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Entrepreneurial Socialization and Psychological Capital: Cross-Cultural and Multigroup Analyses of Impact of Mentoring, Optimism, and Self-Efficacy on Entrepreneurial Intentions

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Abstract

This study demonstrates that psychological capital is essential in the process of developing and strengthening entrepreneurial intentions. We specifically investigate the mediating roles of optimism and self-efficacy facets of psychological capital in the relationship between entrepreneurial mentoring and intentions. The study was conducted among 1,272 young persons from Germany and East Africa (Uganda and Kenya). These included 784 final year university students and 488 wage employed. A multigroup analysis was applied to test for the effects of employment status and country differences. Results indicate that mentoring, optimism, and self-efficacy are

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positively correlated with entrepreneurial intentions. Findings also supported the hypothesized-mediated mediation model that mentoring impacts on entrepreneurial intentions through optimism and self-efficacy. The association of entrepreneurial mentoring on intentions was higher among the Germany participants than in the East African sample as well as among the students compared with employed individuals. Practical and theoretical implications of our findings are discussed.

Keywords
entrepreneurial intentions, entrepreneurial intent, entrepreneurial mentoring, entrepreneurial socialization, optimism, psychological capital, self-efficacy

Introduction

There is a general consensus that increasing entrepreneurial activity is essential for economic prosperity (Huggins & Thompson, 2014; Liguori et al., 2018; Schumpeter, 1934; Van Praag & Versloot, 2008; Wennekers, van Wennekers, Thurik, & Reynolds, 2005). It is a process that results in the creation of new workplaces and employment opportunities (Wolff & Nivorozhkin, 2012). At a microlevel, entrepreneurship contributes to alleviating household poverty (Ahn, 2015; Falco & Haywood, 2016; Gindling & Newhouse, 2014), hence improving people's standards of living (Zahra, Newey, & Li, 2014). Entrepreneurship is more essential today, given that unemployment rates have remained at worryingly high levels, reflected in the label of a jobless generation (Dietrich & Möller, 2016; Falco & Haywood, 2016; Vogel, 2015b). Furthermore, the number of people in precarious and insecure jobs has risen (Kottwitz, Hünefeld, Frank, & Otto, 2017). Hence, entrepreneurship promotion requires increased attention to ensure sustained economic flourishing (Acs, Szerb, & Autio, 2016) for both individuals and nations.

Consequently, old entrepreneurship debates such as what attracts or inspires individuals into entrepreneurship remain relevant. In recent decades, research has specifically focused on intentions, based on the theory of planned behavior (TPB; Ajzen, 1991). Entrepreneurial intentions are considered an important antecedent of entrepreneurial behavior (Kautonen, van Gelderen, & Fink, 2015; Kautonen, van Gelderen, & Tornikoski, 2013; Van Gelderen, Kautonen, & Fink, 2015). However, there are different explanations for the development and implementation of entrepreneurial intentions. On the one hand, personal factor were considered such as an entrepreneurial personality (e.g., Brandstätter, 2011; Obschonka & Stuetzer, 2017; Zhao, Seibert, & Lumpkin, 2010) and entrepreneurial cognitions (e.g., Barbosa, Gerhardt, & Kickul, 2007; Mitchell et al., 2002; Shepherd & Krueger, 2002). On the other hand, economic conditions such as unemployment, job insecurity, and utility evaluations (Baumgartner &

Caliendo, 2008; Blanchflower, 2000; Falco & Haywood, 2016; Hughes, 2003) have been found to push individuals into self-employment.

An increasingly applied approach to explaining the development of entrepreneurial intentions is entrepreneurship socialization, which occurs through entrepreneurship training and culture (Adamonienė & Astromskienė, 2015; Contiua, Gaborb, & Stefanescuc, 2012; Falck, Heblich, & Luedemann, 2012; Fritsch & Rusakova, 2012; Licht, 2010; Starr & Fondas, 1992). This article particularly focuses on the association between entrepreneurship training (mentoring) and entrepreneurial intentions. Evidence shows that many universities across the world have introduced entrepreneurship courses as a means of socializing young professionals toward entrepreneurial activity (Fox, Pittaway, & Uzuegbunam, 2018; Liguori et al., 2018). Entrepreneurship learning is, however, not limited to formal education but also occurs through informal mechanisms such as role modeling. We summarize all these forms of entrepreneurship learning in the construct *entrepreneurial mentoring*. It has been noted that learning about entrepreneurship enables individuals to develop awareness and competencies required for entrepreneurial roles and to consider a career in entrepreneurship (Block, Hoogerheide, & Thurik, 2013; Fayolle & Gailly, 2015).

Reviews of existing research reveal that entrepreneurial education is significantly related to stronger entrepreneurial attitudes and intentions. However, there are several concerns such as the need to examine how different course contents and methodology impact on intentions (Fayolle & Gailly, 2015; Liñán & Fayolle, 2015). This study focuses on the impact of general entrepreneurship mentoring, which includes entrepreneurship training and support in different forms including role modeling, coaching, counseling, encouragement, and information provision (St-Jean, 2012; St-Jean & Audet, 2012). Learning accruing from such activities whether formally or informally arranged has the potential to improve on an individual's entrepreneurial competencies. All these forms of entrepreneurial learning provide important tools for enhancing one's identification with entrepreneurship as a profession as well as boosting attitudes, motivation, and competences (Gibson, 2004; Wyrwich, Stuetzer, & Sternberg, 2016) and, hence, could play essential roles in modifying behaviors toward start-ups. This is in line with the major expectations of entrepreneurial education, that is, supporting learners to develop the necessary mind-set, skill set, and behaviors for start-up (Neck & Corbett, 2018).

Entrepreneurship training primarily focuses on developing entrepreneurial competencies such as opportunity recognition, innovation, and managing start-ups. There are suggestions that entrepreneurial training should also focus on more soft skills particularly relating to entrepreneurial cognition (Barbosa, Kickul, & Smith, 2008; Urban, 2012). In this study, we suggest that entrepreneurial training, both formal and informal, is likely to be more effective if it helps to enhance psychological resources (psychological capital) of protégés. We posit that the level of psychological capital affects the extent to which

protégés will translate entrepreneurial learning into firm intentions to start their own business. We particularly focus on the two aspects of self-efficacy and optimism, which previous research has found important for both entrepreneurial learning and development of entrepreneurial intentions (e.g., Chun-mei, Chien-hua, & Hsi-chi, 2011; Contreras, de Dreu, & Espinosa, 2017; McLaughlin, 2010; Shinnar, Hsu, & Powell, 2014). The other facets (hope and resilience) are also important for entrepreneurship and, however, are likely to be relevant to the later stages of the entrepreneurial process (Baluku, Kikooma, & Kibanja, 2016; Baluku, Kikooma, & Otto, 2018).

Previous empirical findings on entrepreneurial education have also been predominantly based on studies using student participants, which raises challenges of application beyond student groups (Nabi, Liñán, Fayolle, Krueger, & Walmsley, 2017). In this study, we not only focus on entrepreneurial mentoring among students but also groups of employed individuals. We demonstrate that the effectiveness of entrepreneurial mentoring in developing entrepreneurial intentions differs among these groups of participants and between the countries.

The remainder of this article is structured in four sections. The following section focuses on the theoretical framework and development of hypotheses and introduces the concept of psychological capital and how it relates to entrepreneurial mentoring (as a form of entrepreneurial socialization) in influencing intentions. Then the methodology used in the study including the sample, instruments, and analysis strategy is described. A subsequent section presents the results of the study. The final section discusses the results including conclusions, practical implications, and limitations.

Theoretical Framework and Hypotheses

The concept of behavior intentions is rooted in Ajzen's (1985, 1991) TPB. Intentions refer to the readiness to engage in a given behavior (Ajzen, 2011). Entrepreneurial intentions, therefore, are the readiness of an individual to establish a business venture (Thompson, 2009). From the planned behavior perspective, entrepreneurial intentions are the best predictor of entrepreneurial behavior or start-up (Kautonen et al., 2015). However, intentions are determined by attitudes toward the behavior, subjective norms, and behavioral control (Ajzen, 1991). Moreover, behavioral control determines whether or not an individual will implement the intentions (Ajzen, 2002). The behavioral control aspect emphasizes competence or self-efficacy, that is, the perceived easiness or difficulty of executing a task. It involves constraints to a behavior and how those constraints are perceived (Shaver, 2010). Moreover, belief in one's ability to control behavior increases one's agentic resources, particularly translating into optimism and persistence in action (Bandura, 2006; Mikko, Anderson, & Vesala, 2017). The emphasis on self-efficacy as an indicator of behavioral control aspect of TPB and the resulting optimism for action highlight the importance of

psychological resources (psychological capital) in the formation and implementation of behavioral intentions.

Psychological Drivers of Entrepreneurial Intentions

There are a plethora of works that have sought to explain why some people and not others engage in entrepreneurial activities. Different perspectives, particularly in the psychological and economic domains, have been used to generate a wide range of answers to this question. Evidence generated suggests that there are individual and contextual factors, from micro- to macro-levels, that attract or push people into self-employment (Patel & Thatcher, 2014). The major player, however, seems to be the changes in the labor force (Falter, 2005). At present, this could be true for developing countries with predominantly young populations, where all graduates cannot be absorbed by the current job openings. The consequence of such situations is a surge in unemployment rates or at least underemployment, which in turn push individuals into self-employment (Abada, Hou, & Lu, 2014; Falco & Haywood, 2016; Grüner, 2006; Oh, 2008). Therefore, many individuals, particularly new entrants in the labor market, may seek a career in self-employment based on limited likelihoods of obtaining the desired job (Gindling & Newhouse, 2014) or the likelihood of never getting a salaried job. Based on these realities, some scholars claim that choice to go into self-employment is more reactive than proactive (Walker & Webster, 2007).

Contrary to this idea that individuals are pushed into self-employment by some vexatious economic situations, there is evidence suggesting that some individuals are attracted to entrepreneurial opportunities (Dana, 1995a, 1996) even where there are other great employment opportunities or individuals preferring salaried jobs that enable them to use their entrepreneurial abilities through intrapreneurship. There is also evidence demonstrating that push factors such as unemployment actually have only marginal effects on entry into self-employment (Patel & Thatcher, 2014). Instead, research shows that there are a range of factors that influence individuals' decisions to pursue a career in self-employment, for example, entrepreneurial culture and education, expected earnings, and seeking independence at work (e.g., Abada et al., 2014; Goetz & Rupasingha, 2013; Liñán & Fayolle, 2015; Shiri, Shinnar, Mirakzadeh, & Zarafshani, 2017; Wang, Prieto, Hinrichs, & Aguirre Milling, 2012).

In the psychological domain, studies answering the question of who becomes an entrepreneur have revolved around a few psychological concepts particularly personality variables including the big five factors, risk tolerance, the locus of control, innovativeness, and narcissism (Liñán & Fayolle, 2015). There are also seems to be a fair amount of research on cognition and attitudes as revealed by Liñán and Fayolle (2015) review of entrepreneurial intentions literature. These studies have explained how people perceive, interpret, and react to entrepreneurial opportunities and how people behave in business contexts. However, there is

a need to focus beyond these constructs. Beyond these domains of psychological study, there are emerging concepts that are increasingly becoming popular in management studies, for example, psychological capital (Goldsmith, Veum, & Darity, 1997; Luthans, Luthans, & Luthans, 2004). The application of such constructs to study of entrepreneurship is still in the nascent phase, hence require extension and replication studies. This study particularly investigates the effect of some of the components of psychological capital in the development of entrepreneurial intentions.

This study further focuses on the role of entrepreneurial socialization in the development of entrepreneurial intentions. Entrepreneurial socialization, which includes education, training, and culture, has the potential of increasing entrepreneurial intentions and entry (Adamonienė & Astromskienė, 2015; Honig, 2004; Licht, 2010; Pretorius, Nieman, & van Vuuren, 2005; Starr & Fondas, 1992). The aspects of education and training are in this study summed in the construct of entrepreneurial mentoring. Generally, mentoring involves an experienced individual supporting the professional development of a protégé through information, guidance, and counseling (Kram & Isabella, 1985). Hence, mentoring goes beyond the development of work-related hard skills. In the entrepreneurship field, it is suggested that mentoring should focus on strengthening cognitive and affective skills that improve opportunity recognition, efficacy, and developing one's entrepreneurial identity or self-image (St-Jean & Audet, 2012). This study discusses the linkage between entrepreneurial mentoring and psychological capital facets in the development of entrepreneurial intentions; among different groups (students and employed persons) and between the countries.

Psychological Capital and Entrepreneurial Intentions

Drawing on ideas from the field of positive psychology, Luthans et al. (2004) reaffirmed the existence and importance of psychological capital (positive) over and beyond the human and social capital. The construct focuses on what is right rather than what is wrong with people, thus emphasizing strengths over weaknesses (Seligman, 2002), and basically answers an identity question of *who you are* (Luthans et al., 2004) in determining one's psychological strengths for work and other human development aspects. Psychological capital specifically regards a state of mind, consisting of positive psychological strengths (Avey, Reichard, Luthans, & Mhatre, 2011) that individuals bring to their work and other aspects of life. In their application of the TPB to entrepreneurship, Krueger and Carsrud (1993) listed several personal and situational factors that affect entrepreneurial intentions and behavior, directly or indirectly via the belief systems proposed by the theory (Ajzen, 1991). In this article, we posit that psychological capital is one of those personal factors that affect intentions. Starting a business of one's own requires resources beyond the tangibles inputs. The emphasis on perceptions and

self-efficacy in leading to intentions and behavior in the TPB suggests that positive psychological resources, particularly those that constitute psychological capital, are essential in development and implementation of entrepreneurial intentions.

Psychological capital comprises of the four psychological resources of confidence (self-efficacy), hope, optimism, and resilience (Luthans et al., 2004; Luthans & Youssef-Morgan, 2017). In the context of work, these capabilities have also been considered as essential for motivation. It has been suggested that these resources combined, make stronger contributions to business than financial, human, and social capitals (Baluku et al., 2016; Luthans et al., 2004). However, each of them plays a unique role in the process of starting and managing a business. This study particularly focuses on optimism and self-efficacy, which we presume are important resources in the development of entrepreneurial intentions as these relate to outcome expectations (thus linked to attitudes) and competence (thus linked to control beliefs), respectively, in line with the TPB. We explain the role of each of these resources in the venture creation process in the following paragraphs. We do not focus on hope and resilience aspects as these respectively relate to the motivational state that facilitates persistence in pursuit of goals (Luthans, Avolio, Avey, & Norman, 2007b; Snyder, 2002) and ability to cope with and bounce back from adversity, uncertainty, failure, and dealing with positive change as well (Luthans, Avolio, Avey, et al., 2007b; Masten, 2001). These two aspects could, therefore, be more applicable to the later stages of the entrepreneurial process such as the implementation of intentions and success in the entrepreneurial activity (Baluku et al., 2016, 2018)

Among the four facets of psychological capital, optimism is posited to be the closest to the overall concept of positive psychology (Luthans et al., 2004), as it refers to confidence for positive results now or later (Luthans, Avolio, Avey, et al., 2007b; Trevelyan, 2008). The ability to perceive bad incidences as temporary and good incidences as permanent (Luthans et al., 2004) increases or sustains expectations for good results. This translates into more motivation for action, resilience, and commitment (Trevelyan, 2008). Therefore, optimism could be related to an interest in entrepreneurship or venture creation in different ways. According to the career development literature, expected outcomes play a role in career interests, choices, and actions. Venture creation involves high levels of risk, hence only individuals with high optimism are likely to choose self-employment (Dushnitsky, 2010; Storey, 2011). This is supported by findings that perceptual variables such as confidence and optimism impact on venture creation (Fraser & Greene, 2006; Koellinger, Minniti, & Schade, 2007; Storey, 2011; Trevelyan, 2008). We, therefore, hypothesize that a high level of optimism is associated with high entrepreneurial intentions.

Given that optimism represents the confidence for positive results, it should be differentiated from overconfidence—the overestimation of one's ability and

knowledge (Koellinger et al., 2007; Russo & Schoemaker, 2016). Both constructs are representations of confidence and, however, are not related and tend to have differing outcomes (Trevelyan, 2008). Whereas optimism is a positive motivating force, overconfidence may serve as the basis for an inaccurate judgment of reality (Trevelyan, 2008). To differentiate overconfidence from other forms of confidence, Moore and Healy (2008) identify three aspects of overconfidence: overestimation of actual ability, overplacement (considering oneself to be better than others), and overprecision. In this direction, it has been argued that overconfident entrepreneurs may overestimation the signals received about the entrepreneurial opportunity (Jaimovich & Rebelo, 2007), which has a negative effect on entrepreneurial activities, thus likely to result into failure (Artinger & Powell, 2016; Camerer & Lovallo, 1999; Jain & Ali, 2013; Trevelyan, 2008).

Concerning entrepreneurial intentions and entry, both optimism and overconfidence, have positive contributions (Trevelyan, 2008). Individuals who are overconfident tend to perceive themselves as entrepreneurial (Giacomin, Janssen, & Shinnar, 2015) and therefore tend to have stronger entrepreneurial intentions (Giacomin et al., 2015). However, overconfidence or excessive optimism has been found to be detrimental in the later stages of the entrepreneurial process (e.g., Camerer & Lovallo, 1999; Ilieva, Brudermann, & Drakulevski, 2018). Hence, realistic optimism is required to evaluate what is practically attainable in a given context (Luthans, Youssef, & Avolio, 2007). The challenge for scholars is to define the boundaries between realistic optimism, confidence, and overconfidence to facilitate accurate measurement. The measure for optimism used in this study is part of the Psychological Capital Questionnaire, which is adapted from the Life Orientation Test. It has been argued that this scale measures optimism distinctly from conceptually related variables (Scheier & Carver, 1985). Overall, we hypothesize that:

Hypothesis 1 (H1): Optimism is positively associated with entrepreneurial intentions.

Whereas optimism relates to outcome expectations, self-efficacy, or confidence, on the other hand, relates to one's subjective assessment of competence to achieve the expected outcomes (Bandura, 1997). This subjective competence includes the perceived ability to harness resources required to complete a task which implies the needed motivation, cognitive resources, and behaviors (Luthans et al., 2007; Stajkovic & Luthans, 1998). Thus, people will be attracted and achieve superior performance in activities where their efficacy is higher (Forbes, 2005). High entrepreneurial self-efficacy is, therefore, essential in motivating individuals to engage and succeed in the different challenging tasks related to starting a business including opportunity recognition and mobilization of start-up resources (Boyd & Vozikis, 1994; Culbertson, Smith, & Leiva, 2011; Dimov, 2010). Previous research has also shown that self-efficacy is related to lower fear of failure and reduced risk

perception (Goel & Karri, 2006; Krueger & Dickson, 1994), subsequently enhancing start-up intention. This resource is applicable even in precarious situations such as during hard economic times and war (Bullough, Renko, & Myatt, 2014). This is explained by the positive effect that entrepreneurial self-efficacy has on entrepreneurial attitudes (Izquierdo & Buelens, 2011), which in line with the TPB is a predictor of entrepreneurial intentions. Although most of the extant literature suggests that self-efficacy is related to high entrepreneurial intentions, it is not obvious among all populations. Some studies have indicated that high self-efficacy can lower entrepreneurial intentions in some contexts, for example, high self-efficacy tends to be related to low entrepreneurial intentions among students in theoretically related courses (Piperopoulos & Dimov, 2015). Among students nearing graduation and employees, those with high self-efficacy may also have a positive evaluation of their employability; given that self-efficacy has been found to be positively related employability orientation (Nauta, van Vianen, van der Heijden, Van Dam, & Willemsen, 2009). On the overall, however, we hypothesize that:

> **Hypothesis 2 (H2)**: Self-efficacy is positively associated with entrepreneurial intentions.

These psychological resources (self-efficacy and optimism) develop from various sources including personal and environmental factors. Similarly, entrepreneurial intentions and behavior have also been linked to several personal and environmental influences. From the behavioral perspective, entrepreneurial learning is one process that enhances development of personal psychological resources (e.g., Luthans et al., 2004; Luthans & Youssef-Morgan, 2017; Shinnar et al., 2014) as well as intentions for self-employment (e.g., Nabi et al., 2017; Nabi, Walmsley, Liñán, Akhtar, & Neame, 2018; Urban, 2006). This study focuses on entrepreneurial mentoring (a form of entrepreneurial learning) as a socialization process that can enhance entrepreneurial intentions directly as well as indirectly through increased business-related optimism and self-efficacy. The Entrepreneurial Socialization Model (Starr & Fondas, 1992) suggests that the choice to become self-employed is influenced by predisposing characteristics and experiences, whereby socializing agents such as mentors, family, and peers provide important resources such as knowledge, skills, and information for choosing and performing the entrepreneurial role (Krueger, 2007; Starr & Fondas, 1992). Generally, mentors are experienced and skilled entrepreneurs who support prospecting or nascent entrepreneurs (St-Jean & Audet, 2012). For those prospecting, entrepreneurship learning is important for strengthening the intent to establish one's own business and strengthens individual's ability to maneuver through the difficult start-up process.

Mentoring is often provided in varying forms depending on the needs of the mentee, the competencies of the mentor, and the context. A common form of entrepreneurial socialization that is aimed at enhancing entry and success in

entrepreneurial activities is entrepreneurship education. This is now widespread in many universities and across academic programs and currently involves diverse pedagogical approaches (Liguori et al., 2018), including mentoring. Such programs provide opportunities to teach and mentor learners into entrepreneurial roles. During the course of study, facilitators not only provide but also encourage learners to seek knowledge, information, and support (Rahman & Day, 2014) that enhance entrepreneurial efficacy and attitudes in addition to skills development. However, mentoring is not limited to the formal learning arrangements. Mentoring is, therefore, a form of entrepreneurial learning through which an experienced entrepreneur supports the development of a novice (St-Jean & Audet, 2012). Mentoring may include supporting protégés through coaching, sponsorships, role modeling, experience sharing, hands-on exposure training, linkage to useful business and professional networks, information about opportunities, counseling, friendship, encouragement and persuasion, as well as giving advice or recommendations (Beckett, 2010; Gong, Chen, & Lee, 2011; Radu Lefebvre & Redien-Collot, 2013; St-Jean & Audet, 2012; St-Jean & Mathieu, 2015). Thus, mentoring is not always about development of technical skills but also an opportunity for accessing emotional support, information, and connections as well as improved sense of professional identity and belonging (Radu Lefebvre & Redien-Collot, 2013; St-Jean & Audet, 2012; Terjesen & Sullivan, 2011) that can improve the attitudes (Audet & Couteret, 2012), consequently transforming into strong intentions for entrepreneurial entry, in line with the TPB.

Mentoring literature emphasizes coaching, role modeling, and the quality of relationship as essential in the process of enhancing the professional growth of protégés. Regarding coaching as a mentoring approach, it plays a double role of enabling the mentee to acquire skills, but also the coach can catalyze the entrepreneurial behavior of the young or prospecting entrepreneur (Audet & Couteret, 2012). An important form of mentoring, that is rather informal, is role modeling. It is a powerful tool for enhancing positive attitudes toward entrepreneurship among young people (Lafuente & Vaillant, 2013). This form of learning is linked to the development of a professional self-concept particularly in the early stages of career development (Gibson, 2003); this enables young people to identify themselves with entrepreneurship as a profession. Moreover, role models are a source of inspiration and behavior modification (Gibson, 2004). Despite the emphasis on modeling, coaching, or training, the importance of other mentoring approaches such as information giving, counseling, and networking should not be ignored. All of these are important at all stages of enterprise formation. Overall, entrepreneurship training makes a significant contribution to strengthening entrepreneurial intentions and eventual start-up (Fayolle & Gailly, 2015; Nabi et al., 2017; Xiao & North, 2017). Hence, we posit that:

Hypothesis 3 (H3): Entrepreneurial mentoring is positively associated with entrepreneurial intentions.

In this study, we propose a moderated mediation model (Figure 1); such that the effects of mentoring on entrepreneurial intentions are mediated by optimism and self-efficacy. But also that both the direct and indirect effects are moderated by employment status and country. A mediator is a variable that intervenes in a manner that it transmits the effects of the predictor on the outcome variable (Aguinis, Edwards, & Bradley, 2017; MacKinnon, Fairchild, & Fritz, 2007), thus explaining how the effects of the predictor variable occur (Baron & Kenny, 1986). On the other hand, a moderator is variable that has an impact on the strength and direction of the relationship between the predictor and outcome variables (Aguinis et al., 2017; Baron & Kenny, 1986), hence helps to understand when the effects are expected to occur (Baron & Kenny, 1986).

Concerning mediation, our proposition is that the impact of mentoring on entrepreneurial outcomes is facilitated by its impact on psychological resources. Particularly, mentoring tends to enhance entrepreneurial attitudes and self-efficacy (Günzel-Jensen, Moberg, & Mauer, 2017; Jabeen, Faisal, & Katsioloudes, 2017; Karlsson & Moberg, 2013), which may translate into higher entrepreneurial intentions (Wilson, Kickul, & Marlino, 2007; Zhao, Seibert, & Hills, 2005). However, we are not aware of any research linking mentoring to entrepreneurial optimism. Nevertheless, it is known that optimism and self-efficacy are interrelated; therefore, there is a possibility that mentoring can boost both entrepreneurial self-efficacy and optimism. Both optimism and self-efficacy involve a sense of control, agentic goal pursuits, and proactive in nature (Luthans, Avolio, Avey, et al., 2007b; Luthans & Youssef-Morgan, 2017), hence their role in behavioral intentions. Bandura (1998) indicates that an optimistic sense of self-efficacy is required to

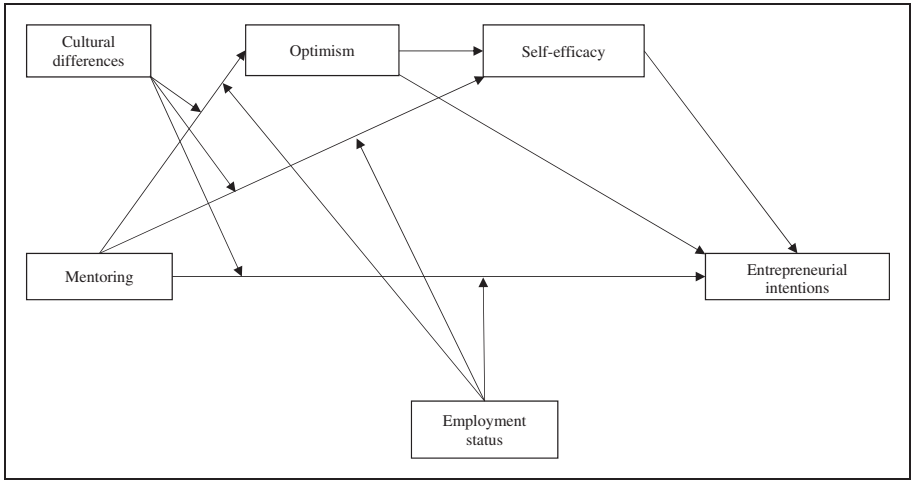

Figure 1. Conceptual model.

achieve goals, which may denote that optimism has implications for the perceptions of one's abilities. Previous research has indicated that people with high optimism also tend to have high self-efficacy, especially the belief that they have the required competencies to achieve their expected goals (Storey, 2011). We, therefore, posit that mentoring impacts on entrepreneurial intentions via optimism and self-efficacy such that entrepreneurial mentoring improves optimism which also impacts on efficacy and consequently on intentions.

> **Hypothesis 4 (H4)**: The impact of mentoring on entrepreneurial intentions is mediated by optimism through self-efficacy.

Research on entrepreneurial training predominantly uses student participants (Liñán & Fayolle, 2015). This limits the applicability of entrepreneurial education research to other populations. Whereas entrepreneurial training, for example, entrepreneurship education in higher institutions, increases intentions among students (Nabi et al., 2017), it is not certain that it has similar effects in other groups such as employed people. Employment status is considered as one of the contextual influences on the development of entrepreneurial intentions (Davidsson, 1995). Moreover, high unemployment is also considered as a situation that tends to push individuals into entrepreneurial activity or self-employment (e.g., Chigunta, 2017; Tervo, 2006; Thurik, Carree, van Stel, & Audretsch, 2008). We, therefore, assume that entrepreneurial mentoring is likely to be differentially effective among these groups. Particularly, we expect that even with entrepreneurial mentoring, employed individuals compared with students who are getting ready to enter the labor market are likely to have less urgency to go into entrepreneurship especially if they are in stable and satisfying jobs. We, therefore, hypothesize that:

> **Hypothesis 5a (H5a)**: Mentoring impacts on entrepreneurial intentions differently according to employment status such that intentions are weaker for employed individuals than for students.

The above hypothesis is in line with the observations of Nabi et al. (2017) who found, in their review of the entrepreneurship education literature, that there exist contradictions in findings relating to the impact of entrepreneurship education on outcomes, which could be accounted for by contextual factors. They indicate that culture and economic development contexts are some of the possible influencing factors but have hardly been included in entrepreneurship training research. To validate this claim, a large cross-national study that found entrepreneurship education is more essential for entrepreneurship activity in countries that are high on individualism and uncertainty tolerance (Oo, Sahaym, Juasrikul, & Lee, 2018). Cultural norms impact on entrepreneurial intentions, start-ups, and entrepreneurial behavior (Dana, 1995a, 1997; Hechavarria & Reynolds, 2009).

An important dimension of the so-called entrepreneurial culture is individualism, whereby entrepreneurship has been found to flourish more in individualistic than in collectivistic cultures (e.g., Hechavarria & Reynolds, 2009; Liñán, Moriano, & Jaén, 2016; Mueller & Thomas, 2001). This study focuses on two countries or regions that vary in culture and economic context, Germany, which is high on individualism, on one hand, and East Africa (Uganda and Kenya), which is low on individualism (Hofstede, Hofstede, & Minkov, 2010). Cultural norms may not only have an impact on entrepreneurial ability and intention, but they are also likely to affect how well people benefit from entrepreneurship mentoring, given that in some situations culture has been found to determine nature of entrepreneurial activities and who is allowed to engage in them (Dana, 1997). Concerning the economic development contexts, East Africa, in contrast to Germany, comprises of low-income economies (World Bank, 2017) and with a rapidly growing young population (United Nations Department of Economic and Social Affairs Population Division, 2017), which poses an unemployment challenge. Hence, self-employment, like in many less developed countries, is the most common form of employment (Gindling & Newhouse, 2014). This implies that individuals may already have high entrepreneurial intentions, thus limiting the potential impact of entrepreneurial mentoring on forming intentions (Nabi et al., 2017). Unsurprisingly, youth entrepreneurship potential is high in this region, especially in Uganda, as revealed by Global Entrepreneurship Monitor reports (e.g., Singer, Amorós, & Moska, 2015). It is hence likely that the impact of entrepreneurial mentoring on intentions is higher in Germany than in East Africa. We, therefore, hypothesize that:

Hypothesis 5b (H5b): Mentoring impacts on entrepreneurial intentions differently among countries, such that the impact is stronger in Germany than in East Africa.

This study examines the differential impact of mentoring on entrepreneurial intentions through the two psychological resources (self-efficacy and optimism) using a multigroup and cross-cultural sample of students and employed individuals. Our assumption is that entrepreneurial mentoring aimed at strengthening these psychological resources among learners has a stronger impact on intentions, given that these resources are essential for developing entrepreneurial intentions as already highlighted in the previous sections. However, in interventions to strengthen self-efficacy, for example, the improvement tends to occur differentially among groups (e.g., Shinnar et al., 2014). We, therefore, posit that the indirect effects of mentoring on intentions via these psychological resources may differ between groups of students and employed individuals as well as between countries.

Hypothesis 6 (H6): The indirect effects of mentoring on entrepreneurial intentions via optimism are conditioned by (a) employment status and (b) country.

Hypothesis 7 (H7): The indirect effects of mentoring on entrepreneurial intentions via self-efficacy are conditions by (a) employment status and (b) country.

Methods

The Sample

To achieve the aim of the study, data were collected from a sample of 1,272 individuals (50.08% male), comprising of final year university students and employed individuals from Germany and East Africa (Uganda and Kenya). The student sample consisted of 784 (61.64% male) participants: 289 German (57.79% male) who responded to the invitation through the students' mailing list of a German University to participate in the online study and 495 East African (53.13% female). The East African student sample was recruited in their lecture rooms with the support of their lecturers; the survey the students filled in was a paper-and-pencil questionnaire. The sample of employed persons comprised of 488 individuals (51.23% female). These included 93 German participants (67.74% female) and 395 East African participants (52.41% male). The German employed sample comprised mainly of academic and administrative staff of Philipps University Marburg. These were recruited through the university's staff mailing list to respond to an online questionnaire. East African participants were also drawn from different companies including administrative and academic staff of Makerere University, Kisii University, and Maseno University and employees in small businesses in Kampala, Kisii, and Maseno cities. For this sample, paper-and-pencil method was used to administer the survey questionnaire with the support of research assistants.

Instruments

Mentoring. We adopted 18 most reliable items from the entrepreneurial mentoring questionnaire developed by Baluku, Leonsio, Bantu, and Otto (2018). From the 22 items comprising the questionnaire, 4 items were not included in the analysis because they loaded at less than the threshold of .70 (Hair, Hult, Ringle, & Sarstedt, 2013). A sample item: I have been assisted in using facts to map out realistic step-by-step strategies for becoming an entrepreneur. 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*). The questionnaire demonstrated high internal consistency ($\alpha = .97$).

Psychological capital. The Psychological Capital Questionnaire self-rater version (Luthans, Avolio, & Avey, 2007a) was adopted to measure the dimensions of optimism and self-efficacy. The questionnaire comprises of six items for each

dimension, measured on a 6-point Likert-type scale (1 = *strongly disagree* to 6 = *strongly agree*). The internal consistency reliabilities in this study (α = .85 for self-efficacy and .72 for optimism) were satisfactory. Sample items include: *I feel confident presenting information to a group of colleagues* (for self-efficacy) and *I always look on the bright side of things* (for optimism).

Entrepreneurial intentions were measured by using the intentions questionnaire developed by Liñán and Chen (2009). The items were rated on a 7-point Likert-type scale ranging from 1 (*totally disagree*) to 7 (*totally agree*). The instrument composed of six items (α = .95, sample item: I am determined to create a business in the future).

Composite reliability and convergent reliability were computed using average variance extracted (AVE). Loadings for all reflective measures were above .07 threshold (Hair et al., 2013). The composite reliability and AVE square root values are presented in Table 1. In line with the criteria for discriminant validity (Fornell & Larcker, 1981), the AVE square root values were higher than the correlations among the constructs. In addition, we used Harman's single factor test to examine the common method variance. The derived single factor explained only 42.74% of the variance, which is below the 50% threshold (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003; Sharma, Crawford, & Yetton, 2009). Furthermore, variance inflation factors ranged from 1.12 to 1.41, which are considered acceptable (Hair, Ringle, & Sarstedt, 2011; C. G. Thompson, Kim, Aloe, & Becker, 2017), hence no collinearity concerns to worry about.

Results

Correlations between variables, reliability, and descriptive statistics are presented in Table 1. All correlations between the predictor variables and entrepreneurial intentions were significant, even when controlling for sex, employment status, and country. These correlations were confirmed in regression analyses for mediation and moderation effects. Using a multivariate analysis of group

Table 1. Descriptive Statistics, Reliabilities, Validity, and Partial Correlation of Variables.

	M (min, max)	*SD*	CR	AVE	α	1	2	3	4
1. Entrepreneurial mentoring	2.85 (1, 5)	1.06	.96	.60	.97	**.78**			
2. Self-efficacy	4.61 (1, 6)	.97	.85	.53	.85	.28***	**.73**		
3. Optimism	4.31 (1, 6)	1.01	.74	.50	.72	.26***	.48***	**.71**	
4. Entrepreneurial intentions	4.18 (1, 7)	1.82	.97	.85	.95	.33***	.23***	.21***	**.92**

Note. AVE square root in the diagonal bolded. Control variables: sex, country, and employment status. *SD* = standard deviation; CR = composite reliability; AVE = average variance extracted.
***$p < .001$.

Table 2. Multivariate Analysis of Variance Results for Group Differences in the Study Variables.

	Employment status				Country			
Variable	Status	*M*	*SD*	*F*	Country	*M*	*SD*	*F*
Entrepreneurial mentoring	Students	2.87	1.12	1.16	East Africa	3.26	.83	684.92***
	Employed	2.81	.97		Germany	1.89	.91	
Self-efficacy	Students	4.82	.82	111.70***	East Africa	4.57	.99	4.50
	Employed	4.25	1.10		Germany	4.70	.92	
Optimism	Students	4.44	.99	36.62***	East Africa	4.42	1.02	38.39***
	Employed	4.09	1.03		Germany	4.04	.94	
Entrepreneurial intentions	Students	4.88	1.95	383.54***	East Africa	4.68	1.73	263.65***
	Employed	3.07	1.82		Germany	3.03	1.47	

Note. SD = standard deviation.
***$p < .001$.

differences (multivariate analysis of variance, see Table 2), we observe that entrepreneurial intention levels were higher in East Africa ($M = 4.68$) than in Germany ($M = 3.03$); and among students ($M = 4.88$) than the employed ($M = 3.07$). This is in line with our expectation, given the differences in economic development and culture between Germany and East Africa. Along these differences among countries in entrepreneurial intention levels, respondents in East Africa compared with their German counterparts also reported higher optimism ($M = 4.42$ vs. 4.04) and higher mentoring level ($M = 3.26$ vs. 1.89); although the differences in self-efficacy were not significant.

The study specifically seeks to achieve two aims (refer to the conceptual model in Figure 1). The first aim is to examine whether the two dimensions of psychological capital (optimism and efficacy) mediate the relationship between entrepreneurial mentoring and intentions. The second aim is to test whether the direct and indirect effects of mentoring (via optimism and self-efficacy) are conditioned by employment status and country. Concerning mediation effects, our assumption was that optimism enhances self-efficacy, hence a mediated mediation model (entrepreneurial mentoring → optimism → self-efficacy → intentions) was applied. To test for the mediated mediation, we applied regression analysis using PROCESS macro 2.16 (model 6) in SPSS (Hayes, 2013). The model tests for all the mediation paths in a single model. Given the significant differences in entrepreneurial mentoring, optimism, efficacy, and intention, we controlled for employment status and country in addition to sex. We did not control for age, given the relative homogeneity of the sample regarding age. In line with recommendations by Hayes (2013), we applied sample bootstrapping at 5,000.

As indicated in Table 3, also illustrated in Figure 2, entrepreneurial mentoring was positively and significantly related to the mediators: optimism ($B = 0.30$, $t = 9.02$, confidence interval [CI] = [0.23, 0.36]) and self-efficacy ($B = 0.19$, $t = 6.11$, CI [0.13, 0.25]) as well as entrepreneurial intentions ($B = 0.42$, $t = 8.93$, CI [0.33, 0.51]). Concerning the indirect effects, all the three mediation paths were significant. The mediation path via optimism was positive and significant ($B = 0.04$, boot CI [0.01, 0.06]). The mediation path via self-efficacy was also significant ($B = 0.03$, boot CI [0.01, 0.05]) as well as the mediated mediation model via optimism through self-efficacy ($B = 0.02$, boot CI [0.01, 0.03]). The mediated mediation model explained 57% of the variance in entrepreneurial intentions (see Table 3). Overall, H1, H2, H3, and H4 were supported.

The mediation effects of optimism and self-efficacy were further tested separately in moderated mediation models to examine whether the indirect and direct effects of entrepreneurial mentoring on intentions were conditioned by employment status and country. For these analyses, we employed PROCESS macro 2.16 (model 10). The model tests for mediation simultaneously with two moderators for both direct and indirect effects (Hayes, 2012, 2013). We also controlled for the effects of sex and applied sample bootstrapping at 5,000 in line with (Hayes, 2013) recommendation. Regarding the effect of entrepreneurial mentoring on intentions via optimism, results in Table 4 showed that the employment status ($B = -1.08$, $t = -.18.63$, CI [-1.19, -0.96]) and country ($B = 0.41$, $t = 4.72$, CI [0.23, 0.58]) had significant moderation effects on the association between entrepreneurial mentoring and intentions. Hence, moderation of direct effects of entrepreneurial mentoring on intentions is confirmed, supporting H5a and H5b. However, neither employment status nor country moderated the indirect effects of entrepreneurial mentoring on intentions via optimism. Hence, both H6a and H6b are not supported. The moderation plots of these effects show that high entrepreneurial mentoring was related to relatively higher optimism for both German and East African respondents (Figure 3(a)). A similar trend is observed when comparing the samples of students and employed individuals (Figure 3(c)). Regarding intentions, entrepreneurial mentoring had a high effect in the German sample when controlling for both employment status and optimism (Figure 3(b)). In addition, when controlling for country and optimism as well as the interaction between mentoring and country on optimism, mentoring is positively associated with entrepreneurial intentions among the student sample; in contrast to this finding and our theorizing, however, it is negatively correlated with intentions among the sample of employed individuals (Figure 3(d)).

Concerning the effect of entrepreneurial mentoring on intentions via self-efficacy and moderated by country, we observed significant conditional direct and conditional indirect effects (see Table 5), further supporting H5a and H5b as well as H7a and H7b. Specifically, mentoring and country had negative significant interaction effects on self-efficacy ($B = -0.30$, $t = -4.41$, CI [-0.44, -0.17]).

Table 3. Mediated Mediation Impact of Mentoring on Intentions Through Optimism and Efficacy.

	Optimism				Self-efficacy				Entrepreneurial intentions			
Predictors	*B*	*SE*	*t*	CI	*B*	*SE*	*t*	CI	*B*	*SE*	*t*	CI
Constant	3.91	.16	24.56	[3.60, 4.23]	2.59	.17	15.09	[2.25, 2.93]	4.81	.29	16.50	[4.24, 5.38]
Sex[a]	0.05	.05	0.96	[−0.05, 0.16]	−0.05	.05	−.97	[−0.14, 0.05]	0.01	.07	0.06	[−0.13, 0.14]
Country[a]	−0.04	.08	−0.49	[−0.19, 0.11]	0.48	.07	7.09	[0.34, 0.61]	−1.43	.11	−12.92	[−1.64, −1.21]
Employment status[a]	−0.34	.06	−5.77	[−0.45, −0.22]	−0.32	.05	−6.55	[−0.42, −0.23]	−1.90	.08	−24.05	[−2.05, −1.74]
Mentoring	0.30	.03	9.02	[0.23, 0.36]	0.19	.03	6.11	[0.13, 0.25]	0.42	.05	8.93	[0.33, 0.51]
Optimism					0.42	.03	14.72	[0.36, 0.48]	0.12	.05	2.60	[0.03, 0.21]
Self-efficacy									0.16	.04	3.61	[0.07, 0.24]
Mentoring (total effect)									0.50	.05	11.08	[0.41, 0.59]
Model summary	$F(4, 1267) = 50.80$, $R^2 = .13$, $p = .000$				$F(5, 1266) = 93.62$, $R^2 = .32$, $p = .000$				$F(6, 1265) = 279.84$, $R^2 = .57$, $p = .000$			

Indirect effects	Effect	Boot *SE*	Boot CI
Total indirect effect	.08	.02	[0.06, 0.12]
Mentoring → optimism → entrepreneurial intentions	.04	.02	[0.01, 0.06]
Mentoring → self-efficacy → entrepreneurial intentions	.03	.01	[0.01, 0.05]
Mentoring → optimism → self-efficacy → entrepreneurial intentions	.02	.01	[0.01, 0.03]

Note. Bootstrap CI = 5,000, level of confidence = 95%, CI = confidence interval, $N = 1{,}272$. *SE* = standard error.
[a]Control variables: sex (male = 0, female = 1), country (East Africa = 0, Germany = 1), and employment status (student = 0, employed = 1).

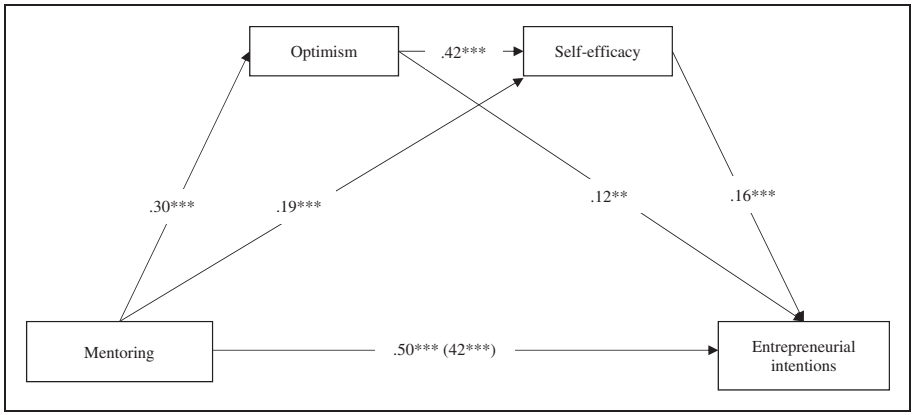

Figure 2. Mediated mediation effects of mentoring on entrepreneurial intention via optimism and efficacy. $^{**}p < .01$. $^{***}p < .001$.

On the other hand, mentoring and employment status had positive significant interaction effects on self-efficacy ($B = 0.29$, $t = 4.80$, CI [0.15, 0.36]). However, the reverse is observed when these interactive effects are examined with entrepreneurial intentions. Mentoring and country had positive significant interactive effects on intentions ($B = 0.49$, $t = 5.77$, CI [0.32, 0.65]), while mentoring and employment status had negative significant interactive effects on intentions ($B = -1.16$, $t = -20.24$, CI [-1.27, -1.05]). The index of partial moderated mediation reveals that moderated mediations were significant for both moderators (country and employment status) but negative for the country and positive for employment status. The moderation plots show that entrepreneurial mentoring is more positively related to self-efficacy for the East African sample compared with the German sample (Figure 4(a)). However, when controlling for self-efficacy, employment status, and the interaction effect of mentoring and employment status, the interactive effects of mentoring and county on entrepreneurial intention were higher for the Germany sample (Figure 4(b)). In addition, Figure 4(c) shows that entrepreneurial mentoring associated with self-efficacy more among the employed individuals than the students. On the contrary, when controlling for self-efficacy, country, and interaction of mentoring and country, entrepreneurial mentoring is positively correlated to entrepreneurial intentions among the student sample and negatively among the sample of employed individuals (see Figure 4(d)).

Discussion

Recognizing the usefulness of psychological capital, it has been suggested that psychological resources are important in the entrepreneurial process

Table 4. Regression Results for Mediation Effects of Optimism and Moderating Effects of Cultural Differences and Employment Status.

	Mediator: optimism				Outcome: entrepreneurial intentions			
Predictors	*B*	*SE*	*t*	CI	*B*	*SE*	*t*	CI
Constant	4.25	.04	103.65	[4.17, 4.33]	3.50	.16	21.72	[3.19, 3.81]
Sex[a]	0.04	.05	0.80	[−0.06, 0.14]	−0.11	.06	−1.71	[−0.22, 0.02]
Mentoring	0.30	.03	8.89	[0.24, 0.37]	0.38	.04	9.12	[0.30, 0.46]
Country	−0.09	.08	−1.16	[−0.24, 0.06]	−1.09	.12	−9.40	[−1.31, −0.86]
Employment status	−0.33	.06	−5.66	[−0.45, −0.22]	−1.96	.07	−29.23	[−2.10, −1.83]
Optimism					0.19	.04	5.45	[0.12, 0.26]
Mentoring × Country	−0.11	.07	−1.62	[−0.24, 0.02]	0.41	.09	4.72	[0.23, 0.58]
Mentoring × Employment Status	−0.01	.06	−0.07	[−0.11, 0.11]	−1.08	.06	−18.63	[−1.19, −0.96]
Model summary	$F(6, 1265) = 34.93$, $R^2 = .14$, $p = .000$				$F(7, 1264) = 446.00$, $R^2 = .65$, $p = .000$			
	Conditional direct effects				Conditional indirect effects			
Conditional direct and indirect effects on entrepreneurial intentions	*B*	*SE*	*t*	CI	*B*	*SE* (boot)		Boot CI
East Africa—students	0.67	.06	11.61	[0.55, 0.78]	0.07	.02		[0.04, 0.10]
East Africa—wage employed	−0.41	.05	−7.45	[−0.51, −0.30]	0.06	.02		[0.04, 0.10]
Germany—students	1.08	.08	14.08	[0.93, 1.23]	0.04	.01		[0.02, 0.08]
Germany—wage employed	0.00	.08	0.00	[−0.16, 0.16]	0.04	.02		[0.02, 0.08]
Index of partial moderated mediation					Index	*SE* (Boot)		CI
Moderator: country					0.02	.01		[−0.05, 0.00]
Moderator: employment status					−0.00	.01		[−0.02, 0.02]

Note. Bootstrap CI = 5,000, level of confidence = 95%, CI = confidence interval, $N = 1,276$. *SE* = standard error.
[a]Control variables: sex (male = 0, female = 1), country (East Africa = 0, Germany = 1), and employment status (student = 0, employed = 1).

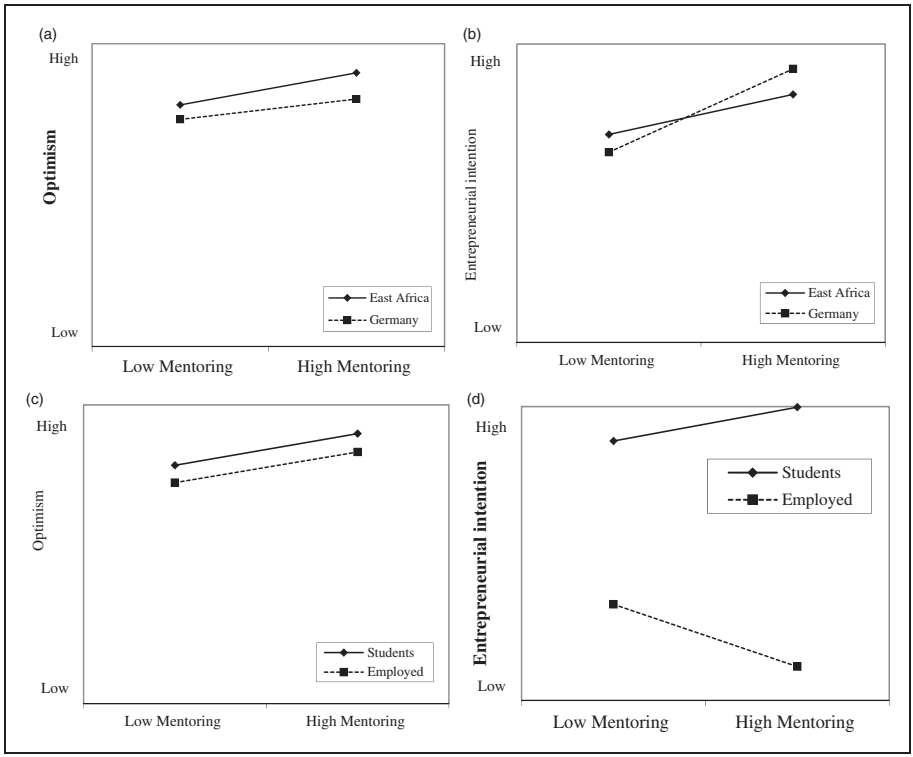

Figure 3. (a) Interaction effects of mentoring and country on optimism when controlling for effects of employment status, (b) interaction effects of mentoring and country on entrepreneurial intention when controlling for effects of optimism and employment status, (c) interaction effects of mentoring and employment status on optimism when controlling for effects of country, and (d) interaction effects of mentoring and employment on entrepreneurial intention when controlling for effects of optimism and country.

(Baluku et al., 2016; Baron, Franklin, & Hmieleski, 2016). This study set out to examine the role of some of the components of psychological capital, namely, optimism, and self-efficacy, in the link between entrepreneurial mentoring and intentions. These are psychological resources that are essential to the entrepreneurial process. Specifically, self-efficacy is an essential component of control beliefs in the planned behavior theory (Ajzen, 2002), while optimism is useful in the process of establishing and growing enterprises (Rigotti, Ryan, & Vaithianathan, 2011; Storey, 2011). This study assessed whether optimism and self-efficacy mediate the association between entrepreneurial mentoring and intentions and whether the direct and indirect effects of entrepreneurial mentoring on intentions are moderated by employment status and country. Our findings show positive and significant effects of mentoring on entrepreneurial

Table 5. Regression Results for Mediation Effects of Self-Efficacy and Moderating Effects of Cultural Differences and Employment Status.

	Mediator: self-efficacy				Outcome: Entrepreneurial intentions			
Predictors	*B*	*SE*	*t*	CI	*B*	*SE*	*t*	CI
Constant	4.52	.04	105.61	[4.45, 4.61]	2.80	.15	18.23	[2.50, 3.11]
Sex[a]	−0.02	.05	−0.29	[−0.12, 0.09]	−0.09	.06	−1.53	[−0.21, 0.03]
Mentoring	0.34	.03	10.30	[0.27, 0.40]	0.32	.04	7.84	[0.24, 0.40]
Country	0.30	.08	3.68	[0.14, 0.46]	−1.21	.11	−10.74	[−1.43, −0.99]
Employment status	−0.45	.05	−8.56	[−0.56, −0.35]	−1.88	.07	−27.75	[−2.01, −1.74]
Self-efficacy					0.34	.03	10.23	[0.27, 0.40]
Mentoring × Country	−0.30	.07	−4.41	[−0.44, −0.17]	0.49	.09	5.77	[0.32, 0.65]
Mentoring × Employment Status	0.26	.05	4.80	[0.15, 0.36]	−1.16	.06	−20.24	[−1.27, −1.05]
Model summary	$F(6, 1265) = 34.76$, $R^2 = .19$, $p = .000$				$F(7, 1264) = 531.60$, $R^2 = .67$, $p = .000$			
	Conditional direct effects				Conditional indirect effects			
Conditional direct and indirect effects on entrepreneurial intentions	*B*	*SE*	*t*	CI	*B*	*SE* (Boot)		Boot CI
East Africa—students	0.62	.06	11.34	[0.51, 0.73]	0.11	.02		[0.08, 0.15]
East Africa—wage employed	−0.54	.06	−9.17	[−0.66, −0.43]	0.20	.03		[0.15, 0.25]
Germany—students	1.11	.08	14.83	[0.96, 1.26]	0.01	.02		[−0.03, 0.05]
Germany—wage employed	−0.05	.08	−0.66	[−0.21, 0.10]	0.10	.03		[0.05, 0.15]
Index of partial moderated mediation					Index	*SE* (boot)		CI
Moderator: country					−.10	.03		[−0.16, −0.06]
Moderator: employment status					.09	.02		[0.05, 0.13]

Note. Bootstrap CI = 5,000, level of confidence = 95%, CI = confidence interval, $N = 1{,}276$. *SE* = standard error.
[a]Control variable: sex (male = 0, female = 1), country (East Africa = 0, Germany = 1), and employment status (student = 0, employed = 1).

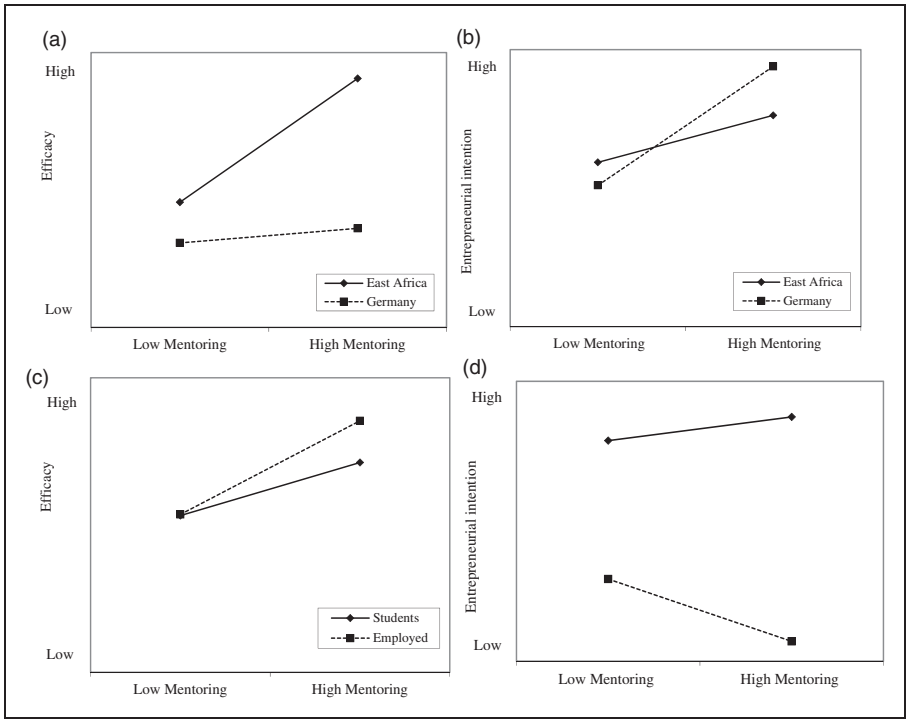

Figure 4. (a) Interaction of mentoring and country on self-efficacy when controlling for effects of employment status, (b) interaction of mentoring and country on entrepreneurial intention when controlling for effects self-efficacy and employment status, (c) interaction of mentoring and employment status on efficacy when controlling for effects of country, and (d) interaction of mentoring and employment status on entrepreneurial intention when controlling for self-efficacy and country.

intentions (H3), supporting the idea that entrepreneurship learning is an important tool for promoting entrepreneurship (Bae, Qian, Miao, & Fiet, 2014; Jabeen et al., 2017; St-Jean & Mathieu, 2015; Xiao & North, 2017).

Concerning the mediation role of facets of psychological capital, we hypothesized a mediated mediation model (H4) such that entrepreneurial mentoring impacts intentions through optimism (Mediator 1) and self-efficacy (Mediator 2). Our findings supported the hypothesized model (refer to Table 3 and Figure 2). Of the two resources, it is self-efficacy that is commonly associated with behavioral intentions, for example, in the planned behavior model (Ajzen, 2002) and therefore appears prominently in entrepreneurial intentions research (e.g., Austin & Nauta, 2016; Martinez Campo, 2011; McLaughlin, 2010; Zhao et al., 2005). On the other hand, optimism is loosely mentioned in

entrepreneurial intentions literature, for example, as regard to perception of support during the founding process (Shinnar, Giacomin, & Janssen, 2012), opportunity recognition (Lehner & Kansikas, 2012), and venture creation or entry decisions (Dawson & Henley, 2013; Trevelyan, 2008). However, the present findings show that both psychological resources are important in transforming entrepreneurial mentoring into firm intentions to start one's own business. Moreover, confirmation of the mediated mediation model provides support for the assumption that optimism enhances self-efficacy (Luthans et al., 2004; Storey, 2011). Entrepreneurial mentoring impacts on optimism, which in turn is related to higher efficacy and consequently stronger intent to go into entrepreneurship.

A major gap identified in extant intentions research concerns inconsistent findings across contexts and the application of findings given that studies are predominantly conducted among student populations (Bae et al., 2014; Liñán & Fayolle, 2015; Nabi et al., 2017). This study used two samples: final year university students and employed individuals. Our findings reveal that the effectiveness of mentoring for developing entrepreneurial intentions tends to vary according to employment status (H5a) and country (H5b). As visualized in Figures 3(d) and 4(d), entrepreneurial mentoring is positively related to intentions among students but negatively among employed individuals. Regarding country differences, Figures 3(b) and 4(b) show that entrepreneurial mentoring is positively correlated with intentions in both Germany and East Africa; however, the effects are stronger for Germany. Therefore, beyond concerns around pedagogical approaches (Nabi et al., 2017), it is important to pay attention to the mentoring context and participant characteristics.

Differences in effects of entrepreneurial mentoring on intentions among groups of different employment statuses indicate the strength of conviction to transit into self-employment and the urgency of the transition. Thus, individuals with higher entrepreneurial intentions perceive entrepreneurship as a fitting career alternative (Davidsson, 1995). Students toward the end of their university courses are at an important career transition period, whereby they have to successfully negotiate their entry into work. Self-employment is one of the most available and feasible employment opportunities, given the present dynamic labor market marked by heightened unemployment (Falco & Haywood, 2016; Vogel, 2015a). On the other hand, employed individuals have no or low pressure for such a transition. Therefore, even with entrepreneurial mentoring, employed individuals are likely to have a low interest in entrepreneurship. Having a stable income from wage employment could contribute to low entrepreneurial intentions among employed individuals. This is demonstrated by earlier finding that individuals may not engage in entrepreneurial activity even after job loss if they are receiving unemployment benefits (C. S. Moore & Mueller, 2002).

Concerning contextual aspect, differences in the effectiveness of entrepreneurial training are linked to culture and economic development (Nabi et al., 2017).

Our findings indicate that mentoring has stronger positive effects on entrepreneurial intentions in Germany (a developed country) compared with East Africa (a less developed region). In low-income countries, there are many individuals who are accessing entrepreneurship learning, both formally and informally given that many governments are using entrepreneurship as affirmative action to reduce unemployment and alleviate poverty (Falco & Haywood, 2016; Jennings, 2014; Vogel, 2015a). With the focus of reaching wider populations, the challenge of quality of mentoring may arise. In addition, driven by the unemployment challenge, more individuals are willing to go into entrepreneurship. Consequently, entrepreneurial intentions are already high even before mentoring. This limits the contribution of mentoring to the formation of entrepreneurial intentions.

Despite the differences in the direct effects of entrepreneurial mentoring on intentions among the samples, similarities are observed in the indirect effects. Regarding conditioned indirect effects of entrepreneurial mentoring on intentions via optimism, the effects are significant for both students and employed individuals as well as for Germany and East Africa (see Table 4). Similarly, the test of conditioned indirect effects via self-efficacy revealed that entrepreneurial mentoring has strong effects on intentions in both Germany and East Africa. However, the effects were weaker for employed individuals compared with the student samples. These differences are essential for understanding what kind of psychological resource is necessary for strengthening entrepreneurial intentions in a given group of individuals. This is particularly useful in the design of entrepreneurship education and support programs. Optimism could be a universally necessary component of entrepreneurial training. It is necessary for improving the ability to visualize the outcomes of an entrepreneurial idea, which may consequently strengthen the intention. On the other hand, employed individuals may be attracted to entrepreneurship if they recognize that they have the required ability to succeed in entrepreneurial activities. In the TPB model, self-efficacy is an important aspect of perceived control. Relating, to the observed differences in the impact of entrepreneurial mentoring on intentions, the likelihood is that even with mentoring, employed individuals may find entrepreneurship less attractive if their entrepreneurial self-efficacy (ability to execute one's entrepreneurial idea in a given context) is low. This need may be different for students who are faced with career development milestone challenge of transiting from college to labor market and whereby entrepreneurship is the most available employment opportunity, whether it is feasible or not.

Implications and Limitations of the Study

The findings discussed above have significant implications for both theory and practice. First, the findings help to extend positive psychology, particularly psychological capital literature, to explain the development of entrepreneurial

intentions. Psychological resources are important in individuals' evaluation of the feasibility of entrepreneurship as a career alternative. Psychological capital, being a state-like individual attribute (Luthans & Youssef-Morgan, 2017) is an important aspect of a person's mind-set; therefore also important in the development of entrepreneurial mind-sets. This is one of the major outcomes of entrepreneurial education that relate to capacity for start-up (Neck & Corbett, 2018). Given that mind-sets are important for recognition of opportunities (e.g., Gurel, Altinay, & Daniele, 2010), psychological capital plays a critical role in the development of entrepreneurial intentions. Previous research has particularly highlighted the role of the self-efficacy facet for mediating the effects of personal and contextual factors on entrepreneurial intention and behavior (e.g., Austin & Nauta, 2016; Pfeifer, Šarlija, & Zekić, 2016; Zhao et al., 2005). However, beyond self-efficacy, this study has demonstrated that another aspect of psychological capital, namely, optimism, is useful in the process of developing and strengthening entrepreneurial intentions. Moreover, the present findings indicate that these facets of psychological capital work together, such that the effects of optimism on intentions are transmitted through self-efficacy. This extends existing literature that optimism enhances efficacy to succeed in entrepreneurship (Storey, 2011). Furthermore, mentoring enhances optimism, both of which are associated with self-efficacy. Efficacy is an aspect of perceived control in the TPB model. Therefore, our study contributes to the application of the model, especially by extending the determinants of antecedents of intentions.

Considering the inconsistencies in empirical findings regarding the impact of entrepreneurship training on outcomes (Bae et al., 2014; Nabi et al., 2017), a question emerges of not only what explains the inconsistencies but also what should be the focus of entrepreneurial training in different target groups or contexts. Our findings indicate that entrepreneurial mentoring is more effective when it enhances psychological resources, specifically optimism and self-efficacy. Therefore, in line with the emphasis on an entrepreneurial mind-set (Fayolle, 2005; Pfeifer et al., 2016; Wu & Wu, 2008), entrepreneurial mentoring activities should in addition to the hard entrepreneurial skills also focus on developing protégés self-efficacy and optimism, as they are mechanisms through which effects of entrepreneurial mentoring on intentions are transmitted.

Entrepreneurial socialization interventions, specifically mentoring, aimed at strengthening intentions and behavior need to recognize the cultural and economic development context, as these are salient factors in the effectiveness of entrepreneurship training. Moreover, culture is an integral part of the socialization process. These contexts have implications for the value of entrepreneurship in a given community (Dana, 1995b, 1997). Our findings indicate that the impact of entrepreneurial mentoring on intentions is higher in Germany, which is a high-income country and where individuals have high levels of autonomy (Baluku et al., 2018) compared with East Africa. Hence, it could be rewarding to include in entrepreneurial training programs a focus on developing and

strengthening learners' capacities for autonomous decision-making and action, as recommended by Van Gelderen (2010).

Despite these practical and theoretical implications, the study has some limitations. First, optimism and overconfidence are concepts that all relate to confidence. The boundary between these concepts is rather obscure. Although it is argued that the Life Orientation Test measures optimistic distinctly from related variables (Scheier & Carver, 1985), we cannot rule out overlap with overconfidence. Second, the study used self-report measures, which present a risk of social desirability bias (Miller, 2012). Thus, the possibility of inflated relations of mentoring and autonomy with entrepreneurial intentions cannot be ruled out. Third, data were collected through a cross-sectional survey. This is associated with common-method bias, which has been observed to usually account for wide variances in research results (Doty & Glick, 1998). However, Harman's single factor test (Podsakoff et al., 2003) indicated that this was not a challenge of this study. Nonetheless, the specific shortcoming is that receiving mentorship or not could not be manipulated; therefore, causal conclusions cannot be drawn regarding the influence of mentoring on entrepreneurial intentions. Experimental or longitudinal approaches where there is control or a baseline are best fitted to study of the impact of mentoring on entrepreneurial intentions. On the positive side, it is also suggested that common methods variance does not pose a great danger to the validity of findings in studies using multiple item measures with substantial reliabilities (Fuller, Simmering, Atinc, Atinc, & Babin, 2016). Moreover, complex inferential analyses are less likely to be affected by common methods bias (Evans, 1985). Therefore, the present results are likely to be free from common methods challenges. Another limitation is that whereas the study involved differentiating the impact of entrepreneurial intentions between samples of students and employed individuals, we did not control for the fact that some students are employed. We, therefore, propose that future studies should examine the differential impact of entrepreneurial mentoring on intentions of full-time college students and working students.

Conclusion

The findings of this study contribute to the understanding of the process through which entrepreneurial socialization (mentoring) leads to the development of intentions to start one's own business. Specifically, the study provides insights into the role facets of psychological capital play in the process through which mentoring results in business start-up intentions. Entrepreneurship is a complex job characterized by challenging situations and tasks requiring strong mental resources (Baron et al., 2016). Toward this, the findings of the study demonstrate that entrepreneurial mentoring will result in higher intentions if it helps to increase an individual's efficacy and optimism. However, although optimism was useful among all populations, the role efficacy varied between students

and employed individuals. The study also demonstrates that the association of entrepreneurial mentoring and intentions varies according to context and employment status.

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