
Impact of personal cultural orientations and moral potency on self-employment intentions: the moderating role cognitive styles

Martin Mabunda Baluku*

Faculty of Psychology, Work and Organizational Psychology,
Philipps-Universität,
Gutenbergstr, 18, D-35032 Marburg, Germany
Fax: +49-(0)6421-28-23819
Email: martin.baluku@staff.uni-marburg.de

and

Department of Educational, Social and Organizational Psychology,
School of Psychology,
Makerere University,
P.O. Box 7072, Kampala, Uganda
Email: mbaluku@chuss.mak.ac.ug
*Corresponding author

Kathleen Otto

Faculty of Psychology, Work and Organizational Psychology,
Philipps-Universität,
Gutenbergstr, 18, D-35032 Marburg, Germany
Email: kathleen.otto@staff.uni-marburg.de

Abstract: Self-employment presents a viable work opportunity for the unemployed. However, not all unemployed individuals are attracted to self-employment. Based on the assumptions of the situated metacognition model of entrepreneurial mind-set and theory of planned behaviour, we explain why unemployed individuals may evaluate self-employment as an attractive opportunity for career progression. Using a sample of 227 unemployed young people from East Africa, we examine the interactional effects of cognitive style, personal cultural orientation and moral potency. Our findings show that unemployed young individuals with an adaptive cognitive style have higher self-employment intentions compared to their counterparts with intuitive or analytic styles. Moderation analyses showed that the effects of risk aversion and moral potency on self-employment intentions are conditioned by cognitive styles. Practical implications of these findings are discussed.

Keywords: self-employment; cognitive adaptability; cognitive styles; cultural orientation; entrepreneurship; independence; moral potency; risk aversion; small business; entrepreneurial intentions.

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Biographical notes: Martin Mabunda Baluku is a PhD student at the Philipps-University Marburg, Germany. He is an Assistant Lecturer at the 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.

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

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1 Introduction

The continuous increase in youth unemployment especially in developing countries is a great challenge for economies and individuals as well. It has a net effect on the ability of individuals and countries to develop. Given the slowed economic progression, self-employment (SE) is perhaps the most available and viable employment opportunity for new graduates to avoid unemployment right from the start, but also for the formerly employed to return to work. It does not only provide an employment opportunity, but also the resulting enterprises contribute to economic development (Anyanwu, 2014; Fritsch and Wyrwich, 2014; Williams et al., 2013). SE in some communities is the biggest provider of jobs (Falco and Haywood, 2016; Gindling and Newhouse, 2014). Hence, SE is often used as a strategy for promoting entrepreneurial activity and enhancing economic development (Dana, 1995, 1996; Peredo et al., 2004; Peredo and McLean, 2010).

Previous research has showed that contextual factors including unemployment and changing labour market dynamics push individuals into SE (Abada et al., 2014; Clark and Drinkwater, 2000; Falter, 2005; Nelson, 2016; Oh, 2008). However, the decision to become self-employed is on the other hand facilitated by several personal factors as has been demonstrated in different models of entrepreneurial intentions such as the theory of planned behaviour (Ajzen, 1991) and the model for entrepreneurial socialisation and organisation formation (Starr and Fondas, 1992). Both of these models to some extent recognise the role of contextual aspects. Of interest in the present study, is the role of culture in predisposing individuals to entrepreneurial careers. In the Weberian sense, entrepreneurial potential and behaviour seem to be situated in the cultural domain (Dana, 1995, 1996). Considering the interplay between one's cognitive attributes and culture, the present study examines the impact of personal normative beliefs and cognitive styles on formation of SE intentions.

The assumption that unemployment, changing nature of labour force and labour market dynamics increase rates of SE is particularly true for developing countries. For example, sub-Saharan countries have predominantly young populations (Ashford, 2007);

where all graduates cannot be absorbed by the current job openings. In addition to unemployment as a stimulator, many young people are likely to pursue a career in SE driven by the increasingly slim chances to get the desired job (Gindling and Newhouse, 2014). However, this does not comprehensively explain the choice of SE. We argue that in the context of unemployment, personal factors still play a major role in formation of SE intentions. This argument is based on empirical evidence that unemployment actually has a small effect on entry into SE (Patel and Thatcher, 2014). Hence, known predictors of behavioural intentions such as enterprising culture, expected earnings, attitudes, normative beliefs, competence and need for autonomy in work (Abada et al., 2014; Dana, 1996; Goetz and Rupasingha, 2013; Kautonen et al., 2015; Kolvereid, 2016; Vinogradov et al., 2013; Wang et al., 2012) still play a major role in motivating individuals into SE in the context of unemployment.

We particularly focus on the interactive effect of personal normative beliefs (risk aversion and independence orientations, as well as moral potency) and cognitive styles on development of intentions. We posit that although SE entry in the context of unemployment is reactionary (Walker and Webster, 2007), the decision to become self-employed is based on a cognitive process. Therefore, the unemployment situation could be a trigger for individuals to adopt their cognition to the most available employment option (SE). This, in addition to favourable cultural beliefs, increases intention for SE. Favourable cultural beliefs particularly enhance the ability to identify and respond to entrepreneurial opportunities (Dana, 1996). We therefore base our study on the situated metacognition model of entrepreneurial mind-set (Haynie et al., 2010) and theory of planned behaviour (Ajzen, 1991) to explore the role of cognitive styles (as a moderator) in development of SE intentions in the context of unemployment. Based on planned behaviour theory, we introduce the concept of moral potency (which is related to control beliefs, as well as ethical attitudes) to the study of entrepreneurial intentions. The perceived moral challenges involved in business transactions and certain business opportunities can diminish intentions for SE. On the other hand, some individuals chose a career in SE because it offers an opportunity to make a positive impact on communities (Dana, 1996), which could be evaluated as a moral pull to entrepreneurial activity. We posit that an adaptive cognition in the context of unemployment negates the negative impact of risk aversion and moral challenges on intentions. We particularly base our assumptions on the proposition from the situated metacognitive model of the entrepreneurial mind-set that adaptability of cognitive approaches to entrepreneurial tasks leads to greater outcomes (Haynie et al., 2010). We therefore extend the application of cognitive adaptability to SE intentions, particularly in the context of unemployment and expect that unemployed individuals with adaptive cognitive style (able to combine intuition and analysis) are more likely to consider SE.

The study was conducted in two East African economies, Uganda and Kenya, with high youth unemployment rates. Evidence shows that Africa has a bigger percentage of the unemployed youth more than any other continent (Anyanwu, 2014). In the absence of a strong industrial-base to provide stable jobs, governments and development partners have placed more emphasis on SE as a major strategy for reducing unemployment, by means of providing start-up incentives and technical training programs (Blattman et al., 2014; Cho and Honorati, 2014; Bruton et al., 2015). While these interventions have yielded amazing results in increasing the number of young people entering SE (Blattman et al., 2014; Cho and Honorati, 2014), the increasing numbers of unemployed youths

suggests that focus should be beyond financial incentives and basic skills trainings and probably the efforts to promote SE should be intensified.

Recent research has suggested that the widely known predictors of entrepreneurial intentions may not apply to some groups of people (Dheer and Lenartowicz, 2016). There are well known and widely applied models, for example the planned behaviour theory which explains 30%–59% of entrepreneurial intentions (e.g., van Gelderen et al., 2008; Kautonen et al., 2015) and the self-determination perspective which emphasises need for autonomy (Deci and Ryan, 2015; Peco et al., 2006). Populations such as refugees and the unemployed may not necessarily be inherently interested in SE. Previous studies, for example, have indicated that for some self-employed people, SE was not their preferred career (Dana, 1996). However, the challenge of being unemployed may trigger cognitive approaches that lead to positive evaluation of SE; hence not every unemployed individual does perceive SE as a feasible employment option. We therefore adopt a cognitive approach (combining assumptions from situated metacognitive model of entrepreneurial mind-set and theory of planned behaviour) to examine the role of cognitive styles to SE intentions. Entrepreneurial cognition research has been praised for its contribution understanding of entrepreneurial behaviour (Haynie and Shepherd, 2009; Mitchell et al., 2002). Thus, understanding how people in different contexts think or process information might be an important step in understanding their perspective of entrepreneurial activities and progress (Dheer and Lenartowicz, 2016). In the present study, we emphasise the impact of personal normative beliefs and cognitive styles in development of intentions.

2 Theoretical framework and hypotheses development

To study SE motivations in challenging situations such as economic recession and unemployment, researchers have focused on what is classified as push factors (Clark and Drinkwater, 2000; Nelson, 2016; Patrick et al., 2016). This perspective proposes that in such contexts, individuals are compelled into SE. However, even in these circumstances, some individuals are able to perceive opportunities and respond to those opportunities, while others do not (Dana, 1996). Therefore, although difficult socio-economic circumstances may provide a push into an entrepreneurial activity, individuals still take a conscious choice to become self-employed or not to. This is in line with the debate on whether the will is free from being caused and what causes the will. In Monroe et al.'s (2014) study, judgement of free will was strongly predicted by psychological capacities including intentionality, choice and being the sole cause of one's action; thus, affirming the role of cognitive processes. In line with this, the theoretical treatise below portrays intentions for SE as a function of individual's cognitive processes and contextual influences. We argue that in the context of high unemployment, not every unemployed individual will be pushed into SE. But rather, those with adaptive cognition and positive personal beliefs towards entrepreneurship will develop intentions for SE.

Extant literature shows that entrepreneurial intentions and behaviours are a result of a unique entrepreneurial cognitive approach, suggesting an entrepreneurial mind-set, one that makes entrepreneurs unique (Dheer and Lenartowicz, 2016; Haynie et al., 2010). Accordingly, individuals with an entrepreneurial mind-set have the ability to perceive venture creation opportunities in their environment (Arora et al., 2013; Mitchell et al., 2007). Hence, certain cognitive processes, elicited by contextual cues, enable individuals with an entrepreneurial mind-set to identify opportunities and develop the desire to

start ventures. Most recent cognitive research on entrepreneurial behaviour particularly emphasises metacognition (Arora et al., 2013; Dheer and Lenartowicz, 2016; Haynie and Shepherd, 2009). Our assumptions and hypotheses are partly based on assumptions of the situated metacognitive model of entrepreneurial mind-set (Haynie et al., 2010). The model particularly highlights the essentiality of adaptive cognitions to entrepreneurial decisions in uncertain contexts, which is facilitated by a metacognitive process. Metacognition involves individuals being aware of themselves and the context and the use of feedback from the environment to facilitate adaptable cognition (Haynie et al., 2010; Haynie and Shepherd, 2009); thus enabling individuals to consciously contemplate different options (Haynie and Shepherd, 2009) resulting into improved performance.

Whereas, the situated metacognition model of entrepreneurial mind-set was developed to explain entrepreneurial decision-making and further illustrates how cognitive adaptability is situated in metacognition; we concern ourselves with the proposition that cognitive adaptability is associated with phenomenal performance on entrepreneurial task (Haynie et al., 2012, 2010). However, we apply this model to intentions. The process of intentions formation and entry decisions involve deployment of cognitive processes and abilities; moreover, the context of such decisions is equally complex like that of an established entrepreneur contemplating creating a new venture. Young people today must make vocational decisions in the context of heightened unemployment and unpredictable dynamics in the labour market; which requires awareness of these realities. Hence, based on the idea of adaptive cognition as central to entrepreneurial task performance, we posit that adaptability of cognitive style should be helpful in unbiased evaluation of the SE option, leading to higher intention.

We posit that cognitive style moderates the personal normative beliefs including orientation towards independence and risk aversion; and moral potency on SE. There is vast literature on impact of independence and risk aversion on entrepreneurship. Moral potency is related to whether SE poses moral challenge or champions a moral cause; and hence, a subject of controllability. Based on theory of planned behaviour (Ajzen, 1991), research has confirmed that such attitudinal and competence factors account for big variance in entrepreneurial intentions (van Gelderen et al., 2008; Kautonen et al., 2015). We conceptualise that personal cultural orientation (PCO) towards independence and risk aversion are personal normative beliefs; while, moral potency is related to control beliefs in line with the planned behaviour model. The theory suggests that behaviour is a function of intention; which is also influenced by attitudes towards the given behaviour, subjective norm and perceived behavioural control. These cultural orientations portray the normative standards that an individual considers personally important (Sharma, 2010) hence, have potential to influence behavioural attitudes and subsequently intentions. Similarly, moral potency portrays both the ethical attitude towards a behaviour as well as the individual's ability to behave ethically in a given context and to achieve morally acceptable goals (Hannah and Avolio, 2010). Based on planned behaviour theory, we content that individual's personal beliefs and ethical evaluation of the business behaviour (as well ethical outcomes of SE) impact on decision to become self-employed. We also hypothesise that this impact is conditioned by cognitive style. The cognitive continuum theory suggests cognitive style is a bipolar construct, with intuition at one end of the continuum and analysis at the other (Allinson and Hayes, 2012; Hammond et al., 1987). Intuitive style involves making "affectively charged judgments that arise through rapid, non-conscious and holistic

associations" (Pratt, 2007); whereas, analytical style involves ordered and linear information processing. Hence, adaptive style involves blending intuition and analysis (Allinson and Hayes, 2012).

2.1 Cognitive styles and SE

The construct of cognitive styles has emerged as one of the major domains in efforts to understanding the entrepreneur from the cognitive perspective. Cognition is relevant to understanding issues such as who becomes an entrepreneur, how do entrepreneurs think, how do they recognise opportunities that others fail to see, what motivates the entrepreneur (Baron, 1998; Byrne and Shepherd, 2015; Carland et al., 2015; Carsrud and Brännback, 2009; Mitchell et al., 2007). Cognitive styles are stable, pervasive and bipolar individual differences in perception, thought, problem solving, learning and relating to others (Riding and Sadler-Smith, 1997; Riding and Rayner, 2013; Stephen and Riding, 1997; Witkin et al., 1977). They involve individuals' preferences in obtaining, processing, evaluating, representing and using information (Allinson et al., 2000; Riding and Rayner, 2013). Cognitive styles are conceptualised to concern the form rather than content of cognitive activities (Armstrong and Hird, 2009; Witkin et al., 1977) since the focus is generally on information processing (Doyle et al., 2002).

Kozhevnikov et al. (2014) and Riding and Rayner (2013) provide a summary of categorisations of cognitive styles that are relevant to entrepreneurial research. Regardless of the specific taxonomy, research indicates that cognitive styles have an impact on entrepreneurial competences. First, they influence preferred ways of learning, information gathering and processing, decision-making (Juanchich et al., 2016; Chang et al., 2016; Kozhevnikov et al., 2014; Dewberry et al., 2013); which are all important for entrepreneurial roles. Consequently, cognition affects perception of entrepreneurial environment and the intention to engage in entrepreneurial activities (Hadjimanolis, 2016). Second, these effects on cognitive tasks have implications for innovative behaviour (Kozhevnikov et al., 2014; Armstrong et al., 2012; Wu et al., 2014; Carnabuci and Diószegi, 2015), opportunity recognition, planning and resource mobilisation (Allinson et al., 2000; Baron, 2004; Kickul et al., 2009), entrepreneurial self-efficacy and confidence in forecasting (Poore et al., 2014; Kickul et al., 2009) and risk tolerance (Barbosa et al., 2007). In addition, cognitive styles influence entrepreneurial behaviour via their impact on entrepreneurial attitudes (Urban, 2012a) as well as entrepreneurial intentions (Barbosa et al., 2007; Molaei et al., 2014).

The above effects on business competency suggest that understanding individuals' cognitive styles is important step for predicting their chances of becoming self-employed (Armstrong and Hird, 2009; Barbosa et al., 2007; Hmieleski and Corbett, 2006; Ahmad et al., 2014) and growing the enterprise (Dutta and Thornhill, 2014; Knockaert et al., 2015). On the overall, extant literature tends to favour an intuitive cognitive style as central to an entrepreneurial thinking and decision making, specifically regarding recognising and exploiting business ideas and opportunities (Armstrong and Hird, 2009; Barbosa et al., 2007; Molaei et al., 2014; Nandram, 2016; Sadler-Smith, 2016). On the other hand, the situated metacognitive model of the entrepreneurial mind-set underlines adaptability of cognitive processes for superior performance of entrepreneurs (Haynie et al., 2010). In line with this theoretical perspective, we posit that an adaptive cognitive style is more suited to entrepreneurial tasks. Towards this direction, previous research shows that balancing between intuitive and analytic styles or linear and nonlinear styles

enhances innovative behaviour (Ettlie et al., 2014). Similarly, Sommer (2013) suggests that both intuitive and analytic styles are necessary and should be emphasised in entrepreneurship education.

Despite the increase in amount of studies on cognitive styles and entrepreneurial behaviour, Armstrong et al. (2012) observe that this is still an under researched area in entrepreneurship. They particularly call for studies on cognitive styles in relation to the person-environment. Towards this call, the present study assesses the impact of cognitive style on entrepreneurial (SE) intention, focusing on unemployed young persons. We specifically contend that an adaptive cognitive style is superior to other cognitive styles in formation of intentions to become self-employed among the unemployed. Unemployment is an uncertain and complex period for an individual, which in accordance with the situated metacognitive model, is associated with greater metacognitive awareness (Haynie et al., 2010) thus, facilitating adaptive cognition. Such cognitive approach enables individuals to carefully evaluate the employment situation and their chances of getting a job (or the desired job) and the feasibility of creating a SE venture.

H1a Unemployed youths with an adaptive cognitive style have higher intentions for SE than those with intuitive and analytic styles.

2.2 Cultural orientations and SE intentions

The debate on the association between culture and entrepreneurship is an old one, but continues to interest several scholars. Whereas, such scholarly efforts have generated good frameworks to understand culture, there are also unanswered questions with regard to the concrete roles of culture in entrepreneurship. Frederking (2004) observed that the role of culture in business tends to vary among societies. Such variations include how norms and values are applied to economic activities. Cultural values and norms that encourage, for instance, wealth accumulation increase individuals' participation in entrepreneurial activities (Dana, 1997). Specifically, culture influences entrepreneurial cognition, attitudes, intentions and behaviour (Freytag and Thurik, 2010; Liu and Almor, 2016; Shinnar et al., 2012). Regarding cognition aspects, culture is a significant factor in the process of recognising and responding to entrepreneurial opportunities, as well as constraints attached to the available opportunities (Dana, 1996). Regarding behaviour and competency, cultures that promote prudence or frugality are associated with entrepreneurial opportunity seeking abilities (Dana, 1995; Minkov and Hofstede, 2012). Culture further influences the type of SE individuals engage in, that is whether active or passive entrepreneurship (Dana, 1996) and opportunistic or reactive entrepreneurship (Dana, 1995b). Moreover, cultural values and norms in some societies define the entrepreneurial activities and goals that are permissible for individuals to pursue, as well as the methods of trade (Dana, 1997).

Previous research efforts have been directed towards identifying the kind of cultures in which entrepreneurship thrives. The general consensus in these studies particularly informed by Hofstede's model (Franke et al., 1991; Minkov and Hofstede, 2011) is that an entrepreneurial culture is characterised by individualism, masculinity, low power distance, low uncertainty avoidance and long-term orientation (Hamilton, 2013; Hofstede and Minkov, 2010; Tlaiss, 2014; Vinogradov and Kolvereid, 2007; Wennekers et al., 2010). These dimensions of culture have been found to relate to entrepreneurial

competencies including autonomy, innovativeness and risk-taking (Kreiser et al., 2010; Lee and Peterson, 2000; Omerzel, 2016; Rauch et al., 2013). However, evidence suggests that not all these dimensions are important at all stages of enterprise formation and growth. Previous research (e.g., Mitchell et al., 2000; Wennberg et al., 2013) shows that individualism and risk-taking are the orientations particularly seminal at the entry phase. In line with recent calls to treat culture as a moderator in entrepreneurship studies (e.g., Rauch et al., 2013), we examine the interaction effect of cognitive styles with these two cultural orientations on SE intentions.

Studies on risk aversion have adopted either an attitudinal or cultural conceptualisation. Regardless of the approach used, there is concurrence in the findings that high risk tolerance is associated with entrepreneurial intentions and entry (e.g., Brown et al., 2011; Hu, 2014; Skriabikova et al., 2014). Evidence shows that risk-averse individuals have preferences for stable earnings (Di Mauro and Musumeci, 2011); yet, earnings in SE fluctuate greatly. However, in the complex context of unemployment and uncertainty in the labour market, the negative effect of risk aversion on entrepreneurial intention can be lessened by cognitive adaptability. In the development of the situated metacognitive model of entrepreneurial mind-set, Haynie et al. (2010) make a strong case for the interaction between the context and entrepreneurial motivation. Accordingly, entrepreneurial action, which is linked to development and deployment of a specific metacognitive strategy is a function of the interaction between the environment and the entrepreneurial motivation. On this basis, unemployed individuals with higher risk tolerance will most likely view SE as a viable employment option. We also posit that in the context of unemployment and uncertainty about success in job search, adaptive cognition can increase SE intentions even for risk-averse individuals. We therefore hypothesise a significant interactional effect of cognitive styles and risk aversion cultural orientation on SE intention. Previous research suggests that risk averse unemployed people have the potential to at least enter SE as necessity entrepreneurs. Block et al. (2015) observed that individuals low on risk attitudes are less likely to be driven by opportunity or innovation, but rather tend to become necessity entrepreneurs.

H2a Risk aversion is negatively related to SE intentions.

H2b The relationship of risk aversion and SE intentions is moderated by cognitive style.

Independence orientation or individualism is widely studied as autonomy in entrepreneurial attitudes research. As a cultural orientation, individualism implies that people favour loose ties with other members of the society and prefer to act autonomously (Sharma, 2010). Changing career dynamics such as increased need for self-reliance is driving individuals to career options that offer high levels of independence. Consequently, in reference to self-determination theory (Deci and Ryan, 2015), satisfaction of need for autonomy is an important motivator for SE. Independence is one of the expected entrepreneurial outcomes (Croson and Minniti, 2012; Douglas and Shepherd, 2002). However, the independence needs in relation to work vary among individuals (van Gelderen and Jansen, 2006). Whereas, some individuals prefer work where they can have independence in decision making, others prefer SE because they want to be their own bosses yet doing work that is inherently interesting to them.

In the context of unemployment and uncertainty over chances of finding the desired job, an adaptive cognitive style would further enhance SE intentions. The situated metacognitive model of entrepreneurial mind-set advocates for cognitive adaptability

(Haynie et al., 2010), while the planned behaviour model suggests that normative beliefs impact on behaviour intentions (Ajzen, 1991). In the present study, we propose that personal norms interact with cognitive styles (particularly adaptive style) to enhance SE intention among the unemployed. In this direction, previous research has posited that some situations can push even individuals from less entrepreneurially oriented cultures or individuals who are not interested in an entrepreneurial activity to become self-employed (Dana, 1995, 1996). We propose that this is in particular possible when individuals are adaptive in their cognitive styles; which allows them the intuition to recognise opportunities but also to evaluate the possible constraints and positive outcomes of entrepreneurial activities as opposed to the challenges of remaining unemployed.

H2c Independence orientation is positively related to SE intentions.

H2d The relationship of independence orientation and SE intentions is moderated by cognitive style.

2.3 The role of moral potency

Moral potency is “a psychological state characterised sense of ownership over the moral aspects of one’s environment, reinforced by efficacy beliefs in the capability to act to achieve moral purpose in that domain and the courage to perform ethically in the face of adversity and persevere through challenges” [Hannah and Avolio, (2010) p.291]. This definition of moral potency as a control competence fits the description of control beliefs in the planned behaviour theory (Ajzen, 1991). However, it also indirectly depicts an individual’s ethical attitude towards a respective behaviour. Allegiance to the specific moral standards of a given society can promote or discourage entrepreneurial behaviour or define the nature of business and medium of transacting (Dana, 1997).

Moral competence arguably represents some form of intelligence: ‘moral intelligence’. This is considered the newest intelligence construct after being popularised by Kiel and Lennick (2005) and Lennick and Kiel (2006). However, Boss (1994) had already used the construct in his article ‘The autonomy of moral intelligence’ in which he contended that moral intelligence is a genuine and one of the distinct autonomous intelligences; which denotes individual’s ability to apply universal human principles to personal values, goals and actions (Kiel and Lennick, 2005; Lennick and Kiel, 2011). It involves moral reasoning that transcends into respect for values that are inherent in one self and others (Boss, 1994) and is enacted through the virtues of truth, love, caring, empathy and justice as well as acting based on one’s moral decisions (Boss, 1994; Clarken, 2009). This competence is founded on values and comes to play when personal or business goals do not align with universal or core principles, only directed towards doing good (Lennick and Kiel, 2011). In the present study, we investigate the interactive effects of this moral capability with cognition styles on SE intention in the context of unemployment.

Like other members of society or even more than the others, the moral behaviour of people in the business arena is of paramount concern. Particularly, the self-employed in an entrepreneurial sense are required to be imaginative, novel and sensitive (Buchholz and Rosenthal, 2005; McVea, 2009) which should sensitise them to morals. However, these very requirements and other business needs engulf entrepreneurs in situations of complex ethical dilemmas, where they are most likely to be deceptive or break rules and

promises in order to generate ideas or exploit opportunities (McVea, 2009; Brenkert, 2009). Although being moral is often complex and difficult (Clarken, 2009). Brenkert (2009, p.449) contents that accepting the rule breaking behaviours of entrepreneurs with labels such as tricksters, crafty competitors and clever entrepreneurs is detrimental. These scenarios and behavioural calls justify Lennick and Kiel's (2006) suggestion that the greatest challenge moral potency addresses is knowing what is right or wrong versus doing what is right or wrong. Hence, from the attitude point of view, individuals who perceive behaviour in business setting as immoral are less likely to be willing to go into SE. On the other hand, individuals with a positive regard about the outcomes of SE and believe that they can behave ethically in the business arena (competence point of view) are likely to find SE more attractive than staying unemployed. In addition, some individuals are attracted to SE because it offers an opportunity to make noble social contributions to the social and economic development (Dana, 1996).

Available empirical evidence suggests that morality is a fundamental issue in running of an enterprise, more especially in business leadership, recognition of opportunities and manner of transacting (Balog et al., 2014; Lennick and Kiel, 2006; Sivanathan and Cynthia Fekken, 2002; Sivadas et al., 2002). According to Lennick and Kiel (2011), moral behaviour implies doing what is right for oneself and others, which is valid for business situations. Therefore, the perception of the moral qualities of the business owners or managers is important to the public (Lennick and Kiel, 2006; Wojciszke, 2005). Except for social entrepreneurs who are perceived to espouse venerated moral standards (Bacq et al., 2016), the general perception is that morals are bankrupted in the business space (Anderson and Smith, 2007; Brenkert, 2009). The likely result of such generalised misconceptions of entrepreneurial behaviour is that individuals with high moral imperative may shy away from pursuing a career in SE. However, we presume that individuals with adaptive cognition will more likely evaluate SE as a more morally right alternative than remaining unemployed; after all, it offers an opportunity to make positive contribution to society.

There is an emerging body of knowledge that the cognitive and socio-cultural influences interact to affect behaviour (Cerulo, 2015). In the present study, we presume that cognitive styles and moral potency interact to affect SE intentions. The situated metacognitive model of entrepreneurial mind-set posits that what people know about entrepreneurial task or situation leads to formulation of a metacognitive strategy that will most likely lead to the desired outcome (Haynie et al., 2010; Haynie and Shepherd, 2009). Thus, individuals who consider business behaviour to be morally challenging would intuitively shun SE opportunities. However, the model further postulates that the perception of the context and motivations can lead to adjustment in goals and plans to fit the reality and to achieve the best outcomes (Haynie et al., 2010). Therefore, applied to job search, unemployed individuals who employ flexible cognitive approaches would still find SE an attractive employment alternative, even for those who generally think that certain aspects of business are morally challenging.

H3a Moral potency is positively related to SE intentions.

H3b The relationship of moral potency and SE intentions is moderated by cognitive style.

3 Methods

3.1 Participants and procedures

Participants involved unemployed youths from Uganda and Kenya. Participants were recruited from public forums including training workshops and youth associations. This resulted into responses from 171 Ugandan and 56 Kenyan unemployed youth; 50.7% females and 49.3% males. Participants were young persons aged 18 to 35 years (average age: 25.5, SD = .85). All participants had achieved a level of education that is necessary to obtain skilled employment; bachelors or higher degree (59.4%), diploma (12.3%) and certificate in vocational or technical skills (25.9%). Nearly half (49.3%) of the participants had prior experience in SE, either running their personal or working in family businesses.

3.2 Measures

- *Cognitive styles*: the cognitive styles index (CSI) (Allinson and Hayes, 1996) was adopted. The CSI is a 38-item self-report inventory measured on a three-point response scale (true, uncertain and false) that assesses an individual's position on the intuitive and analytic continuum. Sample item: to solve a problem, I have to study each part of it in detail. For the present study, the inventory had an acceptable reliability coefficient ($\alpha = .64$). The CSI presents cognitive styles as a multi-categorical construct with five indicators: intuitive, quasi intuitive, adaptive, quasi analytic and analytic styles. The scale is scored with a single total score for each participant (minimum = 0 and maximum = 76). Accordingly, the score ranges for each style are; intuitive (0–28), quasi intuitive (29–38), adaptive (39–45), quasi analytic (46–52) and analytic (53–76) (Allinson and Hayes, 2012). In the present study, we operationalise cognitive styles with three indicators; intuitive (0–38), adaptive (39–45) and analytic (46–76).
- *Culture*: the PCOs scale (Sharma, 2010) was used. The PCO is a 40-item instrument measured on a seven-point Likert scale (1 – strongly disagree to 7 – strongly agree); for example, I rely on myself most of the time, rarely on others. The scale operationalises Hofstede's national cultural dimensions at the individual level in a structure of ten PCO. These include independence, interdependence, power, social inequality, masculinity, gender equality, risk aversion, ambiguity intolerance, tradition and prudence. Only independence and risk aversion orientations were measured in the present study (each with Cronbach $\alpha = .74$).
- *Moral potency*: was measured using the moral potency questionnaire (MPQ) (Hannah et al., 2011; Hannah and Avolio, 2010). The MPQ is a 12-item Likert scale measuring three moral capacities including moral ownership, moral efficacy and moral courage. Sample item: confront a leader if he/she commits an unethical act (1 – strongly disagree, 5 – strongly agree). The questionnaire had a high reliability in the present study ($\alpha = .86$).

- *SE intentions*: we adopted items from Liñán and Chen (2009) entrepreneurial intentions questionnaire. The items were rated on a seven-point Likert scale ranging from 1 (totally disagree) to 7 (totally agree). The instrument composed of six items for example “I am ready to do anything to be self-employed” and “I have the firm intention to start my SE project someday.” This questionnaire showed high reliability in the present study ($\alpha = .86$).

4 Results

Tables 1 and 2 present the descriptive statistics and correlations among the variables. In line with our expectations (*H1*), the ANOVA results show that unemployed youth with adaptive cognitive style ($M = 6.27$, $SD = .10$) have higher mean scores on SE intentions than those with intuitive ($M = 4.82$, $SD = .22$) and analytic ($M = 5.85$, $SD = .08$) styles. In general, the mean differences on SE intentions for different cognitive styles were significant ($F = 26.88$, $p < .001$). We further investigated the mean differences in other variables in the study, in relation to cognitive styles. Our results (Table 2) show non-significant mean differences in the cultural orientations (independence and risk aversion); but there are significant differences in moral potency ($F = 16.96$, $p < .001$). This is confirmed by correlation results showing a positive relationship between moral potency and SE intentions ($r = .25$, $p < .001$). Further analysis using linear regression (Table A1) also proved the positive impact of moral potency on SE intentions ($B = .38$, $p < .001$). Hence, *H3a* is supported. SE intention was marginally positively correlated to independence cultural orientation and negatively to risk aversion orientation. We confirmed these relationships with linear regression analysis (Table A1). Risk aversion was negatively and non-significantly associated with SE intentions ($B = -.05$, $p > .05$) while independence was positively but non-significantly associated to SE intentions ($B = .06$, $p > .05$). Thus, *H2a* and *H2c* were not supported. Regarding the control variables, only sex ($B = .33$, $p < .05$; male = 0, female = 1) and previous business related experience ($B = .39$, $p < .05$; with experience = 01, no experience = 0) were significantly associated to SE intentions. This indicates that females had higher intentions for SE. In addition, business related experience increases intention to become self-employed.

Conditional and unconditional effects of cognitive styles on SE intentions are presented in Tables 3 and 4. The effects are also visualised in Figures 1–3. We employed the PROCESS macro (Hayes, 2013) model 1 to test for moderation effects. Sample bootstrapping was set at 5,000 in line with Hayes’ (2013) recommendation for bootstrapping to determine significance. In all moderation analyses, we controlled for the effects of country, age, sex, education level and prior business related experience. Similar to the procedure for analysing mediation with multi-categorical variables (Hayes and Preacher, 2014), supplementary documentation for PROCESS describes steps for analysing interaction effects with multi-categorical moderator. The indicators are dummy coded such that one indicator (with least code) is used as the reference against which the effects of the other indicators are compared. We coded cognitive styles as: adaptive = 0, intuitive = 1 and analytical = 2. Adaptive style was used as the reference indicator (thus the code 0) against which the effects of intuitive and analytic styles are compared. In the first model, independence orientation is the focal predictor; and cognitive styles the moderator.

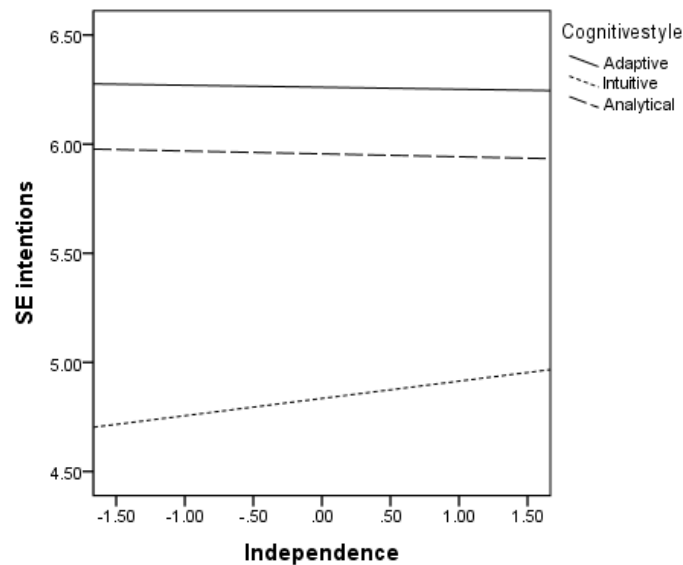
Table 1 Descriptive statistics and correlations between variables

Variables	<i>M</i>	<i>SD</i>	α	1	2	3	4
1 Cognitive styles	2.03	1.52	.64	-			
2 Independence	5.62	1.23	.74		-		
3 Risk aversion	3.92	1.55	.74		.00	-	
4 Moral potency	3.63	.73	.86		.07	-.03	-
5 Self-employment intentions	5.85	1.11	.86		.04	-.13	.25***

Note: ***Correlation is significant at the 0.001 level (2-tailed).

Table 2 Cognitive styles and mean differences in other variables

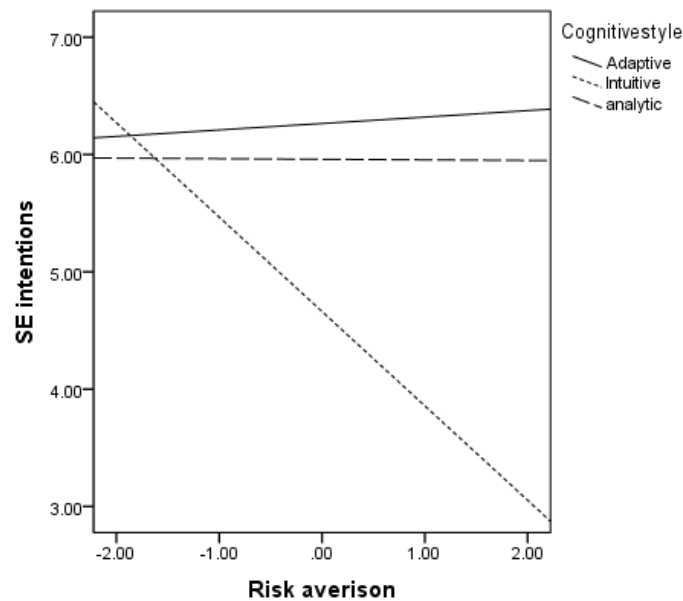
Outcome	Means (<i>SE</i>)			<i>F</i>	<i>P</i>
	Intuitive	Adaptive	Analytic		
Self-employment intentions	4.82 (.22)	6.27 (.10)	5.85 (.08)	26.88	.000
Independence	5.32 (.27)	5.60 (.14)	5.74 (.10)	1.68	.188
Risk aversion	3.74 (.21)	3.79 (.22)	4.05 (.14)	.85	.431
Moral potency	3.11 (.13)	3.55 (.09)	3.84 (.06)	16.96	.000

Figure 1 Interaction effects of cognitive styles and independence cultural orientation on SE intentions

Results of the moderation models in Table 3 support *H2b*, however *H2d* was not supported. In comparison to the reference cognitive style (adaptive), both intuitive style ($B = -1.43$, $CI = -1.92$ to $-.94$) and analytic style ($B = -.31$, $CI = -.57$ to $-.03$) had negative significant effects on SE intentions. Regarding the interaction effects of cognitive styles and independence orientation, our findings show positive but non-significant effects for intuitive style ($B = .09$, $CI = -.25$ to $.42$) and negative but non-significant effects for analytic styles ($B = -.00$, $CI = -.33$ to $.32$). The overall effects

were also non-significant with negligible change in intentions resulting from the interaction of cognitive styles and independence orientation. Probing of the moderation show the conditional effects were non-significant for all the three cognitive styles. The moderation plots in Figure 1 show that the intent to become self-employed is high for unemployed individuals with an adaptive style; which intent is constant at all levels of independence orientation. Individuals with an intuitive style reported relatively lower high SE intentions, however, the intentions increase with the level of independence orientation.

Figure 2 Interaction effects of cognitive styles and risk aversion cultural orientation on SE intentions



When risk aversion is the focal variable, the conditional effects were significant with a significant increase in SE intentions due to the interaction ($F = 26.98$, $p < .001$, $\Delta R^2 = .13$). The whole regression model ($F = 14.98$, $p < .001$, $R^2 = .39$) was also significant. In relation to the reference style (adaptive), both intuitive style ($B = -1.60$, $CI = -1.98$ to -1.23) and analytical style ($B = -.31$, $CI = -.56$ to $-.06$) had significant negative effects on SE intentions. However, interaction with risk aversion only had significant effects for the intuitive style ($B = -.86$, $CI = -1.09$ to $-.63$). We observe that the SE intention among people with adaptive style is high and increases gradually with levels of risk aversion, while intentions for analytic style group remain quite the same at different levels of risk aversion. On the contrary, intent for SE is very high for intuitive style group at lower levels of risk aversion, but extremely low at higher levels of risk aversion.

Table 3 Interaction effects of cultural orientations and cognitive styles on SE intention

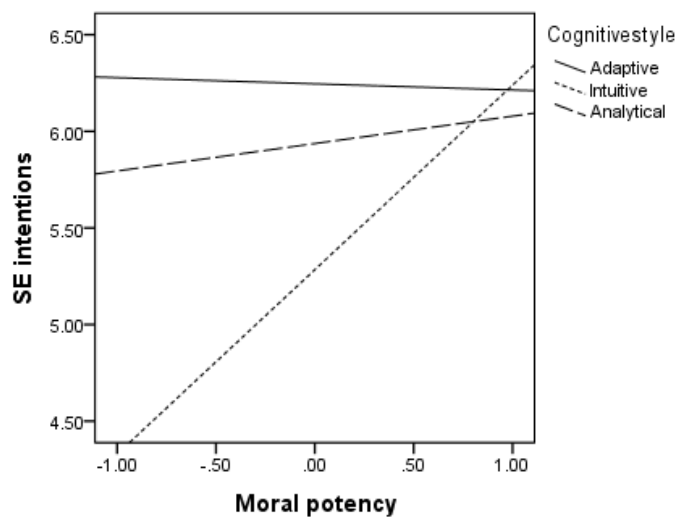
<i>Predictors</i>	<i>B</i>	<i>SE</i>	<i>LLCI</i>	<i>ULCI</i>
<i>Independence cultural orientation</i>				
Country	-.06	.16	-.37	.25
Age	-.00	.09	-.18	.18
Sex	.34	.15	.06	.63
Education level	-.05	.07	-.18	.08
Previous experience	.40	.14	.12	.67
Independence	-.01	.11	-.23	.21
Intuitive style	-1.42	.25	-1.92	-.94
Analytic style	-.31	.14	-.57	-.04
Independence X intuitive	.09	.17	-.25	.42
Independence X analytic	-.00	.16	-.33	.32
Model summary	$F(10, 206) = 5.13, p = .000, R^2 = .25$			
R ² increase due to interaction	$F(2, 206) = .16, p = .849, \Delta R^2 = .002$			
<i>Conditional effect of independence orientation in groups defined by cognitive style</i>				
Adaptive	-.01	.11	-.23	.21
Intuitive	.08	.13	-.17	.33
Analytical	-.01	.14	-.28	.25
<i>Risk aversion cultural orientation</i>				
Country	-.09	.14	-.36	.19
Age	-.02	.08	-.17	.14
Sex	.13	.13	-.13	.39
Education level	.03	.05	-.07	.14
Previous experience	.21	.13	-.04	.46
Risk aversion	.06	.04	-.03	.14
Intuitive style	-1.60	.19	-1.98	-1.23
Analytic style	-.31	.13	-.56	-.06
Risk aversion X intuitive	-.86	.12	-1.09	-.63
Risk aversion X analytic	-.06	.07	-.19	.07
Model summary	$F(10, 206) = 14.98, p = .000, R^2 = .39$			
R ² increase due to interaction	$F(2, 206) = 26.98, p = .000, \Delta R^2 = .13$			
<i>Conditional effects of risk aversion in groups defined by cognitive styles</i>				
Adaptive	.06	.04	-.03	.14
Intuitive	-.81	.11	-1.02	-.59
Analytical	-.01	.06	-.11	.10

The study further aimed at establishing the impact of cognitive styles on the association between moral potency and SE intention. Interactions with intuitive style ($B = .99$, $CI = .46$ to 1.51) was significant, while interactions with analytic style ($B = .17$, $CI = -.43$ to $.78$) was not significant. From the moderation plot (Figure 3), we observe that for individuals with intuitive, the intent to become self-employed is higher at high levels of moral potency, but very low at low levels of moral potency. On the other hand, SE intentions are high at all levels of moral potency for individuals with analytic and adaptive styles, although intentions increase gradually with high level of moral potency.

Table 4 Interaction effects of moral potency and cognitive styles on SE intentions

Predictors	B	SE	LLCI	ULCI
Country	-.05	.15	-.36	.25
Age	.07	.09	-.10	.24
Sex	.24	.15	-.04	.52
Education level	-.07	.07	-.20	.07
Previous experience	.35	.13	.10	.61
Moral potency	-.03	.17	-.38	.31
Intuitive style	-.96	.26	-1.48	-.45
Analytic style	-.31	.15	-.60	.02
Intuitive X moral potency	.99	.27	.47	1.51
Analytic X moral potency	.17	.31	-.43	.78
Model summary	$F(10, 206) = 19.19, p = .000, R^2 = .33$			
R^2 increase due to interaction	$F(2, 206) = 7.54, p = .001, \Delta R^2 = .05$			
<i>Test of equality of conditional means at different levels of the moderator</i>				
Adaptive	-.03	.17	-.38	.31
Intuitive	.96	.18	.60	1.31
Analytical	.14	.23	-.32	.60

Figure 3 Interaction effects of cognitive styles and moral potency on SE intentions



5 Discussions

The aim of the present study was to investigate the impact of cognitive styles, cultural orientations and moral potency on SE intentions of unemployed youth. Specifically, we posited that an adaptive cognitive style is more seminal than the intuitive and analytic styles in formation of intent to go into SE in the context of unemployment. The results show significant mean differences on SE intentions for different cognitive styles, confirming previous findings that cognitive styles have a role to play in formation of entrepreneurial intentions (Barbosa et al., 2007; Molaei et al., 2014). There is no general agreement about which cognitive style is particularly important for enhancing intentions. Whereas, most of previous research suggest that intuitive style is more suited to the entrepreneurial role. Our findings are in line with those suggesting that combining both intuition and rationality, that is the adaptive style, is beneficial for the entrepreneur (Armstrong et al., 2012; Cools and Van Den Broeck, 2008; Ettl et al., 2014; Sommer, 2013). Adaptability of cognitive style is generally important for unemployed individuals in their efforts to obtain employment or reemployment. Some individuals have been employed before but lost their jobs. Some have a previous history of SE but failed in their endeavours. While others have never been in any form of employment because they have not been successful in their job searches. Given these circumstances, individuals may employ flexibility in their cognition; for example, using more rationality in discerning whether SE offers a viable and secure employment option; while on the other hand requiring some level of intuition to recognise business opportunities that offer an entry point into SE.

The results further show that other predictors of SE intentions in this study, particularly moral potency, also vary in relation to cognitive styles. Moral potency tends to be high for individuals, using the analytic style, low for individuals using intuitive style and moderate for individuals using adaptive style. This has implications for the level of moral challenge that individuals may perceive in given SE ideas or opportunities. In relation to risk aversion, individuals with analytic style had the highest mean score on risk aversion. The more individuals analyse situations, the more the likelihood of discovering challenges relating to entry ethical dilemmas of doing business. This may have a negative implication for SE intentions. On the contrary however, we find a positive correlation between moral potency and SE intentions. As expected, SE intentions was positively related to independence orientation and negatively to risk aversion.

The moral challenges in entrepreneurship and the morally deficient behaviour of some businesspeople (Anderson and Smith, 2007; Brenkert, 2009) can discourage morally potent individuals from SE. On the other hand, adaptability of cognitive style facilitates a balanced evaluation of the moral challenges versus expected outcomes. The positive socio-economic benefits to self and community therefore become moral attractions to SE. Yet, even when undesirable, SE is socially, economically, morally and professionally a superior alternative than remaining unemployed. Moreover, the outcomes of SE such as earning income, creating jobs for others and service provision may be evaluated as outweighing the ethical challenges the self-employed encounter in starting and running an enterprise.

One of the important contributions of this study relates to the conditional effects of cognitive styles on SE intentions; as moderated by PCOs of independence and risk aversion. The results support our proposition that unemployed individuals with an

adaptive cognitive style have higher SE intentions. However, SE intentions for people with adaptive cognitive style did vary with level of independence orientation. This is contrary to our presumption that cognitive adaptability is useful when people have higher levels of autonomy. It also contradicts Vaghely and Julien's (2010) model of combined constructionist and cognitivist perspective, individuals with an adaptive cognitive style are able to combine their intuitive learning to recognise opportunities (Ahmad et al., 2014; Barbosa et al., 2007; Hmieleski and Corbett, 2006) with their analytical skills to explore the feasibility of SE and explore alternative finance and alternatives to implement their ideas.

Our findings highlight the collectivistic (interdependence) nature of East African communities. The African 'Ubuntu' psychology of development focuses on togetherness. This is expressed in the Ubuntu concept "ich bin, weil du bist" (Sahling, 2013); implying "I am, because you are". This explains why independence orientation or autonomy is loosely linked to SE intentions. In highly collectivistic East African cultures, careers are not always autonomously determined, rather the significant others play a major role. Regarding SE specifically, young people rely on their families and relatives for approval and support with start-up resources. This highlights the idea that collectivism facilitates implementation of innovations (Tung et al., 2007) through joint actions. Specifically, collectivism facilitates participation in business activities even among those that do not own enterprises through discouraging competition (Dana, 1997). Although this negatively impacts on the number of start-ups, it provides an environment for success for those who start enterprises. Collective tendencies in the society also increase opportunities for creating social networks within the community that enables pulling resources and competences to implement the innovative ideas of those with entrepreneurial minds or as Mauroner (2017) refers to them as 'the makers'. However, with rapid changes in societies and in economic forces, there are also changes occurring in the level to which individualism and collectivism are being applied to small businesses (Missens et al., 2010).

With regard to risk aversion, results indicate that the relationship between cognitive styles and SE intentions was stronger at moderate and high levels of risk aversion than at the lower level. In line with our postulation, SE intentions among unemployed individuals are high at all levels of risk aversion for individuals with an adaptive style; while intentions are high only at lower risk aversion levels for individuals with intuitive style. Although we investigate risk aversion as a PCO, our findings complement previous research that has predominantly treated risk aversion in the framework of national cultures or as an entrepreneurial attitude (e.g., Barbosa et al., 2007; Costa and Mainardes, 2016; Dawson and Henley, 2015). However, the present study added the interactional effect of risk aversion and cognitive style. We observe that the interaction of intuitive style and high risk aversion significantly lowers entrepreneurial intentions. To the contrary, SE intentions tend to be high at all levels of risk aversion for unemployed people with adaptive and analytic styles. This finding may not be confined to the nature of the population or geographical area, given that Barbosa et al. (2007) makes a similar observation from a similar study in a different population and different developmental context. The possible implication is that intuitive individuals quickly dismiss an opportunity, without give it much thought, when they realise that there are less likelihoods of success. in agreement with theoretical assumptions of adaptive cognition (Haynie et al., 2010; Haynie and Shepherd, 2009), individuals with adaptive style will not dismiss or exploit SE opportunities intuitively or with overly calculative risk analysis, but

rather on a balanced view of the risk versus expected outcomes based on their knowledge of the opportunity, their abilities and the context.

Another major contribution of the present study relates to the impact of cognitive styles on the relationship between moral potency and SE intention. We investigated moral potency as both a moderator and mediator. In support of our hypothesis, individuals with adaptive style have high SE intentions at all levels of moral potency. On the contrary, SE intentions are very high at higher levels of moral potency for individuals with an intuitive style. Similarly, intentions are relatively higher at higher levels than at low levels of moral potency for individuals with analytical style. Given that individuals with intuitive styles pay less attention to details (Allinson and Hayes, 1996) they are less likely to make a thorough analysis of the moral implications of a particular entrepreneurial idea. Thus, an individual is most likely to abandon immediately an idea or opportunity when it is perceived to be associated with more ethical challenges. For individuals with adaptive style, particularly in the context of unemployment, they are likely to make a balanced evaluation of the moral challenges of SE opportunity versus expected outcomes as well as in relation to the challenges of remaining unemployed. For some individuals particularly with adaptive cognition, the moral challenges of SE are offset by the expected socio-economic outcomes. Overall, moral potency plays a big role in development of SE intentions among the unemployed. SE intentions are more likely to be high when individuals think that they have the ability to behave ethically or overcome the ethical challenges related to the business idea or opportunity. The consideration that SE does not only offer employment, but also an opportunity to make contribution to society makes SE attractive (Dana, 1996) and morally superior to remaining unemployed.

5.1 Implications

Our findings have implications for policy, specifically for governments of less developed economies and their development partners, in the process of increasing the number of young and unemployed people starting up SE projects. Through entrepreneurial education, entrepreneurial cognition can be developed. Sommer (2013), for example, highlights the need to emphasise the intuitive and analytic approaches in entrepreneurial education. To the contrary, we suggest that emphasis should be on empowering young people to be adaptive in their cognition. We particularly call on government interventions and trainers to incorporate entrepreneurial cognition skills and abilities in entrepreneurial training programs. Such abilities are helpful in effective evaluation of risk, ethical and other challenges that individuals associate with SE opportunities. We also recommend that there should be efforts to expose young persons to self-employed role models or entrepreneurs with admirable moral character. Role models with positive character will not only attract more young persons to SE, but also model ethical behaviour among prospective entrepreneurs.

5.2 Limitations

There are some limitations for this study that have to be considered. We have investigated SE intentions among unemployed youth and how cognitive styles, personal cultural values and moral potency impact on the intentions. However, we did not explore whether the fact that one is unemployed contributes to their intent to go into SE. We only

consider unemployment as a context. Whereas, some studies demonstrate the link between unemployment and intentions to become self-employed (e.g., Abada et al., 2014; Oh, 2008; Saridakis et al., 2014) other researchers downplay this relationship (see: Patel and Thatcher, 2014). This association, therefore, is an area that requires more research attention. The second limitation is that whereas we collect data from two different countries, we did not analyse for the differences among these countries given that we primarily focus on PCO rather than national culture. A cross-cultural research to examine the variability of the effects among different developing countries can provide further insights. Moreover, a comparison with a similar population in more developed countries would provide better cross cultural and economic perspectives.

5.3 *Conclusions*

At the time when economies are still recovering from the economic depression and unemployment reaching unprecedented rates, SE has an enormous role to play. The role of SE on increasing entrepreneurial initiatives, which in turn impact on economic development and job creation (e.g., Anyanwu, 2014; Fritsch and Wyrwich, 2014; Shane and Venkataraman, 2000; Williams et al., 2013) cannot be underestimated. Consequently, many governments and development actors are increasingly emphasising SE as an important career alternative; and as a possible means of driving economies forward. There is, therefore, an opportunity to interest many young people to join the ever growing movement of the self-employed. Entrepreneurship is also a sustainable ways of overcoming economic vulnerabilities and empowering individuals and communities to be self-sustaining (Khan, 2014). This is particularly more important for the unemployed youth, who are at a critical stage of their career development. Given the importance of SE to the labour market and economy, enormous research has been conducted on SE or entrepreneurial intentions. However, very few studies have investigated the impact of cognitive styles in the intentions models, while the role of morality is rather ignored. Moreover, there is very limited research on entrepreneurial intentions in the context of less developed countries.

This paper contributes to the entrepreneurial intentions literature in studying a rather neglected yet vulnerable population of unemployed youth in less developed economies. Our findings have demonstrated two issues. First, at least among the unemployed and in support of the theoretical basis of adaptive cognition, an adaptive cognitive style is related to higher intent to become self-employed. Second, cognitive styles moderate the relationships between personal orientation towards risk aversion as well as moral potency and SE intentions. Moreover, for individuals that have high orientation towards risk aversion, an adaptive cognitive style still enhances SE intentions. The role of cognitive styles in entrepreneurial tasks or motivations such as opportunity recognition, decision making, innovations, efficacy and attitudes is already highlighted in extant literature (e.g., Barbosa et al., 2007; Baron, 2004; Urban, 2012a, 2012b). With regards to intentions however, our findings highlight the relevance adaptive cognition to entrepreneurial intentions and extends the few studies that have argued for an adaptive style in entrepreneurial education (e.g., Etlie et al., 2014; Sommer, 2013).

Moreover, we introduce a moral potency concept (or moral intelligence, as referred to in some literature) to the study of intentions. By doing so, our study further extends the literature and theoretical models on factors that underpin development of entrepreneurial intentions and behaviour (e.g., Baron, 1998; Krueger et al., 2000; Schlaegel et al., 2013;

Schlaegel and Koenig, 2014). The moral potency concept for example extends the normative factors that motivate entrepreneurial intentions and behaviour. Similarly, Rauch et al. (2013) advocated for studying culture as a moderator in entrepreneurship research. Our study is one of such efforts heeding to this call and have successfully proven that measuring PCO, as opposed to the popular national level measures, is also important to understanding entrepreneurial or SE intentions; as well as relations of cultural variables to other personal level variables in development of intentions.

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Appendix

Table A1 Predictors of self-employment intentions

<i>Predictor</i>	<i>B</i>	<i>SE</i>
Constant	4.53***	.75
Country	-.11	.18
Age	-.09	.09
Sex	.37*	.15
Education level	-.07	.08
Previous experience	.39*	.15
Cognitive styles	-.18	.09
Independence	.05	.06
Risk aversion	-.05	.05
Moral potency	.43***	.09
Model summary	$F(9, 207) = 4.16***, R^2 = .15$	

Notes: ***p < .001, p < .05.