Behrens, and Krackhardt 2000) and particularly has an impact on growth (Rauch et al. 2013). In this way, collectivism can boost self-employment entry through its association with social capability, creating networks and ability to pool resources from different networks. However, if establishment of the firm poses challenges to social norms, it could lower chances of entry into self-employment, given that normative deviance is less tolerated in collectivistic societies (Wennberg, Pathak, and Autio 2013), yet some level of deviance is necessary for entrepreneurship (Akhtar, Ahmetoglu, and Chamorro-Premuzic 2013). But there is no empirical evidence to confirm whether such limitations also impede on the effect of entrepreneurial learning on entrepreneurial attitudes and intentions.

Regarding the economic development contexts, East Africa comprises of low-income economies characterized by rapidly growing and young populations (World

Bank 2017; United Nations Department of Economic and Social Affairs Population Division 2017). This poses an unemployment challenge. In such a context, self-employment is the most common form of employment (Gindling and Newhouse 2014). This implies that individuals may already have high entrepreneurial intentions, limiting the potential impact of entrepreneurial mentoring on forming intentions (Nabi et al. 2017). It is hence likely that the impact of entrepreneurial mentoring on intentions is higher in Germany than in East Africa.

Considering this extant literature on the influence of culture and economic context, we hypothesize that:

H4a. Entrepreneurial attitudes are higher in Germany (individualistic and more developed context) than in East Africa (collectivistic and less developed context).

H4b. Self-employment intentions are higher in Germany (individualistic and more developed context) than in East Africa (collectivistic and less developed context).

H4c. The impact of mentoring on entrepreneurial attitudes is higher in Germany (individualistic and more developed context) than in East Africa (collectivistic and less developed context).

H4d. The impact of mentoring on entrepreneurial intentions is higher in Germany (individualistic and more developed context) than in East Africa (collectivistic and less developed context).

H4e. Implementation of self-employment intentions into actual entry is higher in East Africa (collectivistic and less developed context) than in Germany (individualistic and more developed context).

2.5. The role of psychological capital

Entry and success in self-employment require more than financial or material capital. Entrepreneurs require psychological resources to recognize and effectively exploit opportunities. In their model of entrepreneurial psychological capital, Pease and Cunningham (2016) reiterate that entrepreneurs need psychological resources to successfully navigate the entrepreneurial process. Psychological capital a positive developmental state comprising of four mental resources; self-efficacy (confidence), optimism, hope and resilience (Luthans, Luthans, and Luthans 2004; Luthans, Youssef, and Avolio 2015; Luthans, Youssef, and Avolio 2007c; Luthans and Youssef-Morgan 2017). Although the entrepreneurial psychological capital model proposes the inclusion of positive traits such as creativity, proactivity and entrepreneurial orientation (Pease and Cunningham 2016) , proponents of this construct provide evidence that only the four aspects (self-efficacy, hope, resiliency, and optimism) meet the criteria for inclusion (e.g. Luthans and Youssef-Morgan 2017).

Although the construct of psychological capital emerged in the area of positive organizational behavior (Luthans 2002; Youssef and Luthans 2007) and has been extensively studied in explaining employee behavior and outcomes, its application to entrepreneurial processes and behavior is by far limited. Moreover, the few studies on entrepreneurial psychological capital focus on its impact on different facets of success (e.g. Hmieleski and Carr 2008; Baluku, Kikooma, and Kibanja 2016; Baron, Franklin, and Hmieleski 2016; Baluku, Kikooma, and Otto 2018). However, some facets of

psychological capital especially self-efficacy and optimism have been applied to studying entrepreneurial learning outcomes (e.g. Karlsson and Moberg 2013; Laviolette, Lefebvre, and Brunel 2012; Austin and Nauta 2016; Trevelyan 2008) and explaining intentions and entry (e.g. Sequeira, Mueller, and Mcgee 2007; Dalborg and Wincent 2015). This suggests that psychological resources are important at the various phases of the entrepreneurial process including the formation and implementation of intentions to start a business.

The exploratory study of Contreras, Dreu, and Espinosa (2017) is by far the only research we are aware of that has applied the psychological capital construct to entrepreneurial intentions. The authors observe that the integrated construct, as well as its single facets, are related to entrepreneurial intentions. The present study investigates the role of the construct beyond the direct relations that Contreras, Dreu, and Espinosa (2017) observe. As a resource, psychological capital could be a conditioning factor that enables individuals to transform entrepreneurial mentoring and attitudes into firm intentions to start a business. We, therefore, investigate its moderation effect on the relationship between entrepreneurial mentoring, attitudes, and self-employment intentions; as well as its association with entry.

Extant literature on psychological resources that relate to entrepreneurial intentions and entry is dominated by the focus on the aspects of self-efficacy and optimism only. Self-Efficacy or confidence refers to an individual's belief in personal capacities to achieve a goal or complete a task (Bandura 1982). In the study of self-employment, it could be referred to as the confidence that inspires individuals to undertake the challenging yet risky role of entrepreneurship or face the challenges of running a business (Luthans, Youssef, and Avolio 2007c; Luthans et al. 2007b; Boyd and Vozikis 1994). Self-efficacy is necessary at the different stages of the entrepreneurial process, starting with developing entrepreneurial intentions, recognizing opportunities and harnessing the required resources (Culbertson, Smith, and Leiva 2011; Dimov 2010; Contreras, Dreu, and Espinosa 2017). Its role in lowering risk perceptions and fear of failure are particularly considered important (Goel and Karri 2006; Piperopoulos and Dimov 2015).

The importance of optimism is highlighted by the theoretical emphasis on the role of outcome expectations. For example, the TPB stresses that such expectations heighten the behavioral attitude consequently influencing intentions and behavior (Ajzen 1985, 1991). Optimism is a psychological state where individuals are confident of positive results now or later (Luthans et al. 2007b) and is a driver for action, resilience, and commitment (Trevelyan 2008). Hence, optimism is necessary for the choice of an entrepreneurial career, formation of intentions, evaluating opportunities, and startup decisions (Rigotti, Ryan, and Vaithianathan 2011; Storey 2011; Trevelyan 2008).

Less has been documented on the role of hope and resiliency in self-employment intentions and entry. Concerning the aspect of hope, it is described as a motivational state for developing and persisting in pursuit of goals (Luthans et al. 2007b; Rand and Cheavens 2012; Snyder 2002). This description points to the likely impact on the process of translating self-employment intentions into actual entry behavior. Regarding resiliency, the mental capacity to cope with adversity and uncertainty (Luthans et al. 2007b), is observed to correlate with entrepreneurial intentions (Contreras, Dreu, and

Espinosa 2017) and success (Baluku, Kikooma, and Kibanja 2016). The ability to cope with challenges, change, and failure also suggests that resiliency could be an important resource in making startup decisions and persisting during the startup phase. In sum, psychological capital could be a powerful resource for nascent and prospecting entrepreneurs. We, therefore, hypothesize that high psychological capital is required for translating entrepreneurial mentoring and attitudes into self-employment intentions, and for implementing intentions.

H5a. Psychological capital is related to self-employment intentions.

H5b. Psychological capital is related to self-employment entry.

H5c. Psychological capital moderates the effects of entrepreneurial attitudes on self-employment intentions.

H5d. Psychological capital moderates the effects of mentoring on self-employment intentions.

2.6. The impact of financial capital

Whereas we posit that mentoring and psychological resources are essential to the implementation of intentions therefore predictive of entry into self-employment, establishing one's own business involves several processes and activities. Most of these processes are dependent on financial resources. Previous research shows that individuals go into self-employment because of opportunities or necessity (Xavier-Oliveira, Laplume, and Pathak 2015; Verheul et al. 2010). However, financial capital is a relevant resource (Xavier-Oliveira, Laplume, and Pathak 2015; Dunn and Holtz-Eakin 2000) which enables individuals to implement their planned entrepreneurial activities. Although this is disputed by findings of Kim, Aldrich, and Keister (2006), financial capital at least has an influence on the approach individuals use to become entrepreneurs (Bastié, Cieply, and Cussy 2013). Hence individuals with limited access to financial resources may have limited possibilities of entry into entrepreneurial roles. This implies that only those with financial ability have a higher likelihood of exploiting entrepreneurial opportunities, especially when there are other alternative employment opportunities (Xavier-Oliveira, Laplume, and Pathak 2015). We, therefore, hypothesize that:

H6. Lack of financial capital reduces the likelihood of entry into self-employment.

3. Methods

3.1. Procedure

We conducted two studies with university students in their final year/semester of their degree courses in Germany and East Africa (Uganda and Kenya). For the German sample, final year students at the University of Marburg were requested via student mailing lists to complete an online questionnaire (T1). For the East African sample, finalizing students at Makerere University (Uganda), Kisii and Maseno Universities (Kenya) were contacted in their lecture rooms through their professors since student mailing lists were not available for these universities. To effectively

study the link between self-employment intentions and entry, and to overcome some of the shortcomings of cross-sectional data, we applied a longitudinal design, collecting data on continuous mentoring and entry into self-employment in Study 2. All participants were contacted via e-mail one to two years later to complete an online follow-up questionnaire (T2).

3.2. The sample

The sample comprised of students in the final year of their university studies (Bachelor, Diploma, and Master) from Germany and East Africa. For Germany, participants were invited through the student mailing list of Philipps-University Marburg, which has a population of over 25,000 students. For East Africa, 2000 students were asked, in their lecture rooms at three universities (Makerere University, Kisii University, and Maseno University), to respond to the survey questionnaire. Overall, a total of 786 students completed the study questionnaire at T1 (55% female); 498 from East African and 288 from Germany. They were on average aged 23.45 years ($SD = .62$). Most participants had never had any self-employment or business related experience (75.2%). All participants were in their last semester, thus completing their degree courses at most in six (6) months' period from the time of completing the questionnaire. Majority of the students (75.2%) had never had an experience in self-employment.

At T2, only students who had participated in Study 1 and indicated their willingness to participate in the follow-up survey (458 East African and 278 German) were contacted via e-mail. However, only 477 (353 East African and 124 East African) who had provided valid addresses were contacted to participate in the follow-up survey. This process yielded 103 complete responses that we were able to match with the responses of T1; which is a response rate of 21.59%. Although this is lower than the average response rates of 39% in entrepreneurship research (Rutherford et al. 2017), it has been found that there is no evidence suggesting that low response rates affect relationships in entrepreneurship studies (Rutherford et al. 2017). The participants included 50 from East Africa (24 females & 26 males) representing a response rate of 14.16% and 53 from Germany (30 females & 23 males) representing a response rate of 42.74%. Among the East African participants, 12 had entered salaried-employment, 18 had entered self-employment, 11 were still unemployed, while nine were still in school. Among the German participants, 14 had entered salaried employment while only three were in self-employment, five were unemployed and 21 were still in school. Those still in school included those who had enrolled for graduate studies or had not yet graduated (28.2% of the total sample). On average, participants were aged 25.1 years ($SD = 3.26$). Regarding their school completion time, 18.4% reported to have graduated 6 months before the follow-up survey (T2), 28.2% had graduated in a period of six months to one year, while only 25.2% had graduated in a period of one to two years before the follow-up survey. Moreover, 77.7% did not have previous experience in self-employment. Overall, the descriptive characteristics of the samples at T1 and T2; regarding age, gender and previous experience in self-employment were quite similar, hence we can assume no selection biases at T2.

Table 1. Descriptive statistics and partial correlations of variables (T1).

	M	SD	α	1	2	3	4
1. Mentoring (T1)	2.88	1.10	.97	1			
2. Entr. attitude	3.76	1.39	.65	.30***	1		
3. Psychological capital	4.39	.61	.87	.21***	.18***	1	
4. S.E. Intentions	4.87	1.95	.97	.46***	.42***	.27***	1

Note: *** $p < .001$, Controls: age, sex, country, and previous self-employment experience.

3.3. Measures

Descriptive statistics and inter-correlations of all measures used in Studies 1 and 2 are provided in Table 1.

Mentoring: Focus for measuring students' participation in formal and informal mentoring relating to self-employment or business in general. The mentoring questionnaire by Baluku et al. (2018) was adopted. The questionnaire consists of 22 items (sample item: I have been provided with practical suggestions for becoming self-employment). All the 22 items were adopted for measuring mentoring in the cross-sectional study (T1). For the follow-up study (T2), seven (7) items were constructed focusing on continued access to mentoring after graduation (sample item: Since graduation, I have been guided on practical steps to entering self-employment or setting up a personal business). Items measured the frequency of access to or participation in different aspects of entrepreneurial mentoring on a 5-point Likert type scale; 1 (Never) to 5 (Always). These questionnaires had high internal consistency ($\alpha = .97$ for T1, and $\alpha = .94$ for T2). Although high reliability is preferred (Webb, Shavelson, and Haertel 2006), it can indicate redundancy of some items (McCrae et al. 2011).

Entrepreneurial Attitudes: were measured using Schwarz et al. (2009) questionnaire on general attitudes towards entrepreneurship. It consists of 2 items ($\alpha = .65$; sample item: I would rather found a new company than be the manager of an existing one). These items were measured on a 5-point Likert scale (1 – strongly disagree to 5 – strongly agree). The questionnaire was preferred because it is short compared to alternatives such as the entrepreneurial attitude orientation scale (Robinson et al. 1991). Whereas shorter measures especially single-item scales can result into underestimation of constructs being measured (Credé et al. 2012), it is argued that in some instances they are preferable in some instances such as self-report surveys (Gosling, Rentfrow, and Swann 2003; Credé et al. 2012). Although the reliability coefficient is below the recommended threshold of .70 (Nunnally 1978), this threshold is contested (e.g. Schmitt 1996).

Contextual Influences: To explore the effect of cultural and development context, we compared Germany and East Africa regarding the impact of mentoring on entrepreneurial attitudes and self-employment intentions. We used (Hofstede, Hofstede, and Minkov 2010) categorization of countries on the individualism-collectivism dimension. Accordingly, Germany scores highly on the individualism dimension (67) compared to East Africa (25 for Kenya; data for Uganda is not yet available but we assume no differences between Kenya and Uganda, given that another country in the East African Community - Tanzania has the same scores). Concerning the development context, Germany is ranked as a high-income

economy while the East African countries are considered low-income economies (World Bank 2017).

Psychological capital: The Psychological Capital Questionnaire (PCQ) in its self-rater version (Luthans, Avolio, and Avey 2007a) was adopted. This questionnaire measures four aspects of psychological capital (self-efficacy, hope, resiliency, and optimism) with six items for each dimension, measured on a 6-point Likert scale (1 – strongly disagree to 6 – strongly agree). Psychometric data from an analysis by Dawkins et al. (2013) revealed that the PCQ has an overall reliability of Cronbach α ranging from 0.88 – 0.89. The internal consistency reliability in the present stay was close to this range (α = .87).

Self-employment intentions: were measured using (Liñán and Chen 2009) entrepreneurial intentions questionnaire. The items were rated on a 7-point Likert scale ranging from 1 (totally disagree) to 7 (totally agree). The instrument composed of six (6) items (α = .97, sample item: I am determined to create a business in the future).

To measure *self-employment entry* (T2), participants were asked to indicate their present employment status (1 = salaried employment, 2 = self-employment/freelancing, 3 = unemployed, 4 = still in school/further education).

To measure the control variable (lack of financial capital), we asked participants to indicate whether their entry into self-employment had been restrained by lack of capital (0 = no, 1 = yes).

3.4. Analytic strategy

We used the PROCESS macro 2.16 (Hayes 2013) to test our hypotheses. Because existing evidence shows that entrepreneurial attitudes, intentions, and startup are also affected by gender (Santos, Roomi, and Liñán 2016), age (Hatak, Harms, and Fink 2015) and past experiences (Cassar 2014), we controlled for the effects of these variables in the analyses of Study 1. With reference to our conceptual model (Figure 1) and hypotheses, the mediating effects of entrepreneurial attitudes in the relationship between mentoring and self-employment intentions were computed. In this analysis (using model 29), differences between Germany and East Africa in the association of mentoring with entrepreneurial attitudes and self-employment intentions were

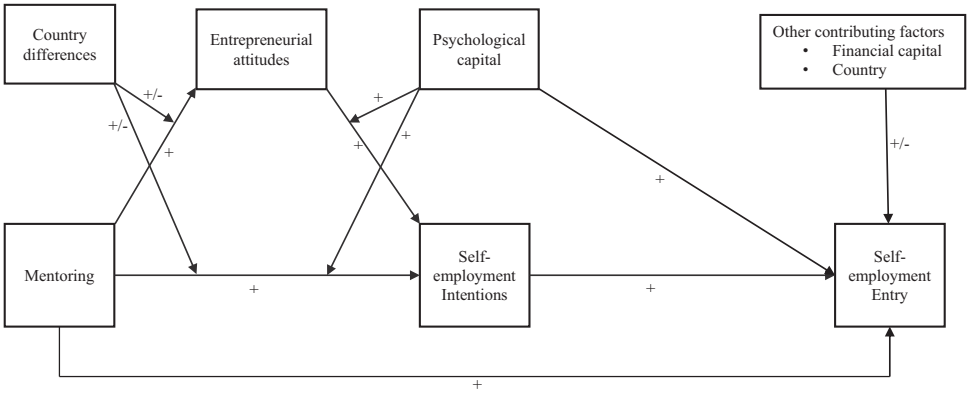

Figure 1. Conceptual model for the study.

examined. Psychological capital was also included as a moderator of the direct and indirect effects of mentoring on self-employment intentions.

Common methods bias is one of the challenges in behavioral research that is believed to relate to four kinds of effects: common rater effects, item characteristic effects, item context effects, and measurement context effects (Podsakoff et al. 2003). All these have the potential to limit our findings. To rule out the common methods bias concern, we used Herman's single factor score (Podsakoff et al. 2003). The total variance of the single factor for Study 1 was 35.14% which is less than the 50% threshold (Podsakoff et al. 2003), hence common methods bias was not a concern for this study.

Regarding Study 2, self-employment intentions (T1) is considered as the independent variable, while self-employment entry (T2) is the outcome variable. To examine the likelihood of being self-employed, as opposed to being salaried employed or unemployed or enrolling in further education, we applied multinomial regression analysis. We also examined for the effects of mentoring (measured at T2), lack/non-lack of financial capital, psychological capital, and differences between Germany and East Africa. To rule out the common methods concern for this study, we again applied Herman's single-factor test. The single factor accounted for a total variance of 30.67%. Hence we are confident that common methods bias had no significant effects on our findings.

4. Results

Results of the partial correlations in Table 1 (controlling for age, gender, and previous business related experience) offer preliminary support for the hypotheses. As posited, mentoring was positively related to entrepreneurial attitudes (*H3a*) and self-employment intentions (*H3b*), yet attitudes were positively related to self-employment intentions (*H1*). Our results also show significant relations for psychological capital with self-employment intentions (H5a); as well as with mentoring and entrepreneurial attitudes. This suggests that students who participate in entrepreneurial mentoring are likely to have higher psychological capital, stronger entrepreneurial attitudes, and higher intentions to establish one's own business. Table 2 presents MANOVA results of comparisons of participants on different predictor variables by employment status (at T2) and country. Despite weaknesses (Everitt 1998), the MANOVA is an acceptable method for analyzing longitudinal data. These results show that participants who had gone into self-employment had significantly higher mean self-employment intention (T1) and continuous mentoring (T2) and lower mean regarding lack of capital (T2) in comparison to those who were unemployed, or who had gone into salaried employment or who had continued with education. In addition, East African participants had significantly higher mean scores on intentions (T1) continuous mentoring (T2) and psychological capital (T1)

The results of the regression analyses are presented in Table 3. Regarding entrepreneurial attitudes, 27% (T1) of the variance could be predicted; while 68% of the variance in self-employment intentions could be predicted (T1). At T2, our model also predicted 61% of the variance in self-employment entry (T2). This pattern of

Table 2. MANOVA results - differences between employment status categories and countries.

	Employment status				Context (differences between countries)			
Variable	*Status*	*M*	*SE*	*F*	*Country*	*M*	*SE*	*F*
Self-employment Intentions (T1)	Self-employed	6.27	.42	7.80***	East Africa	5.91	.20	47.46***
	Salary-employed	4.02	.24		Germany	3.65	.26	
	Unemployed	4.19	.36					
	Still in school	4.65	.27					
Mentoring (T2)	Self-employed	3.57	.19	18.18***	East Africa	3.05	.09	64.33***
	Salary-employed	2.04	.11		Germany	1.84	.12	
	Unemployed	1.94	.17					
	Still in school	2.25	.12					
Psychological capital (T1)	Self-employed	4.78	.21	2.20	East Africa	4.67	.10	2.69***
	Salary-employed	4.67	.12		Germany	4.41	.13	
	Unemployed	4.18	.18					
	Still in school	4.52	.13					
Lack of financial capital	Self-employed	1.64	.13	1.03	East Africa	1.85	.06	1.84
	Salary-employed	1.75	.07		Germany	1.72	.08	
	Unemployed	1.90	.11					
	Still in school	1.85	.08					

Note: *** $p < .001$, Lack of financial capital (0 = no, 1 = yes).

results provides further support for the partial correlation results mentioned above. Mentoring is positively associated with entrepreneurial attitudes (*H3a*) and self-employment intentions (*H3b*). Moreover, the direct impact of mentoring was much stronger on intentions than on attitudes. On the other hand, there were significant differences between Germany (coded as 1) and East Africa on both entrepreneurial attitudes and self-employment intentions. This denotes the influence of culture on attitudes and intentions; whereby entrepreneurial attitudes and intentions are higher in the context of high-income and individualistic culture than in the context of low-income and collectivistic culture. The implication of this finding is explained in the discussion section. Again, the effects are stronger on intentions ($B = -1.29$, CI $= -1.55$ to -1.02) than on attitudes ($B = -.55$, CI $= -.80$ to $-.32$). These results disapprove *H4a* and *H4b*. Concerning psychological capital, our results reveal positive significant effects on intentions ($B = .37$, CI $= .20$ to $.53$). Therefore, *H5a* was confirmed.

The mediational role of entrepreneurial attitudes and the moderating effects of country differences (culture and economic development) and psychological capital on self-employment were tested using the PROCESS Macro (model 29). Thus all these effects were tested simultaneously in one regression model. Our results reveal positive and significant conditional direct and conditional indirect effects of mentoring on entrepreneurial attitudes, with a significant index of moderated mediation (Index $= .03$, Boot CI $= .00$ to $.09$). Thus *H3c* is supported. The effect of mentoring on self-employment intentions via entrepreneurial attitudes, conditioned by psychological capital, is stronger at the higher levels of psychological capital compared to the effect at low and moderate levels. In addition, the effect of mentoring on entrepreneurial attitudes and intentions were positive and significant for both German and East African samples. However, the effect is relatively higher for Germany, confirming that mentoring has a higher impact on self-employment intentions in an individualistic culture and high-income context than in collectivistic culture and low-income context. Hence *H3c* and *H3d* are supported.

Table 3. Regression analyses for mediation and moderation effects.

	Entrepreneurial attitudes				Self-employment intention			
Predictors	B	SE	LLCI	ULCI	B	SE	LLCI	ULCI
Constant	−.51*	.22	−.94	−.08	5.10***	.21	4.70	5.51
Sex	.28**	.09	.11	.45	−.09	.08	−.25	.07
Age	.15*	.07	.01	.30	−.05	.07	−.18	.08
Previous experience	.09	.11	−.12	.30	.43***	.10	.25	.62
Mentoring (T1)	.43***	.05	.33	.52	.55***	.05	.45	.65
Country	−.55***	.12	−.80	−.32	−1.29***	.14	−1.55	−1.02
Entrepreneurial attitudes					.30***	.04	.22	.37
Psychological capital					.37***	.08	.20	.53
Mentoring × country	.27**	.10	.07	.46	.48***	.11	.25	.70
Mentoring × psychological capital					−.16*	.07	−.30	−.02
Entrepreneurial attitudes × psychological capital					.13*	.06	.02	.24
Model summary	F (6, 779) = 57.06***, R^2 = .27				F (10, 775) = 286.79***, R^2 = .68			

Index of moderated mediation	Index	(Boot)SE	Boot LLCI	Boot ULCI
Mediator: entrepreneurial attitudes	.03	.02	.00	.09
Index of Conditional moderated mediation (moderator: country; mediator: entrepreneurial attitudes)				
Low level of psychological capital	.06	.03	.02	.12
Moderate level of psychological capital	.08	.03	.02	.14
High level of psychological capital	.10	.04	.03	.18
Index of Conditional moderated mediation (moderator: psychological capital; mediator: entrepreneurial attitudes)				
East Africa	.04	.02	.01	.09
Germany	.08	.03	.02	.15

Note: *** $p < .001$; Sex (Female = 0, Male = 1); Country (East Africa = 0, Germany = 1).

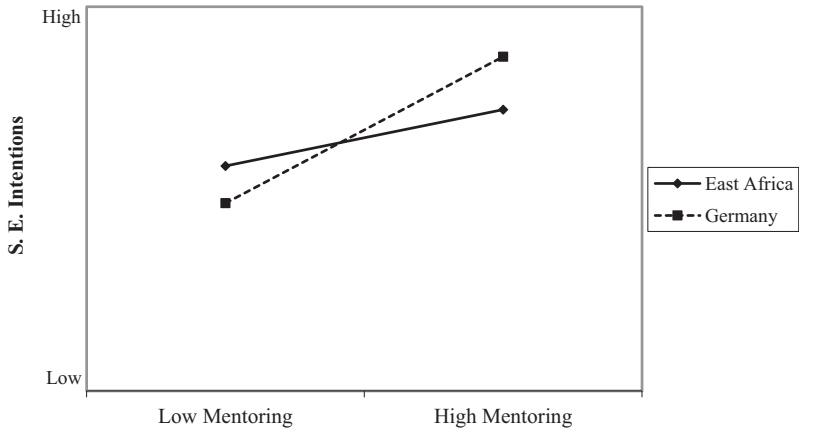

Figure 2. Interaction effects of mentoring and country on self-employment intentions.

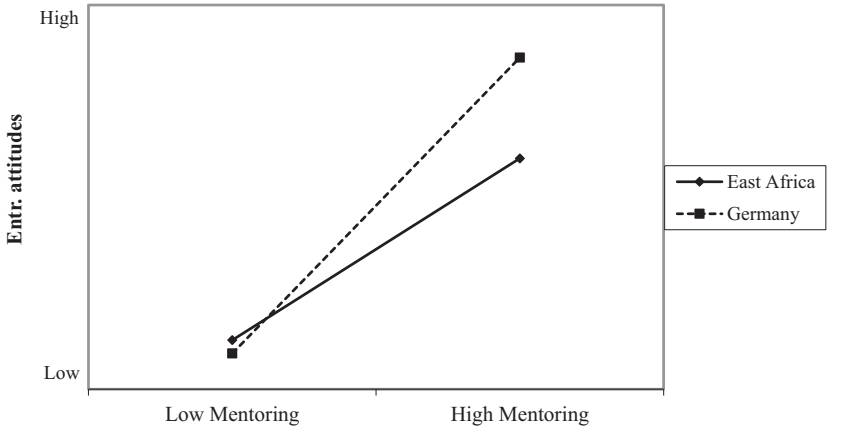

Figure 3. Interaction effects of mentoring and country on entrepreneurial attitudes.

Specifically, the interaction effect of mentoring with context on entrepreneurial attitudes ($B = .27$, CI = .07 to .46) is positive and significant, yet the effect is even higher on self-employment intentions ($B = .48$, CI = .25 to .70). Figure 2 shows moderation plots. Whereas mentoring is related to higher self-employment intentions in both samples, the increase is higher for the German group. At low levels of mentoring, the East African sample reported higher self-employment intentions than the German one. However, this is inverted at the high levels of mentoring. This pattern is quite similar for the interaction effect of mentoring and context on entrepreneurial attitudes (Figure 3).

Regarding the interactive effects of mentoring with psychological capital, our results reveal negative significant effects on self-employment intention ($B = -.16$, CI = −.30 to −.02); hence *H5c* is confirmed. This effect is visualized in Figure 4; which shows that participants with high psychological capital had higher intentions at all levels of mentoring. However, entrepreneurial intentions tend to increase more among those with low psychological capital when the level of mentoring increases. For the interactive effects of attitudes and psychological capital, there was a positive significant effect on self-employment intentions ($B = .13$, CI = .02 to .24), supporting *H5d*. Figure 5 visualizes these interaction effects. Whereas self-employment intentions

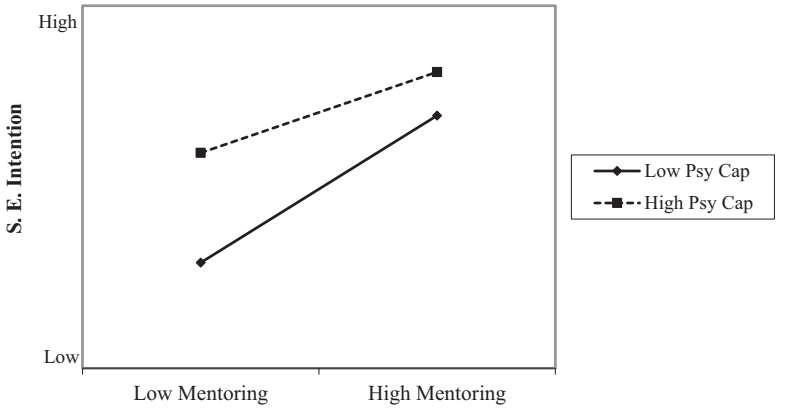

Figure 4. Interactions effects of and psychological capital on self-employment intentions.

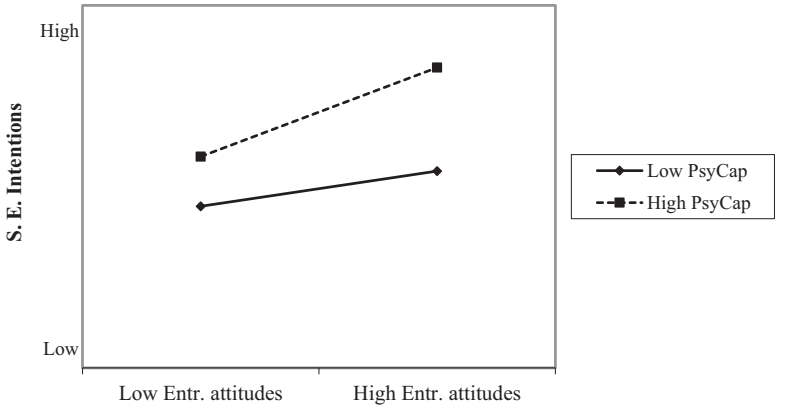

Figure 5. Interaction effects of entrepreneurial attitudes (mediator) and psychological capital on self-employment intentions.

increase with the increased strength of entrepreneurial attitudes for participants with high psychological capital, the increase in intentions for those with low psychological capital is lower.

We proposed that once entrepreneurial intentions are formed, there is a high likelihood that individuals will implement the intentions by starting a business of their own. However, we propose that movement from intentions to self-employment entry requires continued mentoring, psychological capital and financial capital. Therefore, in Study 2, we measured the level of continued participation in mentoring activities; and also whether participants had joined self-employment or other occupational alternatives after graduating from college. To test our assumptions, we applied a multinomial regression analysis.

Results in Table 4 show that participants with higher entrepreneurial intentions (at T1) were more likely to be in self-employment than in salaried employment ($B = -1.74$, $p < .01$), or unemployed ($B = -1.58$, $p < .05$), or still in school ($B = -1.54$, $p < .05$) at T2. This result supports *H2*. Similarly, continued entrepreneurial mentoring (mentoring accessed after graduation) predicted the likelihood of going into self-employment instead of going into salaried employment ($B = -2.24$, $p < .01$) or staying unemployed ($B = -2.73$, $p < .01$) or remaining in school ($B = -2.05$, $p < .01$);

Table 4. Multinomial regression for likelihood of other employment statuses as compared to self-employment.

			95% CI for Odds Ratio		
Employment status[a]/ predictors	B	(SE)	Lower	Odds Ratio	Upper
Salaried employment					
Intercept	13.04	(4.98)**			
Intentions_T1	−1.74	(.65)**	.05	.18	.63
Mentoring_T2	−2.24	(.73)**	.03	.11	.45
Psychological capital_T1	.56	(.66)	.48	1.74	6.33
Country	2.63	(1.52)	.71	13.93	273.42
Lack financial capital_T2	−2.42	(1.38)	.01	.09	1.33
Unemployed					
Intercept	18.14	(5.15)***			
Intentions_T1	−1.58	(.66)*	.06	.21	.76
Mentoring_T2	−2.73	(.82)**	.01	.07	.32
Psychological capital_T1	−.87	(.68)	.11	.42	1.58
Country	4.42	(1.70)**	2.96	83.21	2336.42
Lack financial capital_T2	−3.78	(1.69)*	.00	.02	.64
Still in school/ further education					
Intercept	15.42	(4.95)**			
Intentions_T1	−1.54	(.65)*	.06	.22	.77
Mentoring_T2	−2.05	(.73)**	.03	.13	.54
Psychological capital_T1	−.16	(.64)	.24	.85	2.98
Country	1.66	(1.44)	.31	5.23	88.03
Lack financial capital_T2	−3.02	(1.43)*	.00	.05	.81

Note: $R^2 = .61$ (Nagelkerke), Model χ^2 (15) = 86.41, $p < .001$; *$p < .05$, **$p < .01$. Country (East Africa = 0, Germany = 1). Lack financial Capital (No = 0, Yes = 1).
[a]Reference employment category is 'self-employment/ freelancing'.

thus *H3d* is also confirmed. However, psychological capital did not predict the likelihood of going into self-employment or any of the alternative employment statuses. Therefore, *H5b* is not supported. Even though, we observe that the odds were marginally positive for salaried employment. Concerning differences between Germany and East Africa, results in Table 4 further show significant variations in the likelihood of being unemployed or going into self-employment ($B = 4.42$, $p < .01$). Particularly, there were higher odds for a participant in Germany, compared to East Africa, to remain unemployed than to go into self-employment. Therefore, *H4e* is confirmed. Our results also show that lack of financial capital significantly predicted the likelihood of remaining unemployed ($B = -3.78$, $p < .05$) or remaining in school ($B = -3.02$, $p < .05$) rather than being self-employed, which provides support for *H6*. Hence individuals with no financial capital are less likely to enter self-employment, which could affect the implementation of one's entrepreneurial intentions or the effectiveness of mentoring geared toward business start-up.

5. Discussion

The current labor market dynamics, particularly the high youth unemployment, stresses the importance of promoting self-employment. Young persons should be willing to consider non-traditional employment options. Specifically, self-employment has increasingly become an essential employment option in situations or places where there are limited openings in traditional salaried employment, for example, in less developed economies (Falco and Haywood 2016). Consequently, there are enormous efforts to increase youth entrepreneurship in less developed countries through

entrepreneurial education and financial support (e.g. Blattman, Fiala, and Martinez 2014). But how do these intervention influence entrepreneurial intentions and entry? The present study investigates the mediating role of entrepreneurial attitudes and the moderating role of psychological capital in the mentoring, intentions, and self-employment; as well as how such effects vary with context. Our findings indicate that mentoring, attitudes and psychological capital have substantial effects on entrepreneurial intentions. Concerning entrepreneurial entry, we find that intentions, continuous mentoring and financial capital are essential contributors. Moreover, there seem to be substantial differences between Germany and East Africa in likelihoods of new graduates going into self-employment.

More specifically, the results of Study 1 confirmed that entrepreneurial mentoring, a positive general attitude towards entrepreneurship, and psychological capital combine to enhance intentions to become self-employed. That is, mentoring was significantly associated with entrepreneurial intentions (*H3b*); yet this association was mediated by entrepreneurial attitudes (*H3c*). There are different ways in which mentoring enables entrepreneurial startups, including support in the identification of entrepreneurial opportunities (St-Jean and Tremblay 2011), acquisition of entrepreneurship skills (Xiao and North 2017), and stimulating positive perceptions of entrepreneurship (Lafuente and Vaillant 2013). The present study affirms that participation in entrepreneurship mentoring is associated with a positive general attitude towards entrepreneurship and the intent to become self-employed. In line with the planned behavior theory (Ajzen 1991), attitudes play an important role in the development of behavior intentions, and the intensity of intentions. This suggests that entrepreneurial mentoring activities should not only focus on developing technical skills of prospecting entrepreneurs, but also identifying and addressing attitudinal issues. Particularly, mentors should increasingly use motivational approaches to inspire individuals into self-employment.

There was support for our hypothesis that the association between mentoring and attitudes as well as the association between mentoring and intention vary between Germany (a high-income and individualistic cultural context) and East Africa (a low-income and collectivistic cultural context). The associations of mentoring with both attitudes and intentions were stronger for Germany than for East Africa (*H4c* and *H4d*). That is, mentoring is more likely to be successful in Germany than in East Africa suggesting that entrepreneurial mentoring is more effective in individualistic than in collectivistic cultural contexts. beyond the cultural context, the development context cannot be ignored. It can facilitate or hinder access to quality of mentorship as well as the resources needed for entry into self-employment, hence affecting the strength of the relationship between mentoring, intentions, and entry. Poor quality of mentoring systems has been cited as a major challenge to the success of entrepreneurial mentoring (Ting, Feng, and Qin 2017), which is more likely in less developed countries where there are fewer mentors or successful entrepreneurs to learn from. The propensity of mentoring to enhance entrepreneurial attitudes and intentions could also be affected by the availability of startup resources.

Moreover, our findings indicate that the relationship between mentoring and intentions, as well as the relationship between attitudes and intentions, are further

conditioned by one's amount of psychological capital. Individuals with higher psychological capital seem to have stronger positive entrepreneurial attitudes and higher intention to go into self-employment (*H5c* and *H5d*). However, our results indicate that mentoring is associated with higher intentions among individuals with low psychological capital. Thus, our results confirm that psychological capital is not only important for entrepreneurial success (Pease and Cunningham 2016; Baluku, Kikooma, and Kibanja 2016; Hmieleski and Carr 2008) and wellbeing of the entrepreneurs (Baron, Franklin, and Hmieleski 2016), but also a resource that is useful in the development of self-employment intentions (Contreras, Dreu, and Espinosa 2017). Self-employment involves numerous challenging tasks and processes and a high level of risk, making it less attractive to individuals with low psychological capital. However, our findings show that mentoring can strengthen self-employment intentions for such individuals. Hence, addition to fostering a positive attitude towards entrepreneurship, mentoring should also focus on strengthening psychological capital of protégés, which in turn, strengthens intentions and efforts to establish one's own business.

Implementation of intentions has been identified as a major gap in entrepreneurial intentions research (e.g. Fayolle and Liñán 2014; Van Gelderen, Kautonen, and Fink 2015). Interventions to strengthen entrepreneurial intentions, such as mentoring, can only be meaningful if individuals are capable of implementing their intentions (Ajzen 1985). Unfortunately, due to the relatively small number of respondents who participated in the follow-up survey (T2), we were not able to examine the mediators and moderators of the association between intentions and self-employment entry. However, we were able to test factors that substantially determine implementation of intentions or entry into self-employment. In line with TPB, our findings show that intentions predict self-employment entry. These findings also support extant research that has investigated the association between intentions and entrepreneurial behavior (e.g. Kolvereid and Isaksen 2006; Kautonen, van Gelderen, and Tornikoski 2013). Our results indicate that students who had stronger entrepreneurial intentions towards their graduation (T1) were more likely be self-employed (T2). This could also suggest that developing strong entrepreneurial intentions towards the time of entry into the labor market increase the likelihoods of going into self-employment before trying positions in salaried employment.

Van Gelderen, Kautonen, and Fink (2015) propose that in addition to intentions, other factors that facilitate or hinder the process of entry should be considered. Based on the socialization perspective (Starr and Fondas 1992), the present study (Study 2) examined the role of continuous mentoring (mentoring accessed after graduation), psychological capital and availability or lack of financial capital. Concerning mentoring (*H2d*), our results indicate that those who had continuous entrepreneurial mentoring after graduation were more likely to go into self-employment compared to the likelihood of going into salaried-employment or remaining unemployed. Hence, our results confirm that mentoring has an impact on both entrepreneurial intention and actual entry into self-employment. Mentoring should not be a one-off activity. Continuous mentoring is helpful in transforming intentions into startup behavior. Starting a business is a complex and stressful task. Therefore, prospecting entrepreneurs require constant inspiration, skill development, confidence boosts, and

identifying themselves with the entrepreneurship profession; all of which are a function of mentoring (St-Jean and Audet 2012; St-Jean 2012).

The present study further demonstrates that entry into self-employment is also dependent on the availability of financial capital (*H6*) and that there are variations between Germany and East Africa (*H3e*). Results at T2 show that those who reported lack of capital were more likely to stay in school or remain unemployed. Concerning differences between Germany and East Africa, individuals in Germany were more likely to be unemployed than to be self-employed compared to their East African counterparts. This result points to either the effect of culture or economic conditions. In line with our assumption regarding the impact of national culture, this finding confirms that startup could be faster in collectivistic countries. When there is a business opportunity, individuals can easily obtain support from family and friends. However, Germany is considered to have a high ambiguity intolerance tendency (Raab, Stedham, and Neuner 2005; Weissenstein et al. 2014; Hofstede, Hofstede, and Minkov 2010), which discourages entrepreneurship.

The differences in self-employment entry between Germany and East African can also be explained by the economic contexts. East African states have worryingly high youth unemployment rates (Awiti and Scott 2016; Chigunta 2017; Lakuma, Marty, and Kuteesa 2016), implying that self-employment is the most available employment opportunity for the majority of young people graduating from colleges. On the other hand, Germany reports one of the lowest youth unemployment rates in the world, and actually the lowest in Europe (see Dietrich and Möller 2016). This implies that graduates are more likely to find job placements soon after graduation; hence self-employment among young people becomes limited to those who are opportunity driven or seeking autonomy in the workplace.

5.1. Strengths, limitations and future research

The present paper contains some strengths that highlight its contribution to self-employment intentions and entry research. The major strength of the paper is the examination of antecedents of both intentions and entry. Most of the previous research has studied these separately yet the TPB presents entry (behavior) as a function of intentions, thus presenting a continuous process from the formation of the intention to establishment of a business. Relatedly, the second strength of the paper regards the application of the longitudinal approach to examine the association between intentions and entry into self-employment. It is purported that this is the best approach to investigating the entrepreneurial process (Liñán and Fayolle 2015). Moreover, we are able to replicate findings of similar studies that have found intentions to predict actual entry behavior (e.g. Kolvereid and Isaksen 2006; Kautonen, van Gelderen, and Tornikoski 2013). Another important strength is the cross-cultural sample used. Consequently, the study explains the variations in intentions and entry between countries. With these strengths, we are confident that our study makes an important contribution to understanding the entrepreneurial process.

While the study has a number of strengths, it also has some limitations that should be considered in applying our findings. The first weakness relates to the timeframe

between T1 and T2. Whereas the longitudinal approach is best for explaining enterprise creation process, the time between the measures has to be adequate. It has been found that the association between entrepreneurial intentions and behavior is stronger in a longer period than in the short-term; see Liñán and Fayolle (2015) review of intentions research. In the present study, the period between measures ranged from one to two years. This is a period of about six to 18 months after graduation, which could be considered short for individuals for all those interested in self-employment to have successfully established their businesses. Another weakness relates to the measures for mentoring and intentions. These showed very high alpha coefficients. Although high internal consistency of measures is desired, very high alphas can indicate the possibility of redundancy of items (McCrae et al. 2011). However, this challenge was also observed in the entrepreneurial intentions questionnaire (Liñán and Chen 2009) which is a widely used measure in entrepreneurial intentions research. Future research should examine the applicability of this measure in populations that have a high entrepreneurial propensity. In addition, we only examined the differences in intentions and entry between Germany and East Africa. Whereas these provide a good cross-cultural comparison, these are at the extreme ends of the economic development continuum, which could inflate the observed differences. We suggest that future research should compare more countries a stronger cross-cultural comparison.

5.2. Conclusion

The study examined the association between entrepreneurial mentoring, attitudes, intentions and entry into self-employment; and the role of psychological capital in this process. Our findings confirm that attitudes mediate the effects of entrepreneurial mentoring on self-employment intention, while psychological moderates the effects of mentoring and attitudes on self-employment intentions. Moreover, intentions, mentoring and availability of financial capital determined self-employment entry. Differences between countries in the association between mentoring and self-employment intentions, as well in likelihoods of being self-employed, are observed. This confirms the influence of context on the outcomes of entrepreneurial mentoring. It is, therefore, important to adopt mentoring approaches to the context. Our findings further demonstrate that in addition to enhancing positive entrepreneurial attitude, it is essential to foster the development of psychological capital, which in turn facilitates transforming mentoring into firm intentions to start a business and implementation of the intentions.

Disclosure statement

No potential conflict of interest was reported by the authors.

Notes on contributors

Martin Mabunda Baluku is a PhD Student at Philipps Universität-Marburg, Germany; and Assistant Lecturer at Makerere University, department of Educational, Organizational and Social Psychology. His current research interests are: psychological attributes and

entrepreneurship; career development; the psychology of cheating and corruption; retirement and psychological wellbeing; and organizational politics and change.

Peter Onderi is a Lecturer of Psychology at Maseno University, Kenya. His research interests include: personality assessment, cognitive development, career development and employability counseling.

Kathleen Otto (PhD) is a Professor of Organizational and Work Psychology at Philipps Universität-Marburg, Germany. Her research interests are job insecurity; organizational justice; self-employment; and career success.

ORCID

Martin Mabunda Baluku http://orcid.org/0000-0002-7843-9203

References

Adam, Anne–Flore, and Alain Fayolle. 2015. "Bridging the Entrepreneurial Intention–Behaviour Gap: The Role of Commitment and Implementation Intention." *International Journal of Entrepreneurship and Small Business* 25(1): 36–54.

Ahmed, Tariq, V. G. R. Chandran, and Jane Klobas. 2017. "Specialized Entrepreneurship Education: Does It Really Matter? Fresh Evidence from Pakistan." *International Journal of Entrepreneurial Behavior & Research* 23(1): 4–19.

Ajzen, Icek. 1985. "From Intentions to Action: A Theory of Planned Behavior." In *Action Control: From Cognition to Behavior*, edited by J. Kuhl, and J. Beckman,11–39. Berlin: Springer.

Ajzen, Icek. 1991. "The Theory of Planned Behavior." *Organizational Behavior and Human Decision Processes* 50(2): 179–211.

Ajzen, Icek. 2002. "Perceived Behavioral Control, Self-Efficacy, Locus of Control, and the Theory of Planned Behavior1." *Journal of Applied Social Psychology* 80(6): 2918–2940.

Ajzen, Icek. 2011. "The Theory of Planned Behaviour: Reactions and Reflections." *Psychology & Health* 26(9): 1113–1127.

Akhtar, Reece, Gorkan Ahmetoglu, and Tomas Chamorro-Premuzic. 2013. "Greed Is Good? Assessing the Relationship between Entrepreneurship and Subclinical Psychopathy." *Personality and Individual Differences* 54(3): 420–425.

Armitage, Christopher J., and Mark Conner. 2001. "Efficacy of the Theory of Planned Behaviour: A Meta-Analytic Review." *British Journal of Social Psychology* 40(4): 471–499.

Audet, Josée, and Paul Couteret. 2012. "Coaching the Entrepreneur: Features and Success Factors." *Journal of Small Business and Enterprise Development* 19(3): 515–531.

Austin, Michelle J., and Margaret M. Nauta. 2016. "Entrepreneurial Role-Model Exposure, Self-Efficacy, and Women's Entrepreneurial Intentions." *Journal of Career Development* 43(3): 260–272.

Autio, Erkko, Robert H. Keeley, Magnus Klofsten, George G. C. Parker, and Michael Hay. 2001. "Entrepreneurial Intent among Students in Scandinavia and in the USA." *Enterprise and Innovation Management Studies* 2(2): 145–160.

Avey, James B., Rebecca J. Reichard, Fred Luthans, and Ketan H. Mhatre. 2011. "Meta-Analysis of the Impact of Positive Psychological Capital on Employee Attitudes, Behaviors, and Performance." *Human Resource Development Quarterly* 22(2): 127–152.

Awiti, Alex O., and Bruce Scott. 2016. "The Kenya Youth Survey Report." East Africa Institute, 1–4. Accessed September 20 2017. http://ecommons.aku.edu/eastafrica_eai/17

Baluku, Martin Mabunda, Julius Fred Kikooma, and Grace Milly Kibanja. 2016. "Psychological Capital and the Startup Capital–Entrepreneurial Success Relationship." *Journal of Small Business & Entrepreneurship* 28(1): 27–54. Routledge:

Baluku, Martin Mabunda, Julius Fred Kikooma, and Kathleen Otto. 2018. "Positive Mindset and Entrepreneurial Outcomes: The Magical Contributions of Psychological Resources and Autonomy." *Journal of Small Business & Entrepreneurship* 30(6): 473–498.

Baluku, Martin Mabunda, Matagi Leonsio, Edward Bantu, and Kathleen Otto. 2018. "The Impact of Autonomy on the Relationship between Mentoring and Entrepreneurial Intentions among Youth in Germany, Kenya, and Uganda." *International Journal of Entrepreneurial Behaviour and Research* 25(2): 170–192.

Bandura, Albert. 1969. "Social-Learning Theory of Identificatory Processes." In *Handbook of Socialization Theory and Research*, edited by David A. Goslin, 213-262. Chicago, IL: Rand McNally & Company.

Bandura, Albert. 1977. "Toward a Unifying Theory of Behavioral Change." *Psychological Review* 84(2): 191–215.

Bandura, Albert. 1982. "Self-Efficacy Mechanism in Human Agency." *American Psychologist* 37 (2): 122–147.

Baron, Robert A., Rebecca J. Franklin, and Keith M. Hmieleski. 2016. "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.

Bastié, Françoise, Sylvie Cieply, and Pascal Cussy. 2013. "The Entrepreneur's Mode of Entry: The Effect of Social and Financial Capital." *Small Business Economics* 40(4): 865–877.

Beckett, Brian J. 2010. "Mentorship Is Key to Career Success." *Strategic Finance* 92(4): 21–122.

Berglund, Victor, Ingemar Johansson Sevä, and Mattias Strandh. 2015. "Subjective Well-Being and Job Satisfaction among Self-Employed and Regular Employees: Does Personality Matter Differently?" *Journal of Small Business & Entrepreneurship* 28(1): 1–19.

Blattman, Christopher, Nathan Fiala, and Sebastian Martinez. 2014. "Generating Skilled Self-Employment in Developing Countries: Experimental Evidence from Uganda." *The Quarterly Journal of Economics* 129(2): 697–752.

Bosma, Niels, Jolanda Hessels, Veronique Schutjens, Mirjam Van Praag, and Ingrid Verheul. 2012. "Entrepreneurship and Role Models." *Journal of Economic Psychology* 33(2): 410–424.

Boyd, Nancy G., and George S. Vozikis. 1994. "The Influence of Self-Efficacy on the Development of Entrepreneurial Intentions and Actions." *Entrepreneurship Theory and Practice* 18(4): 63–77.

Brachert, Matthias, Walter Hyll, and Mirko Titze. 2014. "Entry into Entrepreneurship, Endogenous Adaption of Risk Attitudes and Entrepreneurial Survival." No. 701. SOEPpapers on Multidisciplinary Panel Data Research, Deutsches Institut für Wirtschaftsforschung (DIW), Berlin. Accessed September 20, 2017. http://hdl.handle.net/10419/103388

Brown, Sarah, Michael Dietrich, Aurora Ortiz-Nuñez, and Karl Taylor. 2011. "Self-Employment and Attitudes towards Risk: Timing and Unobserved Heterogeneity." *Journal of Economic Psychology* 32(3): 425–433.

Byabashaija, Warren, and Isaac Katono. 2011. "The Impact of College Entrepreneurial Education on Entrepreneurial Attitudes and Intention to Start a Business in Uganda." *Journal of Developmental Entrepreneurship* 16(01): 127–144.

Cassar, Gavin. 2014. "Industry and Startup Experience on Entrepreneur Forecast Performance in New Firms." *Journal of Business Venturing* 29(1): 137–151.

Chigunta, Francis. 2017. "Entrepreneurship as a Possible Solution to Youth Unemployment in Africa." *Laboring and Learning* 10: 433–451. doi:

Contreras, Francoise, Inge De Dreu, and Juan C. Espinosa. 2017. "Examining the Relationship between Psychological Capital and Entrepreneurial Intention: An Exploratory Study." *Asian Social Science* 13(3): 80–88.

Credé, Marcus, Peter Harms, Sarah Niehorster, and Andrea Gaye-Valentine. 2012. "An Evaluation of the Consequences of Using Short Measures of the Big Five Personality Traits." *Journal of Personality and Social Psychology* 102(4): 874–888.

Croson, David C., and Maria Minniti. 2012. "Slipping the Surly Bonds: The Value of Autonomy in Self-Employment." *Journal of Economic Psychology* 33(2): 355–365.

Culbertson, Satoris S., Michael R. Smith, and Pedro I. Leiva. 2011. "Enhancing Entrepreneurship: The Role of Goal Orientation and Self-Efficacy." *Journal of Career Assessment* 19(2): 115–129.

Dalborg, C., and J. Wincent. 2015. "The Idea Is Not Enough: The Role of Self-Efficacy in Mediating the Relationship between Pull Entrepreneurship and Founder Passion - a Research Note." *International Small Business Journal: Researching Entrepreneurship* 33(8): 974–984.

Dana, Leo Paul. 2009. "Self-Employment in the Canadian Sub-Arctic: An Exploratory Study." *Canadian Journal of Administrative Sciences / Revue Canadienne des Sciences de l'Administration* 13(1): 65–77.

Dawkins, Sarah, Angela Martin, Jenn Scott, and Kristy Sanderson. 2013. "Building on the Positives: A Psychometric Review and Critical Analysis of the Construct of Psychological Capital." *Journal of Occupational and Organizational Psychology* 86(3): 348–370.

Deci, Edward L., and Richard M. Ryan. 2000. "The 'What' and 'Why' of Goal Pursuits: Human Needs and the Self-Determination of Behavior." *Psychological Inquiry* 11(4): 227–268.

Deci, Edward L., Richard M. Ryan, Marylène Gagné, Dean R. Leone, Julian Usunov, and Boyanka P. Kornazheva. 2001. "Need Satisfaction, Motivation, and Well-Being in the Work Organizations of a Former Eastern Bloc Country: A Cross-Cultural Study of Self-Determination." *Personality and Social Psychology Bulletin* 27(8): 930–942.

Di Mauro, Carmela, and Rosy Musumeci. 2011. "Linking Risk Aversion and Type of Employment." *The Journal of Socio-Economics* 40(5): 490–495.

Dietrich, Hans, and Joachim Möller. 2016. "Youth Unemployment in Europe – Business Cycle and Institutional Effects." *International Economics and Economic Policy* 13(1): 5–25.

Dimov, Dimo. 2010. "Nascent Entrepreneurs and Venture Emergence: Opportunity Confidence, Human Capital, and Early Planning." *Journal of Management Studies* 47(6): 1123–1153.

Douglas, Evan J., and Dean A. Shepherd. 2002. "Self-Employment as a Career Choice: Attitudes, Entrepreneurial Intentions, and Utility Maximization." *Entrepreneurship Theory and Practice* 26(3): 81–90.

Dunn, Thomas, and Douglas Holtz-Eakin. 2000. "Financial Capital, Human Capital, and the Transition to Self Employment: Evidence from Intergenerational Links." *Journal of Labor Economics* 18(2): 282–305.

Eroglu, Osman, and Murat Picak. 2011. "Entrepreneurship, National Culture and Turkey." *International Journal of Business and Social Science* 2(16): 146–151.

Everitt, B S. 1998. "Analysis of Longitudinal Data. Beyond MANOVA." *British Journal of Psychiatry* 172(1): 7–10.

Falco, Paolo, and Luke Haywood. 2016. "Entrepreneurship versus Joblessness: Explaining the Rise in Self-Employment." *Journal of Development Economics* 118: 245–265.

Fayolle, Alain, and Benoit Gailly. 2015. "The Impact of Entrepreneurship Education on Entrepreneurial Attitudes and Intention: Hysteresis and Persistence." *Journal of Small Business Management* 53(1): 75–93.

Fayolle, Alain, Benoît Gailly, and Narjisse Lassas-Clerc. 2006. "Assessing the Impact of Entrepreneurship Education Programmes: A New Methodology." *Journal of European Industrial Training* 30(9): 701–720.

Fayolle, Alain, and Francisco Liñán. 2014. "The Future of Research on Entrepreneurial Intentions." *Journal of Business Research* 67(5): 663–666.

Fayolle, Alain, Francisco Liñán, and Juan A. Moriano. 2014. "Beyond Entrepreneurial Intentions: Values and Motivations in Entrepreneurship." *International Entrepreneurship and Management Journal* 10(4): 679–689.

Fellnhofer, Katharina, and Kaisu Puumalainen. 2017. "Can Role Models Boost Entrepreneurial Attitudes?" *International Journal of Entrepreneurship and Innovation Management* 21(3): 274–290.

Fitzsimmons Jason R., and Evan J. Douglas. 2005. "Entrepreneurial Attitudes and Entrepreneurial Intentions: A Cross-Cultural Study of Potential Entrepreneurs in India, China, Thailand and Australia." *Applied Optics* 47: 1–20. doi:

Franke, Richard H., Geert Hofstede, and Michael H. Bond. 1991. "Cultural Roots of Economic Performance: A Research NoteA." *Strategic Management Journal* 12(S1): 165–173.

Fritsch, Michael, and Michael Wyrwich. 2014. "The Effect of Regional Entrepreneurship Culture on Economic Development–Evidence for Germany." Jena Economic Research Papers 2014-014, Max Planck Institute of Economics, Jena. Accessed September 20, 2017. http://hdl.handle.net/10419/98454

Garcia, Douglas Henrique, Andreia Damasio Leles, and Regiane Relva Romano. 2017. "Program Entrepreneurship and Innovation: Education as the Core of Innovation." In *Advances in Intelligent Systems and Computing*, edited by T. Ahram, and W. Karwowski, Vol. 494, 235–244. Cham: Springer.

Gibson, Donald E. 2004. "Role Models in Career Development: New Directions for Theory and Research." *Journal of Vocational Behavior* 65(1): 134–156.

Gindling, T. H., and David Newhouse. 2014. "Self-Employment in the Developing World." *World Development* 56: 313–331.

Goel, Sanjay, and Ranjan Karri. 2006. "Entrepreneurs, Effectual Logic, and over-Trust." Entrepreneurship Theory and Practice 30(4): 477–493.

Gong, Rueywei, Shih-Ying Chen, and Shin-Lung Lee. 2011. "Does Mentoring Work? The Mediating Effect of Mentoring in China." *Social Behavior and Personality: An International Journal* 39(6): 807–824.

Gosling, Samuel D., Peter J. Rentfrow, and William B. Swann. 2003. "A Very Brief Measure of the Big-Five Personality Domains." *Journal of Research in Personality* 37(6): 504–528.

Günzel-Jensen, Franziska, Kåre Moberg, and René Mauer. 2017. "Self-Efficacy and the Entrepreneurial Mindset Revisited." In *Revising the Entrepreneurial Mind*, edited by Malin Brännback and Alan Carsrud, 319–335. Springer International Publishing.

Gupta, Vishal K., and Anne S. York. 2008. "Attitudes toward Entrepreneurship and Small Business: Findings from a Survey of Nebraska Residents and Small Business Owners." *Journal of Enterprising Communities: People and Places in the Global Economy* 2(4): 348–366.

Harms, Peter D., and Fred Luthans. 2012. "Measuring Implicit Psychological Constructs in Organizational Behavior: An Example Using Psychological Capital." *Journal of Organizational Behavior* 33(4): 589–594.

Hatak, Isabella, Rainer Harms, and Matthias Fink. 2015. "Age, Job Identification, and Entrepreneurial Intention." *Journal of Managerial Psychology*. 30(1): 38–53.

Hayes, Andrew F. 2013. *Introduction to Mediation, Moderation, and Conditional Process Analysis*. New York, NY: Guilford Press.

Hayek, Mario. 2012. "Control Beliefs and Positive Psychological Capital Can Nascent Entrepreneurs Discr7iminate between What Can and Cannot Be Controlled?" *Journal of Management Research* 12(1): 3–13.

Hmieleski, Keith M., and Jon C. Carr. 2008. "The Relationship between Entrepreneurs Psychological Capital and New Venture Performance." *Frontiers of Entrepreneurship Research* 28(4): 1–15.

Hofstede, Geert. 1984. "Cultural Dimensions in Management and Planning." *Asia Pacific Journal of Management* 1(2): 81–99.

Hofstede, Geert, Gert Jan Hofstede, and Michael Minkov. 2010. *Cultures and Organizations, Software of the Mind: Intercultural Cooperation and Its Importance for Survival*. 3rd ed, Vol. 1. McGraw Hill.

Hofstede, Geert, and Michael Minkov. 2010. "Long- versus Short-Term Orientation: New Perspectives." *Asia Pacific Business Review* 16(4): 493–504.

Honig, B. 2004. "Entrepreneurship Education: Toward a Model of Contingency-Based Business Planning." *Academy of Management Learning & Education* 3(3): 258–273.

Hu, Feng. 2014. "Risk Attitudes and Self-Employment in China." *China & World Economy* 22(3): 101–120.

Huggins, Robert, and Piers Thompson. 2014. "Culture, Entrepreneurship and Uneven Development: A Spatial Analysis." *Entrepreneurship & Regional Development* 26(9–10): 726–752.

Huq, Afreen, and David Gilbert. 2017. "All the World's a Stage: Transforming Entrepreneurship Education through Design Thinking." *Education + Training* 59(2): 155–170.

Jabeen, Fauzia, Mohd. Nishat Faisal, and Marios I. Katsioloudes. 2017. "Entrepreneurial Mindset and the Role of Universities as Strategic Drivers of Entrepreneurship." *Journal of Small Business and Enterprise Development* 24(1): 136–157.

Karlsson, Tomas, and Kåre Moberg. 2013. "Improving Perceived Entrepreneurial Abilities through Education: Exploratory Testing of an Entrepreneurial Self Efficacy Scale in a Pre-Post Setting." *The International Journal of Management Education* 11(1): 1–11.

Katz, Jerome, and William B. Gartner. 1988. "Properties of Emerging Organizations." *Academy of Management Review* 13(3): 429–441.

Kautonen, Teemu, Marco van Gelderen, and Matthias Fink. 2015. "Robustness of the Theory of Planned Behavior in Predicting Entrepreneurial Intentions and Actions." Entrepreneurship Theory and Practice 39(3): 655–674.

Kautonen, Teemu, Marco van Gelderen, and Erno T. Tornikoski. 2013. "Predicting Entrepreneurial Behaviour: A Test of the Theory of Planned Behaviour." *Applied Economics* 45(6): 697–707.

Kawaguchi, Daiji. 2002. "Compensating Wage Differentials among Self-Employed Workers: Evidence from Job Satisfaction Scores." Discussion paper no. 568,Institute of Social and Economic Research, Osaka University.

Kim, Phillip H., Howard E. Aldrich, and Lisa A. Keister. 2006. "Access (Not) Denied: The Impact of Financial, Human, and Cultural Capital on Entrepreneurial Entry in the United States." *Small Business Economics* 27(1): 5–22.

Kolvereid, Lars, and Espen Isaksen. 2006. "New Business Start-up and Subsequent Entry into Self-Employment." *Journal of Business Venturing* 21(6): 866–885.

Kram, Kathy E., and Lynn A. Isabella. 1985. "Mentoring Alternatives: The Role of Peer Relationships in Cancer Development." Academy of Management Journal 28(1): 110–132.

Kreiser, Patrick M., Louis D. Marino, Pat Dickson, and K. Mark Weaver. 2010. "Cultural Influences on Entrepreneurial Orientation: The Impact of National Culture on Risk Taking and Proactiveness in SMEs." Entrepreneurship Theory and Practice 34(5): 959–983.

Krueger, Norris F. 2003. "The Cognitive Psychology of Entrepreneurship." In *Handbook of Entrepreneurship Research*, edited by Z. J. Acs, and D. B. Audretsch, 105–140.

Krueger, Norris F. 2007. "What Lies beneath? The Experiential Essence of Entrepreneurial Thinking." *Entrepreneurship Theory and Practice* 31(1): 123–138.

Krueger, Norris F., Michael D. Reilly, and Alan L. Carsrud. 2000. "Competing Models of Entrepreneurial Intentions." *Journal of Business Venturing* 15(5-6): 411–432.

Lafuente, Esteban M., and Yancy Vaillant. 2013. "Age Driven Influence of Role-Models on Entrepreneurship in a Transition Economy." *Journal of Small Business and Enterprise Development* 20(1): 181–203.

Lakuma, Corti Paul, Robert Marty, and Annette Kuteesa. 2016. "Survival Analysis of Regional Unemployment in Uganda: Evidence from the Uganda National Panel Survey (UNPS)." *African Development Review* 28(1): 140–154.

Lange, Thomas. 2012. "Job Satisfaction and Self-Employment: Autonomy or Personality?" *Small Business Economics* 38(2): 165–177.

Laviolette, Eric Michael, Miruna Radu Lefebvre, and Olivier Brunel. 2012. "The Impact of Story Bound Entrepreneurial Role Models on Self-Efficacy and Entrepreneurial Intention." *International Journal of Entrepreneurial Behavior & Research* 18(6): 720–742.

Lee, Sang M., and Suzanne I J. Peterson. 2000. "Culture, Entrepreneurial Orientation, and Global Competitiveness." *Journal of World Business* 35(4): 401–416.

Liñán, Francisco, and Yi Wen Chen. 2009. "Development and Cross-Cultural Application of a Specific Instrument to Measure Entrepreneurial Intentions." *Entrepreneurship Theory and Practice* 33(3): 593–617.

Liñán, Francisco, and Alain Fayolle. 2015. "A Systematic Literature Review on Entrepreneurial Intentions: Citation, Thematic Analyses, and Research Agenda." *International Entrepreneurship and Management Journal* 11(4): 907–933.

Liñán, Francisco, and José Fernandez-Serrano. 2014. "National Culture, Entrepreneurship and Economic Development: Different Patterns across the European Union." *Small Business Economics* 42(4): 685–701.

Luthans, Fred. 2002. "Positive Organizational Behavior: Developing and Managing Psychological Strengths." *Academy of Management Perspectives* 16(1): 57–72.

Luthans, Fred, and Bruce J. Avolio. 2014. "Brief Summary of Psychological Capital and Introduction to the Special Issue." *Journal of Leadership & Organizational Studies* 21(2): 125–129.

Luthans, Fred, Bruce J. Avolio, and James B. Avey. 2007a. *Psychological Capital (PsyCap) Questionnaire (PCQ)*. Menlo Park, CA: Mind Garden, Inc.

Luthans, Fred, Bruce J. Avolio, James B. Avey, and Steven M. Norman. 2007b. "Positive Psychological Capital: Measurement and Relationship with Performance and Satisfaction." *Personnel Psychology* 60(3): 541–572.:

Luthans, Fred, Kyle W. Luthans, and Brett C. Luthans. 2004. "Positive Psychological Capital: Beyond Human and Social Capital." *Business Horizons* 47(1): 45–50.

Luthans, Fred, and Carolyn M. Youssef-Morgan. 2017. "Psychological Capital: An Evidence-Based Positive Approach." *Annual Review of Organizational Psychology and Organizational Behavior* 4(1): 339–366.

Luthans, Fred, Carolyn M. Youssef, and Bruce J. Avolio. 2007c. "Psychological Capital: Investing and Developing Positive Organizational Behavior." In *Positive Organizational Behavior*, edited by Debra Nelson and Cary L Cooper, 9–24. London: Sage Publications.

Luthans, Fred, Carolyn M. Youssef, and Bruce J. Avolio. 2015. *Psychological Capital and Beyond*. New York, NY: Oxford University Press.

Matlay, Harry. 2008. "The Impact of Entrepreneurship Education on Entrepreneurial Outcomes." *Journal of Small Business and Enterprise Development* 15(2): 382–396.

McCrae, Robert R., John E. Kurtz, Shinji Yamagata, and Antonio Terracciano. 2011. "Internal Consistency, Retest Reliability, and Their Implications for Personality Scale Validity." *Personality and Social Psychology Review* 15(1): 28–50.

McNally, Jeffrey J., Bruce C. Martin, Benson Honig, Heiko Bergmann, and Panagiotis Piperopoulos. 2016. "Toward Rigor and Parsimony: A Primary Validation of Kolvereid's (1996) Entrepreneurial Attitudes Scales." *Entrepreneurship & Regional Development* 28(5–6): 358–379. Routledge:

Minkov, M., and G. Hofstede. 2012. "Hofstede's Fifth Dimension: New Evidence from the World Values Survey." *Journal of Cross-Cultural Psychology* 43(1): 3–14.

Mueller, Stephen L., and Anisya S. Thomas. 2001. "Culture and Entrepreneurial Potential: A Nine Country Study of Locus of Control and Innovativeness." *Journal of Business Venturing* 16(1): 51–75.

Nabi, Ghulam, Francisco Liñán, Alain Fayolle, Norris Krueger, and Andreas Walmsley. 2017. "The Impact of Entrepreneurship Education in Higher Education: A Systematic Review and Research Agenda." *Academy of Management Learning & Education* 16(2): 277–299.

Newman, Alexander, Deniz Ucbasaran, Fei Zhu, and Giles Hirst. 2014. "Psychological Capital: A Review and Synthesis." *Journal of Organizational Behavior* 35(S1): S120–S138.

Nunnally, Jum C.. Jr. 1978. *Psychometric Theory*. New York, NY: Mc Graw-Hill.

Omerzel, Doris Gomezelj. 2016. "The Impact of Entrepreneurial Characteristics and Organisational Culture on Innovativeness in Tourism Firms." *Managing Global Transitions* 14(1): 93–110.

Oo, Pyayt P., Arvin Sahaym, Sakdipon Juasrikul, and Sang Youn Lee. 2018. "The Interplay of Entrepreneurship Education and National Cultures in Entrepreneurial Activity: A Social

Cognitive Perspective." *Journal of International Entrepreneurship* 16(3): 398–420. Springer US:

Parker, Simon C. 2004. *The Economics of Self-Employment and Entrepreneurship*. New York, NY: Cambridge University Press Cambridge.

Patel, Pankaj C., and Sherry M.B. Thatcher. 2014. "Sticking it out: Individual Attributes and Persistence in Self-Employment." *Journal of Management* 40(7): 1932–1979.

Pease, P., and J. Cunningham. 2016. "Entrepreneurial Psychological Capital: A Different Way of Understanding Entrepreneurial Capacity," No. September.

Piperopoulos, Panagiotis, and Dimo Dimov. 2015. "Burst Bubbles or Build Steam? Entrepreneurship Education, Entrepreneurial Self-Efficacy, and Entrepreneurial Intentions." *Journal of Small Business Management* 53(4): 970–985.

Podsakoff, Philip M., Scott B. MacKenzie, Jeong-Yeon Lee, and Nathan P. Podsakoff. 2003. "Common Method Biases in Behavioral Research: A Critical Review of the Literature and Recommended Remedies." *Journal of Applied Psychology* 88(5): 879–903.

Praag, C Mirjam Van., and Peter H. Versloot. 2008. "The Economic Benefits and Costs of Entrepreneurship: A Review of the Research." *Foundations and Trends® in Entrepreneurship* 4(2): 65–154.

Pretorius, Marius, Gideon Nieman, and Jurie van Vuuren. 2005. "Critical Evaluation of Two Models for Entrepreneurial Education." *International Journal of Educational Management* 19(5): 413–427.

Raab, Gerhard, Yvonne Stedham, and Michael Neuner. 2005. "Entrepreneurial Potential: An Exploratory Study of Business Students in the US and Germany." *Journal of Business and Management* 11: 71–88.

Radu Lefebvre, Miruna, and Renaud Redien-Collot. 2013. "How to Do Things with Words': The Discursive Dimension of Experiential Learning in Entrepreneurial Mentoring Dyads." *Journal of Small Business Management* 51(3): 370–393.

Rand, Kevin L., and Jennifer S. Cheavens. 2012. "Hope Theory." In *The Oxford Handbook of Positive Psychology*. 2nd ed., Vol. 30, 257–276.

Rauch, Andreas, Michael Frese, Zhong-Ming Wang, Jens Unger, Maria Lozada, Vita Kupcha, and Tanja Spirina. 2013. "National Culture and Cultural Orientations of Owners Affecting the Innovation–Growth Relationship in Five Countries." *Entrepreneurship & Regional Development* 25(9–10): 732–755.

Rickard, Kim, and Alex Rickard. 2009. "E-Mentoring for Small Business: An Examination of Effectiveness." *Education + Training* 51(8/9): 747–768.

Rigotti, Luca, Matthew Ryan, and Rhema Vaithianathan. 2011. "Optimism and Firm Formation." *Economic Theory* 46(1): 1–38.

Robinson, Peter B., David V. Stimpson, Jonathan C. Huefner, and H Keith Hunt. 1991. "An Attitude Approach to the Prediction of Entrepreneurship." *Entrepreneurship Theory and Practice* 15(4): 13–31.

Rowley, Tim, Dean Behrens, and David Krackhardt. 2000. "Redundant Governance Structures: An Analysis of Structural and Relational Embeddedness in the Steel and Semiconductor Industries." *Strategic Management Journal* 21(3): 369–386.

Rutherford, Matthew W., Ernest H. O'Boyle, Chao Miao, Daniel Goering, and Joseph E. Coombs. 2017. "Do Response Rates Matter in Entrepreneurship Research?" *Journal of Business Venturing Insights* 8: 93–98.

Ryan, Richard M., and Edward L. Deci. 2000. "Self-Determination Theory and the Facilitation of Intrinsic Motivation, Social Development, and Well-Being." *American Psychologist* 55(1): 68–78.

Santos, Francisco J., Muhammad Azam Roomi, and Francisco Liñán. 2016. "About Gender Differences and the Social Environment in the Development of Entrepreneurial Intentions." *Journal of Small Business Management* 54(1): 49–66.

Schmitt, Neal. 1996. "Uses and Abuses of Coefficient Alpha." *Psychological Assessment* 8(4): 350–353.

Schwarz, Erich J., Malgorzata A. Wdowiak, Daniela A. Almer-Jarz, and Robert J. Breitenecker. 2009. "The Effects of Attitudes and Perceived Environment Conditions on Students' Entrepreneurial Intent: An Austrian Perspective." *Education + Training* 51(4): 272–291.

Sequeira, Jennifer, Stephen L. Mueller, and Jeffrey E. Mcgee. 2007. "The Influence of Social Ties and Self-Efficacy in Forming Entrepreneurial Intentions and Motivating Nascent Behavior*." *Journal of Developmental Entrepreneurship* 12(03): 275–293.

Sevä, Ingemar Johansson, Daniel Larsson, and Mattias Strandh. 2016. "The Prevalence, Characteristics and Well-Being of 'Necessity' Self-Employed and 'Latent' Entrepreneurs: Findings from Sweden." *International Journal of Entrepreneurship and Small Business* 28(1): 58.

Shapero, A., and L. Sokol. 1982. "The Social Dimensions of Entrepreneurship, in the Encyclopaedia of Entrepreneurship." In *Encyclopedia of Entrepreneurship*.

Shinnar, Rachel S., Dan K. Hsu, and Benjamin C. Powell. 2014. "Self-Efficacy, Entrepreneurial Intentions, and Gender: Assessing the Impact of Entrepreneurship Education Longitudinally." *The International Journal of Management Education* 12(3): 561–570.

Skriabikova, Olga J., Thomas Dohmen, and Ben Kriechel. 2014. "New Evidence on the Relationship between Risk Attitudes and Self-Employment." *Labour Economics* 30: 176–184.

Snyder, Charles R. 2002. "Hope Theory: Rainbows in the Mind." *Psychological Inquiry* 13(4): 249–275.

Solesvik, Marina Z. 2013. "Entrepreneurial Motivations and Intentions: Investigating the Role of Education Major." *Education + Training* 55(3): 253–271.

St-Jean, Etienne. 2012. "Mentoring as Professional Development for Novice Entrepreneurs: Maximizing the Learning." *International Journal of Training and Development* 16(3): 200–216.

St-Jean, Etienne, and Josée Audet. 2012. "The Role of Mentoring in the Learning Development of the Novice Entrepreneur." *International Entrepreneurship and Management Journal* 8(1): 119–140.

St-Jean, Etienne, and Maripier Tremblay. 2011. "Opportunity Recognition for Novice Entrepreneurs: The Benefits of Learning with a Mentor." *Academy of Entrepreneurship Journal* 17(2): 37–48.

Starr, Jennifer A., and Nanette Fondas. 1992. "A Model of Entrepreneurial Socialization and Organization Formation." Entrepreneurship Theory and Practice 17: 67–77.

Stenholm, Pekka. 2011. "Innovative Behavior as a Moderator of Growth Intentions." *Journal of Small Business Management* 49(2): 233–251.

Storey, David J. 2011. "Optimism and Chance: The Elephants in the Entrepreneurship Room." *International Small Business Journal: Researching Entrepreneurship* 29(4): 303–321.

Sullivan, Robert. 2000. "Entrepreneurial Learning and Mentoring." *International Journal of Entrepreneurial Behavior & Research* 6(3): 160–175.

Terjesen, Siri, and Sherry E. Sullivan 2011. "The Role of Developmental Relationships in the Transition to Entrepreneurship: A Qualitative Study and Agenda for Future Research." *Career Development International* 16 (5): 482–506.

Ting, Song Xiao, Liu Feng, and Wang Qin. 2017. "The Effect of Entrepreneur Mentoring and Its Determinants in the Chinese Context." *Management Decision* 55: 1410–1425.

Tkachev, Alexei, and Lars Kolvereid. 1999. "Self-Employment Intentions among Russian Students." *Entrepreneurship & Regional Development* 11(3): 269–280.

Tlaiss, Hayfaa A. 2014. "Women's Entrepreneurship, Barriers and Culture: Insights from the United Arab Emirates." *The Journal of Entrepreneurship* 23(2): 289–320.

Trevelyan, Rose. 2008. "Optimism, Overconfidence and Entrepreneurial Activity." *Management Decision* 46(7): 986–1001.

United Nations Department of Economic and Social Affairs Population Division. 2017. *World Population Prospects: The 2017 Revision, Key Findings and Advance Tables. ESA/P/WP/248*. New York: United Nations .

Valliere, Dave, and Rein Peterson. 2009. "Entrepreneurship and Economic Growth: Evidence from Emerging and Developed Countries." *Entrepreneurship & Regional Development* 21(5): 459–480.

Valtonen, Heli. 2007. "Does Culture Matter? Entrepreneurial Attitudes in the Autobiographies of Twentieth-Century Business Leaders in Finland and the United States." *Business History Conference* 5(1): 1–24.

Van Auken, Howard, Fred L. Fry, and Paul Stephens. 2006. "The Influence of Role Models on Entrepreneurial Intentions." *Journal of Developmental Entrepreneurship* 11(02): 157–167.

van Gelderen, Marco. 2010. "Autonomy as the Guiding Aim of Entrepreneurship Education." *Education + Training* 52(8/9): 710–721.

Van Gelderen, Marco, Teemu Kautonen, and Matthias Fink. 2015. "From Entrepreneurial Intentions to Actions: Self-Control and Action-Related Doubt, Fear, and Aversion." *Journal of Business Venturing* 30(5): 655–673.

Verheul, Ingrid, Roy Thurik, Jolanda Hessels, and Peter van der Zwan. 2010. "Factors Influencing the Entrepreneurial Engagement of Opportunity and Necessity Entrepreneurs." *EIM Research Reports H* 201011 1–24.

Vinogradov, Evgueni, and Lars Kolvereid. 2007. "Cultural Background, Human Capital and Self- Employment Rates among Immigrants in Norway." *Entrepreneurship & Regional Development* 19(4): 359–376.

Webb, Noreen M., Richard J. Shavelson, and Edward H. Haertel. 2006. "Reliability Coefficients and Generalizability Theory." In *Handbook of Statistics*, edited by Calyampudi Radhakrishna Rao and Sandip Sinharay, Vol. 26, 81–124. Amsterdam: Elsevier B.V.

Weissenstein, Anne, Sandra Ligges, Britta Brouwer, Bernhard Marschall, and Hendrik Friederichs. 2014. "Measuring the Ambiguity Tolerance of Medical Students: A Cross-Sectional Study from the First to Sixth Academic Years." *BMC Family Practice* 15(1): 6–15.

Wennberg, Karl, Saurav Pathak, and Erkko Autio. 2013. "How Culture Moulds the Effects of Self-Efficacy and Fear of Failure on Entrepreneurship." *Entrepreneurship & Regional Development* 25(9–10): 756–780.

World Bank. 2017. "World Bank Country and Lending Groups: Country Classification." https://datahelpdesk.worldbank.org/knowledgebase/articles/906519-world-bank-country-and-lending-groups.

Xavier-Oliveira, Emanuel, André O. Laplume, and Saurav Pathak. 2015. "What Motivates Entrepreneurial Entry under Economic Inequality? The Role of Human and Financial Capital." *Human Relations* 68(7): 1183–1207.

Xiao, Li, and David North. 2017. "The Graduation Performance of Technology Business Incubators in China's Three Tier Cities: The Role of Incubator Funding, Technical Support, and Entrepreneurial Mentoring." The Journal of Technology Transfer 42(3): 615–634.

Youssef, Carolyn M., and Fred Luthans. 2007. "Positive Organizational Behavior in the Workplace: The Impact of Hope, Optimism, and Resilience." *Journal of Management* 33(5): 774–800.

Zhang, Ying, Geert Duysters, and Myriam Cloodt. 2014. "The Role of Entrepreneurship Education as a Predictor of University Students' Entrepreneurial Intention." *International Entrepreneurship and Management Journal* 10(3): 623–641.