STUDENT TRAINING FOR ENTREPRENEURIAL PROMOTION IN TANZANIA: IMPACT ON STUDENTS' ENTREPRENEURIAL MINDSET AND BUSINESS CREATION BEHAVIOUR

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ABSTRACT
The objective of this paper is to report results of a research that assessed the short and long-term impact of an action-oriented students training on entrepreneurship (STEP) on the students' entrepreneurial mindset and business creation behavior. Action-orientation means that students engage in the start-up process of a real business during the training. We used randomized controlled trials (RCT) to assess the impact of STEP. We conducted several pre and post-training measurement waves. In this paper, the results of 448 students who participated in the STEP at the University of Dar es Salaam are reported. We used questionnaires to assess students' entrepreneurial mindset and business creation. Based on statistical analyses, we find that STEP has significant short and long-term effects on students' entrepreneurial mindset and business creation behavior. STEP students create jobs for themselves by means of entrepreneurship. The findings hold across three different cohorts of students. We conclude that STEP is an effective training intervention to foster students' entrepreneurial mindset and to boost the number of new businesses created by university students. Our study contributes to the literature that seeks to identify effective means to foster entrepreneurship among university students. Furthermore, our study contributes to the literature that seeks to develop a theory of entrepreneurship training.

Key words: Entrepreneurship training, randomised controlled trial, entrepreneurial mindset, business creation, Tanzania.

INTRODUCTION

Entrepreneurship has been central to economic transformation around the world since the medieval times (even though a despised undertaking then) and largely responsible for the industrial revolution in Europe in the 19th Century (Ricketts, 2006). The large organisations that were created in the 19th Century and which continue to exist to date are the result primarily of the efforts of entrepreneurs. Attention to entrepreneurship re-emerged in the later part of the 20th Century advocated by, among others, Schumpeter who emphasised its critical role in galvanizing economic development through innovation (Schumpeter, 1934). More recently, entrepreneurship has been viewed as critical for attaining sustainable development. This is because it creates jobs, drives economic growth, promotes innovation and helps to improve social conditions including addressing environmental concerns (United Nations, 2014). The United Nations stressed the importance of giving appropriate consideration to the promotion of entrepreneurship in the post-2015 development agenda by paying attention to entrepreneurship education, among others.

Effective entrepreneurship education needs to impart knowledge and skills that centre on attitudes (soft skills), including persistence, networking and self-confidence, on the one hand, and enabling skills (hard skills), which include basic start-up knowledge, business planning, financial literacy and managerial skills, on the other (United Nations, 2014). This means the question of how to design and deliver effective entrepreneurship training is critical although not fully addressed (Honig, 2004). To address this issue, most of the best universities have introduced the business plan-based training model (Honig, 2004). However, this model is still viewed as inadequate. In other words, merely telling people that they need certain characteristics and behaviours in order to be entrepreneurial will not enable people to develop the competence they need to start and run a business.

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The starting point for addressing concerns about effective entrepreneurship training is the realisation that entrepreneurship is an action-based phenomenon. Action is needed in order to start a new business; a process that starts a continuous chain of activities involving gathering different types of resources and setting up a viable business structure (Gartner, 1985). Entrepreneurship-relevant action has two sides to it: it results in the actual setting up of the business and presents the entrepreneur with the opportunity to learn better ways of starting and operating a successful business[4]. Indeed, learning starts with the very process of starting a new business as one learns efficient ways of starting a business while continued running of the business allows the entrepreneurs to learn and perfect his or her ways of managing a business. As entrepreneurship is conceptualised as a process of identifying and exploiting business opportunities by introducing new products or services into the market (Shane & Venkataraman, 2000), the absence of necessary skills may prevent people from being able to start a new business even in the most favourable entrepreneurial ecosystem and even if they were motivated to start one (Gielnik, *et al*., 2015). Therefore, entrepreneurship training that provides these needed skills is an important factor for empowering and enabling people to take advantage of the entrepreneurial opportunities that exist in their operating environment (Gielnik, *et al*., 2015).

As action is the real driver of entrepreneurship, the key question from an educational perspective concerns effective methods of training on these actions; that is, entrepreneurial actions (Edelman *et al*., 2008; Honig, 2004), which bring to the fore two issues. The first issue is how to include the action (that drives entrepreneurship) in the training (Pittaway, *et al*., 2009) and the second is how to integrate theory in the learning (Fiet, 2000). In terms of the first issue, scholars have noted that while a large number of entrepreneurship trainings puts a strong focus on developing a business plan (Honig, 2004), they lack a method that involves active engagement by the participants (Pittaway, *et al*., 2009). Active engagement means that the training emphasises learning by action and involves performing start-up activities (i.e. the entrepreneurial actions) that correspond to the activities performed by entrepreneurs (Edelman *et al*., 2008). Action-based entrepreneurship trainings (i.e. engaging in start-up activities by actually starting and running a business during the training) have become a popular method to train students in entrepreneurship (Taylor & Thorpe, 2004).

In terms of the second issue, scholars have criticised the fact that many training programmes lack a solid theoretical footing (Fiet, 2000). Fiet posits that a theoretical basis gives the training participants guidance in what they should do in order to be successful at entrepreneurship instead of only describing what other entrepreneurs have done. One way to include theory in trainings is to use action principles that are derived from theory and scientific evidence in order to offer knowledge about how to do something (Frese, 2009; Frese, *et al*., 2016). Although the importance of grounding training in theory is critical, it has not been addressed in most entrepreneurship trainings. In this regard, scholars have pointed out a number of gaps in previous research regarding the theoretical model underlying the short- and long-term effects of entrepreneurship trainings (Gielnik *et al.*, 2015). For example, Martin *et al*. (2013) contend that many entrepreneurship studies have no or only have an inconsistent theoretical grounding thus pointing to the need for more studies to develop a better theoretical understanding and appreciation of entrepreneurship trainings.

Further, most studies which have addressed the impact of entrepreneurship education and trainings have tended to focus on short-term outcomes such as equipping individuals with knowledge and skills for launching and operating business ventures (Katz, 2007). This means we know that entrepreneurship increases new business creation and entrepreneurial activity (Martinez *et al*., 2010). Indeed, meta-analyses have shown that entrepreneurship training effectively promotes entrepreneurial attitudes and performance in new venture creation. However, we lack a theoretical understanding of the mechanisms and boundary conditions that explain why and under which conditions entrepreneurship training has a positive impact (Martin *et al*., 2013). Accordingly, there is a gap in our knowledge about how to develop effective trainings to promote entrepreneurship (Edelman *et al*., 2008; Gielnik *et al*., 2015; Pittaway & Cope, 2007).

The Student Training for Entrepreneurial Promotion (STEP), the assessment of which we present in this article, confronts head on the two issues discussed above. First, STEP integrates actions in the training through engagement of participants in the start-up activities to establish micro business entities as an integral part of the training. Second, STEP integrates theory in the learning process by including and focusing on the action principles regarding the process of starting and running a business enterprise. Thus, the core idea of STEP is to bring together action and theory as a training package in a comprehensive way such that it produces an

[4] Business failure could be viewed as resulting partly from the entrepreneurs' failure or inability to learn how to run the business given the operating environment whereas intended closure could reflect lessons that such a business is not relevant given the prevailing environmental conditions.

entrepreneurial mindset and business creation behaviour.

In this article, we provide evidence of effectiveness of STEP in Tanzania, a developing country that previously followed a more state-based entrepreneurship approach to economic development rather than individual-based entrepreneurship. While promotion of entrepreneurship may be important for all countries, it acquires special significance in developing countries where the problem of youth unemployment is huge and entrepreneurship is increasingly seen as one of the key solutions to the problem. In conducting and assessing this training in the Tanzanian context, we provide evidence for the short- and long-term effects of the training to develop a better understanding of the factors underlying the impact of training on entrepreneurship. We next briefly describe Tanzania as a specific ecosystem in which entrepreneurship occurs.

Tanzania as an Entrepreneurial Ecosystem

Isenberg (2010) urges that a profound understanding is needed of all aspects of the entrepreneurial ecosystem that influence entrepreneurship in order to inform efforts which are aimed at development of entrepreneurship. These aspects are cultural, social, political, and economic structures. In this regard, Tanzania as a specific context in which entrepreneurial activities are performed needs to be understood. It is the largest country in East Africa made up of the spice islands of Zanzibar (consisting of Pemba and Unguja) and the Mainland, which is located south of the equator and between the great lakes (Victoria, Tanganyika, and Nyasa) and the Indian Ocean. Tanzania holds significant promise for its people and for the world even as agriculture remains the main part of Tanzania's economy (Bella & Melyoki, 2017). The country follows a multiparty political system and elections are held every five years (Muya, 1998).

Real gross domestic product (GDP) grew by 7.3% in 2013 and 7.0% in 2014 (World Bank, 2014). The main contributor to the economy was agriculture, which contributed USD 13.9 billion to its GDP (nearly 30%) and 67% to total employment during 2014. As of 2016, Tanzania had over 44 million hectares of arable land with only 33% of this being cultivated (Tanzanian Investment Centre, 2017). Other significant sectors include construction, trade, tourism and transportation. Tanzania is also endowed with huge mineral and petroleum resources (Melyoki, 2017). Current efforts by government at industrialisation are meant to further diversify the economy as much as propel the nation towards middle-income country status by 2025 (United Republic of Tanzania, 1999; 2016).

In terms of the underpinning core ideas about socio-economic development, the Tanzanian Government has taken different turns over time. Being a free market economy at independence, the country attempted to build a socialist economy between 1967 and 1985 based on concepts of self-reliance and state entrepreneurship, articulated in the blueprint, commonly referred to as the Arusha Declaration (Nyerere, 1977). Resulting from this blueprint, nationalisation was undertaken and new state-owned enterprises were created and had monopoly over various sectors of the economy during the time. Except for farming activities, which continued to be mainly peasantry-based, private business enterprises largely played second fiddle. As the country changed to a market-based system from 1986 (Bagachwa *et al.*, 1992), transformation of state entrepreneurship and encouragement of private enterprise became important. This was achieved through a combination of actions: privatisation of state-owned enterprises, liberalisation of the economy and reform of the business environment to create space and incentives for private entrepreneurs to engage in business (Bagachwa, *et al.*, 1992). Other elements of context include a collectivist, risk averse, and harmony-oriented cultural orientation (Hofstede, 2015).

From an entrepreneurial ecosystem perspective, the forgoing background is important because legacies of state entrepreneurship are still present and entrepreneurs must still deal with them in the process of becoming the main engine of economic growth and social development. For example, while Tanzania has developed a sound policy base over time to support entrepreneurship and business development, the challenge lies in translating these policies into initiatives and practices (Africa Peer Review Mechanism, 2013; Bella & Melyoki, 2017). For example, the low level of trust between the public and private sectors is still a serious issue in Tanzania and it needs to be addressed (United Republic of Tanzania and Danish Ministry of Foreign Affairs, 2015). Other issues emanating from the socialist legacies include a weak entrepreneurial culture, regulatory constraints that make doing business difficult and lack of entrepreneurial finance (World Bank, 2017). Thus, similar to other developing countries, Tanzania presents an interesting context for the study of entrepreneurship but more particularly how to equip young people with knowledge and skills they need to avoid unemployment by venturing into business creation. In particular, implementing an action-based entrepreneurship training in a transitioning context and assessing its outcomes provides a valuable theoretical understanding of the mechanisms by which effective entrepreneurship training operates.

Developing economies provide more opportunities but often also more necessity to become a business owner (Frese, 2009). Entrepreneurship develops more strongly in these types of economies and contributes more to the development of wealth (Frese, 2009). Indeed, entrepreneurship has been argued to be an important factor contributing to economic development in transitional and developing economies (Reynolds *et al*., 2004 cited by Frese, 2009). Current governments' efforts at achieving industrialisation (United Republic of Tanzania, 2016) need to be seen largely as a grand entrepreneurial project whose realisation depends, to a large extent, on how entrepreneurship is promoted by focusing on external (environmental) factors as well as internal (psychological) factors. While we recognise the importance of the external environment, this study is about the internal factors as it is focused on how to promote entrepreneurship via knowledge and skill infusion/training. The rest of this article discusses the action regulation theory, which is used as a theoretical basis for this research, research methods, research findings, discussions and conclusions.

ACTION REGULATION THEORY AND ENTREPRENEURSHIP

Action Regulation Theory[5] (ART) was developed in the field of Psychology (Hacker, 2003) and draws heavily from the work of German and Scandinavian researchers bringing together the Levin's Field Theories as well as key elements of Activity Theory proposed by Leontiev and Vygotsky (Jones, 2014). ART has foundations in cognitive, information processing and behavioural theories (Frese & Zapf, 1994). As entrepreneurship is an action-based phenomenon (Gielnik, *et al*., 2015) these foundations are important for the development of entrepreneurship: they reveal that it can be influenced at different levels. At the cognition level, cognition processes that have implications for entrepreneurship can be manipulated in order to decipher information from the environment that is entrepreneurship-favourable. Further, manipulation may focus on information that leads to generation of actions that may become a behaviour. The discussion below further elucidates these aspects.

As noted, central to ART is conscious action, which has two elements: the action process and the structure of action. Action has been defined as the smallest unit of behaviour (Hacker, 1986a cited by Frese & Zapf, 1994) and conscious action consists of a number of processes. These processes are: (i) development of goals and decisions between competing goals, (ii) orientation including prognosis of future events, (iii) generation of plans, (iv) decisions to select a plan from available plans, (v) execution and monitoring of the plan, and (vi) processing of feedback (Frese & Zapf, 1994:273). Frese & Zapf contend that although the different activities in the action process may not be implemented sequentially and back and forth shifts are possible in the process, these processes must all be accomplished for conscious actions to take place. As one may note, the first four elements of the action process are cognitive activities: they take place at the mental level. For example, goals are considered as anticipative cognition structures (future results) that guide the action process (Hacker, 1986 cited by Frese & Zapf, 1994).

According to Hacker (2003), the starting point for action regulation is the goal. In this sense, actions are controlled or regulated by goals. Brushlinsky (1989:37 cited by Kaptelinin, *et al*., *undated*), states that "human activity is always determined by its object not directly but in a mediated way, through its inner specific regularities such as goals, motives, knowledge, experience and values". This characteristic constitutes the most important aspect of ART. Citing Chapman and Skinner (1985) and Heckhausen (1999), West *et al*., 2013 contends that this is because goals and goal-related processes motivate, organise, and direct behaviour at all ages. This leads to the conclusion that action is regulated by cognition - a process that may be conscious or automatic (Scheider & Shiffrin, 1977 cited by Frese & Zapf, 1994).

As conscious cognitive aspects, goals must have certain features that are important in order to influence actions. For example, research has found that specific goals tend to raise performance levels, and individuals with specific goals have shown higher performance than those without specific goals (West *et al*., 2013) and that individuals will strive to meet even very challenging goals (Locke & Latham, 2002 cited by West *et al*., 2013). Another feature of goals is that goals can be decomposed into several partial goals that together constitute the main goal. Furthermore, the goals that regulate activities are stored in the memory, as a representation for what the final result should look like, until the action has been completed. Goals are also the starting points of the emotions that are inherently associated with actions, e.g. perceptions of success (Hacker, 1985 cited by Hacker 2003).

In terms of action processes mentioned earlier, orientation, development of action plans and selection of action plans to implement are also by their nature cognitive activities; that is, they are at the level of knowledge. From

[5]There are many theories of entrepreneurship: Economic Theories, Sociological Theory, innovation Theory, and Psychological Theories.

the perspective of entrepreneurship, all these mental activities can be influenced in several ways. For example, people may be trained to set goals that have effect on entrepreneurial activities. Also, by providing people with information on the benefits of entrepreneurship, they may start to form interest and hence set entrepreneurial goals. By training people on ideas related to efficient realisation of entrepreneurial goals, they may develop plans that can be efficiently pursued to achieve the defined entrepreneurial goals. However, it is important to note that setting entrepreneurial goals and developing good plans to achieve the goals are not enough for entrepreneurship to occur. However, they are the starting points. Indeed, academic entrepreneurship trainings are meant to promote entrepreneurship by influencing these mental activities (Honig, 2004). STEP addresses these mental level activities by offering students knowledge on entrepreneurship and training them on how to set goals, prepare plans that are linked to the goals and which are executable to achieve those goals (Gielnik *et al*., 2015; Frese *et al*., 2016). However, focusing on this level alone is not enough as cognitive activities are only a part of the entrepreneurial action (Frese & Zapf (1994), the full action process must be accomplished which includes execution.

Execution and monitoring are closely linked processes that make ART a truly action- oriented theory. Execution lies at the boundary of the subjective and objective world (Frese & Zapf, 1994) and may be viewed as a process of putting into motion activities accomplished at the mental level (that is, the plan) in the objective world in order to create a new world represented by goals. In entrepreneurship, execution means implementing a series of activities that create a business and running the business firm. Typical activities would include preparing articles of association, and submitting these documents to government agencies that register a business, renting or building premises from which to run the business and undertaking core business activities related to production and provision of the product or service including making sales.

According to ART, the execution stage in the action process can be influenced by training people on ways to do things in an efficient manner that improves the chances of success. In terms of entrepreneurship, this means providing people with effective skills to actually implement actions that are entrepreneurship-relevant. In this respect, self-efficacy becomes important. Self-efficacy is one's assessment of individual capability in a defined task domain, for example, one's belief that if one can run at a high speed, one can become an athlete. Goals tend to be motivating when self-efficacy is higher (Maddux, 1995) and that people with higher self-efficacy have an expectation that additional effort will lead to a positive outcome (Bandura, 1989). Theoretically, self-efficacy is related to performance in a reciprocal fashion (Bandura, 1997 see West *et al*., 2013). That is, initial levels of self-efficacy should affect initial performance and subsequent evaluations of that performance, in light of one's beliefs, should raise or lower self-efficacy, which will in turn affect further future performance (Berry, 1999; Valentijnetal, 2006).

Self-efficacy in entrepreneurship is also addressed in STEP. STEP provides students with action knowledge by providing them with opportunities to perform the actions required in real life in order to create a business and manage it. This boosts their self-belief that they can pursue entrepreneurship and be successful at it. Thus, at the beginning of the STEP programme, students are asked to create business ventures in groups of five. They then receive $100 as capital to start and manage the business during the twelve-week training and as part of it. At the end of the twelve weeks, students are asked to return the initial start-up capital advanced to them. If during the process, they managed to make a profit, they are allowed to retain it but if they made a loss, they are not punished but encouraged to reflect on the causes of failure. The report at the end of twelve weeks constitutes the final feedback time as feedback and guidance is provided continuously during the training. In the ART, feedback is an important process as it represents time for looking back to see how close one had come in realising the goal. According to Frese & Zapf (1994:279), "feedback is the information about how far one has progressed toward the goal and it is essential for future actions".

The STEP's theoretical and empirical model is shown in Figure 1. The figure shows that before the training is offered, a baseline is done at T1. It is then followed up at T2 by the training, which covers topics such as formation of entrepreneurial goal intention, action planning, entrepreneurial self-efficacy and action knowledge. These in turn lead to entrepreneurial action at T2 and T3. The training also covers aspects of business opportunity identification. The entrepreneurial actions and business opportunity identification result in business creation at T3. As shown in Figure 1, it is possible to identify an opportunity and start a business without receiving STEP training, as done by the control group. The STEP intervention is aimed at increasing entrepreneurship by offering skills, knowledge and relevant experiences through establishment of business firms during the training.

In terms of empirical results, studies that evaluated or tested the impact of action-based entrepreneurship, in particular STEP, include Gielnik *et al.* (2015, 2016). Findings from these studies indicate that action-based

entrepreneurship training is indeed effective in effectively promoting entrepreneurship amongst university studies. For example, Gielnik *et al.* (2016) administered STEP to 183 students at vocational training in Uganda and later evaluated the training for effectiveness using a randomised control trail method. They found that STEP was significantly correlated with opportunity identification and entrepreneurial action, which suggests that the training had impact on these aspects of entrepreneurship (Gielnik *et al.*, 2016).

In an earlier study, Gielnik *et al.* (2015) evaluated the impact of STEP in several universities in East African and found that STEP was effective in promoting entrepreneurship among university students. The evaluation study showed that the number of startups grew from 16% to 51% and was 50.1% higher than in the control group. Also, after a year, training-group entrepreneurs created 1.06 jobs on average - twice as many additional jobs as business owners in the control group, who generated an average of 0.51 jobs in addition to their own (Gielnik *et al.*, 2015).

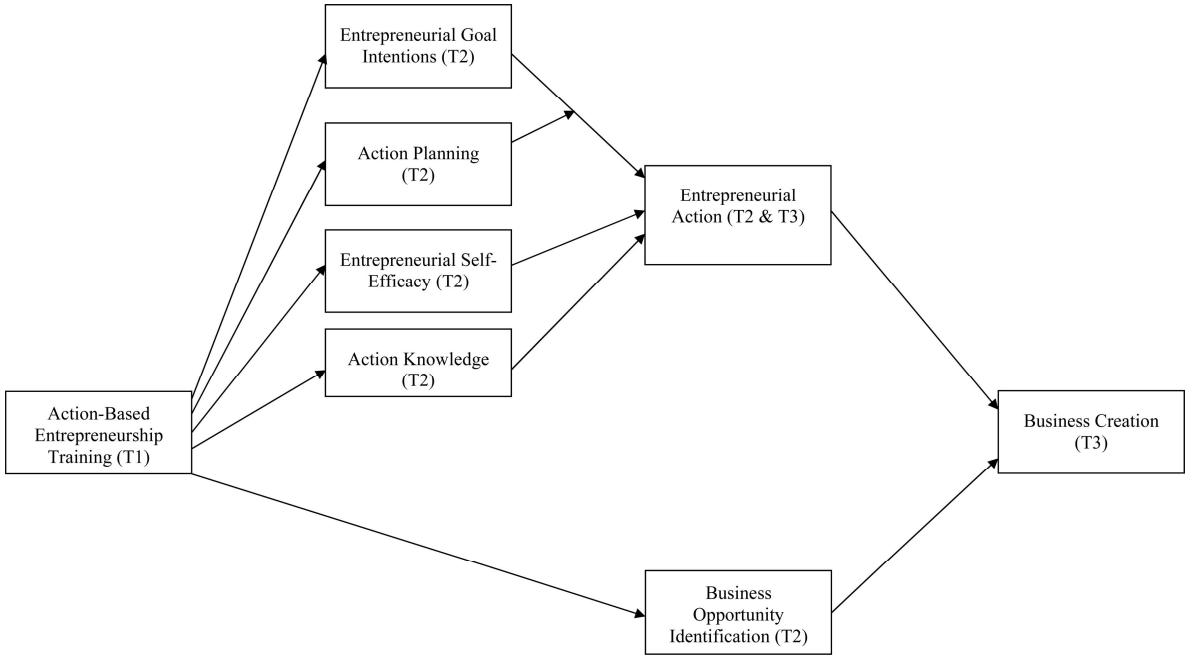


Figure 1: STEP Model
Source: Gielnik *et al.*, 2015

METHODS

Randomised controlled field experiments with a training group and a control group were used. The training group received the STEP training while the control group received no intervention. In this study, the results of three rounds of trainings with three different cohorts of students are reported (2013, 2014, and 2015). In each year, students were sampled from the University of Dar es Salaam and randomly assigned to the training and control groups, respectively. The students received information about the possibility to take part in STEP. They could then apply for the training, which was voluntary and not part of the regular studies. At the end of the training, the participants received certificates upon successful completion of the programme.

A longitudinal design with measurements was then applied before the training (baseline; T1) and after the training (follow-up studies; T2-T3). The measurements after the training took place in the month after the training (T2) and one year after the training (T3). The randomised controlled field experiment with a pre-/post-test design is the gold standard to evaluate interventions and allows to draw causal conclusions regarding the effectiveness of the training (Reay *et al.*, 2009).

All applicants for the training completed a baseline questionnaire. Across the three cohorts, a total of 1,045 valid questionnaires were received that could be used for this study at the baseline measurement (training group = 448; control group = 597). Students from all years and different schools and colleges of the University of Dar es Salaam applied for the training. The students in the training groups formed classes of about 50 students. Students who did not attend the training regularly (i.e. less than eight out of the 12 sessions) were excluded from the analyses to eliminate participants with an incomplete treatment.

All data was collected through questionnaires at the three measurement waves (T1-T3). Data was collected from

1,045 students at T1 (training group = 448; control group = 597), from 761 students at T2 (training group = 425; control group = 336), and from 380 students at T3 (only two cohorts; training group = 221; control group = 159). The following scales were used as short-term outcomes: business opportunity identification (3 items), entrepreneurial self-efficacy (12 items), entrepreneurial goal intentions (5 items), entrepreneurial planning (12 items), and entrepreneurial action (12 items). These variables were measured at T1 and T2. Business creation was measured at T3 to assess the long-term impact of STEP. All measures were based on Gielnik *et al.* (2015), and all scales were internally consistent based on Cronbach's Alpha tests.

RESEARCH FINDINGS

In order to determine whether the randomisation was successful, t-tests were calculated between the training group and control group before the training at T1. The results showed that the two groups did not significantly differ. This means that the two groups were equivalent before the training. Then it was important to find out whether STEP had a significant impact on students' entrepreneurial mind-set. Significant short-term effects of STEP on students' entrepreneurial mind-set were evident. Specifically, the comparison between the training group and control group after the training at T2 showed that STEP significantly increased opportunity identification ($t = 7.34$, $p < .01$), entrepreneurial goal intentions ($t = 5.54$, $p < .01$), entrepreneurial self-efficacy ($t = 7.96$, $p < .01$), entrepreneurial planning ($t = 7.23$, $p < .01$), and entrepreneurial action ($t = 8.90$, $p < .01$). These findings confirm the hypothesis that STEP has a significant short-term impact on students' entrepreneurial mind-set.

The long-term effects of STEP were tested to find out whether the short-term effects translated into long-term effects in terms of business creation. STEP had a significant effect on business creation at T3 ($t = 4.21$, $p < .01$). In the training group, 60.2% had created a business whereas in the control group only 38.4% had created a business. These results thus suggest that STEP had a significant impact and boosted the number of businesses created by the students. Furthermore, STEP also had a long-term impact on the following training outcomes: opportunity identification ($t = 3.95$, $p < .01$), entrepreneurial self-efficacy ($t = 3.07$, $p < .01$), entrepreneurial planning ($t = 3.79$, $p < .01$), and entrepreneurial action ($t = 5.36$, $p < .01$). These findings indicate that the short-term effects sustained over a period of one year. STEP thus has a long-term impact on students' entrepreneurial mind-set and entrepreneurial behaviour. The trajectories over the three measurement waves are depicted in Figure 2.

DISCUSSIONS AND CONCLUSION

The article presented the STEP training and its implementation in Tanzania at the University of Dar es Salaam. The theoretical concept underlying STEP was presented. STEP is based on action-regulation theory and fulfils the criteria of an evidence-based intervention. Thus, STEP addresses the issue raised in the literature concerning lack of entrepreneurship training that integrates action (Honig, 2004; Pittaway *et al*., 2009) and theory (Fiet, 2000). STEP uses latest scientific findings about success factors in entrepreneurship and incorporates these findings on the basis of action principles in the various modules of the training. Furthermore, STEP is evaluated using the gold standard in intervention research. RCT is the most effective method for evaluating intervention (Reay *et al*., 2009). Specifically, randomised controlled trials were used to assess the impact of STEP on students' short- and long-term entrepreneurial mind-set and behaviour. The results showed that STEP fosters students' entrepreneurial mind-set and enhances their entrepreneurial behaviour. STEP students created more businesses over a period of 12 months. Furthermore, the short-term effects on opportunity identification, entrepreneurial self-efficacy, entrepreneurial planning, and entrepreneurial action were maintained over 12 months. This indicates that STEP makes a difference and it is an effective intervention to promote entrepreneurship. These findings are consistent with earlier STEP evaluations in other East African countries as reported by Gielnik *et al.* (2015, 2016), suggesting that STEP is a robust training intervention for effective promotion of entrepreneurship.

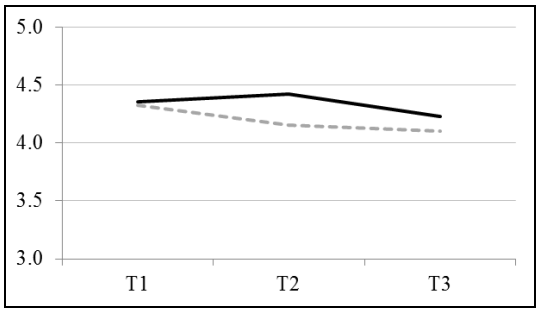
The study has important theoretical and practical implications. First, it shows that action-regulatory factors in terms of entrepreneurial goal intentions, entrepreneurial self-efficacy, entrepreneurial planning, and entrepreneurial action are important short-term outcomes. Trainings that enhance these factors are more likely to increase business creation in the long-run. Thus, entrepreneurship trainings need to be action-oriented. Furthermore, the study shows that entrepreneurship training can be effective for larger groups of students. Entrepreneurship trainings can be offered to students from various disciplines to enhance their entrepreneurial mind-set and behaviour.

With regard to practical implications, this study shows that entrepreneurship training is an effective means to enhance the rate of new businesses created. This holds true even in environments (including Tanzania) where collectivist cultural orientations are the norm and where individual-based entrepreneurship was not promoted in

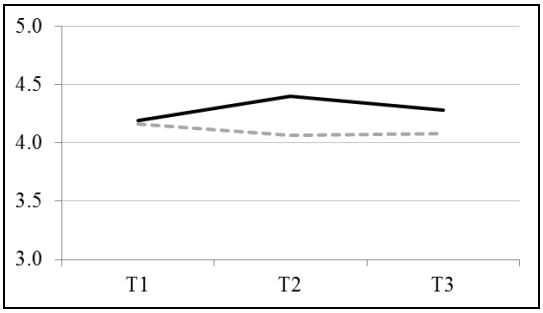
the past due to preference for socialism as a model of economic coordination. STEP is therefore capable of transforming students in these environments to become entrepreneurial as their counterparts from historically market-oriented economies. Thus, universities could incorporate action-oriented entrepreneurship trainings, such as STEP, in their curricula to train their students in entrepreneurship. This helps students to pursue a career as entrepreneurs and offers an alternative to overcome the adverse labour market conditions for youths and young adults. Entrepreneurship constitutes an important economic driver (United Nations, 2004; Rickett, 2006). Enhancing the number of students who start a business should have beneficial economic consequences because students have the necessary human capital from their studies to create businesses that contribute to economic value of their communities. STEP provides a starting point for integrating more action-oriented entrepreneurship training in university education.

Figure 2 shows the trajectories over the three measurement waves for STEP (solid black line) and control group (dashed grey line).

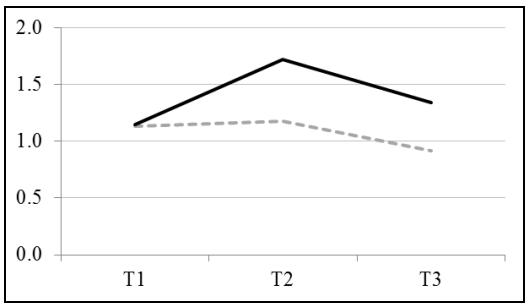
Entrepreneurial Goal Intentions



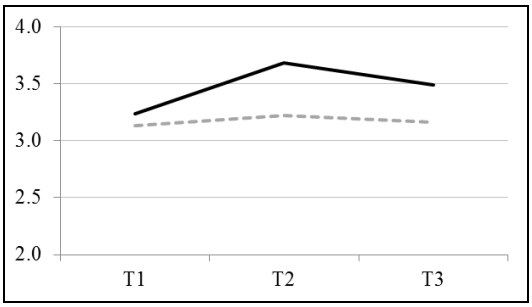
Entrepreneurial self-efficacy



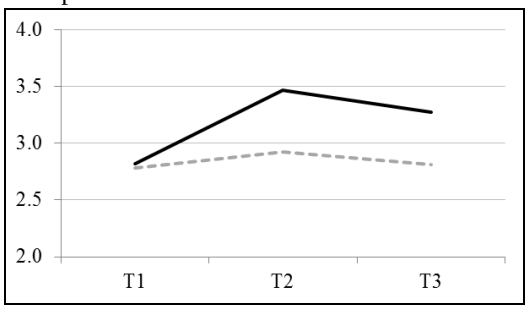
Opportunity identification



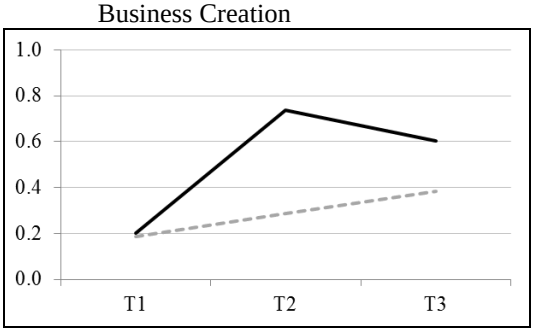
Entrepreneurial planning



Entrepreneurial Action



Business Creation



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