

Venturing under fire: entrepreneurship education, venture creation and poverty reduction in conflict-ridden Maiduguri, Nigeria

Introduction

Entrepreneurship researchers have, in recent years, explored the idea of transformative entrepreneuring, defined as “the process of addressing and ultimately transforming conditions of protracted socioeconomic constraint through entrepreneurship”(Tobias et al., 2013, pp. 728). Traditional entrepreneurship typically focuses on high wealth creation driven by Schumpeterian disruptive innovations (Hill, 2001). On the other hand, transformative entrepreneurship focuses on both economic and social value creation, in two key areas of poverty reduction and conflict mitigation (Bruton et al., 2013; Frese et al., 2016; Tobias et al., 2013), and three mutually reinforcing dimensions- institutional, individual, and communal. For example, at the institutional level, “warm glow” micro lenders offer poor entrepreneurs non-traditional access to capital (Allison et al., 2013), and previously subsistence entrepreneurs exert transformative impact on the market place as they expand and grow their ventures (Sridharan et al., 2014). At the individual level, entrepreneurial transformation is captured not merely by increase in personal income and wealth, but mainly in the strengthening and elevation of personal agency (Sridharan et al., 2014) and the expansion of functionings and capabilities (Al-Dajani et al., 2015). At the communal level, not only do individual entrepreneurial activities create positive ripples on the community, many entrepreneurs go out of their way to financially support and mentor new start-ups (Sridharan et al., 2014). Moreover, in conflict zones, entrepreneurship can transform inter-group relationship through lowering of outgroup prejudice and the reconstruction of social capital through increased business transactions between previously hostile groups (Tobias et al., 2013).

It can be seen from the foregoing that small-scale enterprises (SMEs) have a critical role to play in poverty reduction initiatives in developing countries (Al-Dajani et al., 2015; Si et al., 2015). However, in order for these SMEs to make impact on poverty reduction, they have to move beyond the limits of subsistence entrepreneurship driven by necessity of survival (Banerjee and Jackson, 2016; Bruton et al., 2015) to one characterised by innovation and economic value creation (Bruton et al., 2015; Si et al., 2015; Sridharan et al., 2014). While there are suggestions that entrepreneurs can be trained and supported through an agency-based entrepreneurship training that focuses on translating knowledge and skills into action, (Frese et al., 2016), it is not clear how entrepreneurship education triggers transformative entrepreneuring. In the specific environment characterised by conflict and terrorist violence, scholars have examined how entrepreneurs grapple the challenges of smaller markets, higher transaction, and uncertainties (Bruck et al., 2013), and how they can be instrumental for institutional, personal and communal transformation (Al-Dajani et al., 2015; Sridharan et al., 2014). However, little is known about if and how entrepreneurship education contributes to increased entrepreneurial activities, poverty reduction and conflict mitigation.

This study addresses this gap in knowledge by exploring the case of entrepreneurship education intervention in Maiduguri, Northeast Nigeria, an area that has been long characterised by widespread poverty and high rates of unemployment, and, more recently, terrorist violence

(Rogers, 2012; Salaam, 2012). This intervention is a product of a knowledge transfer partnership between the Centre for African Entrepreneurship and Leadership (CAEL) at the University of Wolverhampton (UoW), United Kingdom and the Centre for Entrepreneurship and Enterprise Development (CEED) at the University of Maiduguri, Nigeria. In the past decade, Maiduguri has witnessed the rise and spread of Boko Haram terrorism, starting from Maiduguri and spreading to the rest of Northern Nigeria. Taking a human capital perspective, this paper explores how entrepreneurship education has facilitated enhanced entrepreneurial skills, promoted entrepreneurial intentions, and contributed to poverty reduction through the birth of new businesses capable of generating incomes and creating jobs.

From the foregoing, the research questions are as follows:

- i. How does entrepreneurship education promote increased awareness of entrepreneurial opportunities and enhanced entrepreneurial skills in a conflict environment like Maiduguri?
- ii. What policy interventions can be used to achieve poverty reduction and job creation through entrepreneurship education and support?

The rest of the paper is organised as follows. First this paper presents a description of the research context in Maiduguri Nigeria, a deprived area that has been under the attack of terrorists for many years. Next the article provides an overview of the literature on entrepreneurship education from a human capital perspective, focusing attention on how the development of entrepreneurial skills contribute to poverty reduction and conflict mitigation through new venture creation and employment generation. In the next section, the research methodology is outlined before a detailed discussion and analysis of interview transcripts, memos and other relevant documents about the activities of the entrepreneurship centre at the University of Maiduguri. The paper finally concludes with a discussion and outline of policy implications and recommendations for future studies.

Empirical context

Borno State, established by the federal military government in 1976, is one of the 36 states in Nigeria. With an estimated population of 5.2 million and a landmass of 61,435km², it is the second largest state by landmass in Nigeria. Borno State is located in the Northeastern part of the country and lies between latitudes 100 and 140 N, and longitudes 110 30' and 140 45' E (University of Maiduguri, 2009). It is bordered by Niger Republic to the North, Chad to the North East, and Cameroon to the East. Within Nigeria, it shares borders with other Northeastern states of Adamawa, Yobe and Gombe states (fig.1). Maiduguri is the capital city of Borno and the largest city in Northeastern Nigeria, covering an area of 543km², and with an estimated population of 1 million (Mayomi and Mohammed, 2014).

INSERT FIGURE 1 HERE

In 2002, the terrorist group Boko Haram was formed in Maiduguri by radical cleric Mohammed Yusuf. Its popular name, Boko Haram, derives from its core teaching that western education is forbidden (Adesoji, 2010). In April 2014, Boko Haram abducted more than 250 school girls

from Chibok, about 80 miles from Maiduguri in Northeast Nigeria (Peters, 2014). Their whereabouts are still unknown. Analysts have pointed out that the emergence and growth of Boko Haram is closely associated with exceptionally high levels of poverty, illiteracy and unemployment in Nigeria, and Northeast Nigeria in particular (Rogers, 2012; Salaam, 2012). Official figures indicate that the Northeast region of Nigeria is the most deprived in terms of poverty, unemployment, and education access (National Bureau of Statistics, 2012; World Bank, 2013), and these have been identified as the most significant risk factors contributing to the spread of Boko Haram insurgency.

In response to the pressing challenge of poverty and unemployment in this volatile environment, the Centre for Entrepreneurship and Enterprise Development (CEED) was set up in 2012 at the University of Maiduguri. The objectives of the centre are, among other things, to promote entrepreneurial awareness, provide students with entrepreneurial skills with a view to creating new ventures, enhance the capacity and performance of practising entrepreneurs, and provide mentoring and consultancy services to small and medium scale enterprises within the region (Sugaba, 2015)

A number of recent studies have explored the transformative and emancipatory impacts of entrepreneurship among the poor in developing countries (Agupusi, 2007; Al-Dajani et al., 2015; Brixiova, 2010). This paper seeks to contribute to this growing body of knowledge by investigating a case of entrepreneurship education in a deprived, conflict-ridden environment of Northeast Nigeria, an area which has been ravaged for years by the Boko Haram terrorist group. Specifically, this paper illuminates the fledging theory of transformative entrepreneuring in conflict environments (Tobias et al., 2013), by focusing on how entrepreneurship education is engendering new venture creation and poverty reduction, and how it is helping young people to survive, cope, and thrive in the midst of insurgency violence.

Theoretical background

Mechanisms for transformative entrepreneuring

Transformative entrepreneuring is defined as a process by which entrepreneurial activities facilitate removal or ease of socio-economic constraints, thereby engendering individual well-being and positive changes in social relations. In their 2013 paper, Tobias et al., (2013) focuses on how transformative entrepreneuring plays out in conflict situations. They identified two key mechanisms for transformative entrepreneuring: poverty reduction and conflict resolution. Their model (figure 2) portrayed poverty reduction and conflict resolution as mutually reinforcing constructs, and both of these aggregate to transformative entrepreneuring.

INSERT FIGURE 2 HERE

Poverty reduction is linked with personal well-being and better quality of life; and conflict resolution is defined and driven by increase in social trust and lowering of outgroup prejudice. This improvement of social capital is a critical asset for entrepreneurs, especially nascent entrepreneurs, who often rely on networking to establish and expand their businesses (Davidsson and Honig, 2003; Ferri et al., 2009). Furthermore, the market logic of

entrepreneurial activities increases the likelihood of business transactions- and therefore social contact- between previously antagonistic groups, thereby contributing to peace building. This paper expands on this theory by looking focusing on the transformative impact of entrepreneuring on personal agency and changing mindsets of previously unemployed and aggrieved youth.

Entrepreneurship education, skill development and poverty reduction

Poverty is traditionally defined in terms of material lack and income level. However, since Sen's introduction of the Capability Approach in 1980s (Sen, 1989), many scholars and practitioners have agreed that an adequate conceptualisation of poverty should incorporate material, as well as non-material, components. In particular, there is an emphasis to incorporate functionings, capabilities and agencies into a multi-dimensional framework for poverty analysis (Dalziel et al., 2008; Hick, 2012). At the heart of this capability approach are considerations of education and skill development.

Skill "poverty" precipitates or aggravates income poverty, in so far as it implies a narrowing or absence of opportunities for the poor to engage in productive economic activities. As a result of deficiencies in skills, the informal sector is often characterised by low productivity, low innovation uptake and low income (Janjua, 2011). Therefore, entrepreneurship education intervention programmes which include skill training for the poor can raise their aspirations, improve productivity enhance their income and therefore lift them out of poverty (King and Palmer, 2007; Lamb, 2011).

In sub-Saharan Africa, the need for skill development for the labour force is particularly important in the light of the significant depletion of human capital through wars and diseases. Furthermore, increasing technology change in a highly competitive global economy requires workers with higher skills and capacities to adapt to new knowledge and processes (Johanson and Adams, 2004). Previous entrepreneurship studies have already shown that entrepreneurship education does have significant impact on entrepreneurial skills and competencies such as business planning, marketing and leadership skills (Din et al., 2016; Sanchez, 2011). For example, individuals with better business planning skills tend to be better informed about the opportunities and risks of a new business venture. They are better able to analyse these risks, document them in written forms, and device strategies to harness the opportunities and mitigate the risks (Brinckmann et al., 2010; Zwikael and Sadeh, 2007). Similarly, those with better marketing skills are more likely to form positive attitudes towards income opportunities and profit making potentials associated with new ventures (Gray and Wert-Gray, 2012; Whalen and Akaka, 2016).

Entrepreneurship education, entrepreneurship skills and conflict mitigation

According to a recent report, there were 1.2 billion young people aged 15-24 in 2015 (United Nations, 2015). Of this number, 226 million, or 19% of the global youth population, live in Africa, where youth unemployment is rife. Specifically, African countries like Nigeria and Zambia with rapid increase in youth population are also the ones with very high youth unemployment. These unemployed youths are prime targets of recruitments into gangs, drug

trafficking, and armed conflicts in the world today. More often than not, young people join armed groups because they concluded that they offer them better access to income, resources and social status (United Nations, 2016). Youth involvement in armed conflict have been explained from a wide range of perspectives: greed and opportunities; grievance; psychological; and social and political exclusion perspectives (Collier and Hoeffler, 2004; Walton, 2010). The common thread in all of these perspectives is the twin problem of youth employment and youth poverty. Globally, hundreds of millions of jobs need to be created to accommodate the potentials of today's youth, and draw them away from the circle of violence and wars (Harrelson et al., 2007). In order to achieve this, governments and stakeholders throughout the world are increasingly recognising the need to invest in entrepreneurial education and skill training for young people.

Previous studies have emphasized the impact of entrepreneurship skill training on the followings:

1. Creation of new jobs, either through self-employment drive of newly trained entrepreneurs, or employment by more established, growing enterprises.
2. Increased productivity and increased profit and income of enterprises.
3. Increased entrepreneurial activities leading to business transactions and social interactions between different groups, including groups that may have once been in conflict.

Employment and income generation reduces young people's propensity to join armed groups because they are able to meet their basic needs (Kurtz, 2011). Furthermore, the development and improvement of entrepreneurial skills is central to innovativeness, productivity and competitiveness of enterprises. In other words, better skilled entrepreneurs are more likely to grow and absorb new workers. This is especially so in conflict and turbulent environments, where better skilled entrepreneurs tend to be more resilient and more adept at identifying and appropriating entrepreneurial opportunities (Tsai and Yang, 2013). Finally, entrepreneurship skills generally lead to increased business transactions and social interactions among different groups, including former or current parties to conflict. This process of increased interactions between antagonistic groups is central to the theory of transformative entrepreneuring, proposed by Tobias, Mair, & Barbosa-Leiker (2013). Outgroup prejudice, which is a key antecedent of mass murders perpetrated in conflict zones, can be significantly lowered through business contacts with the "outgroup". This lowering of outgroup prejudice in turn leads to reduction of intergroup conflict, and contributes to the rebuilding of social capital of communities affected by conflict.

In addition to preventive interventions targeted at vulnerable youths, entrepreneurial skill training is also critical for the re-integration of ex-combatants and returnees (United Nations, 2009). Training for ex-combatants could focus primarily on book-keeping and other basic skills that can help them to improve their income. This skill training should be followed, not preceded, by re-integration packages like sewing machines given in kind (Body, 2006). A detailed entrepreneurship curriculum can also include topics such as management, business planning, types of businesses, accounting and taxation, and marketing. As studies have shown,

entrepreneurial skill training, when packaged along with support in capital and in kind, can help ex-combatants to generate a livelihood from self-employment (UNDP, 2016). It can also help more ambitious entrepreneurial aspirations to develop and run their own businesses (Body, 2006).

From the foregoing, a synthesis of Tobias et al., (2013)'s theory of transformative entrepreneuring (see figure 2) and previous theoretical postulations about the impact of entrepreneurship education on new venture creation produces the following theoretical model (figure 3), which is explored in this paper. In summary, the paper investigates if, and to what extent, entrepreneurship education influences new venture creation and firm performance. In turn, the paper explores how the creation and performance of new ventures contribute to poverty reduction and conflict mitigation, through economic empowerment of youth and change of mindset from aggrieved outsiders to active stakeholders.

INSERT FIGURE 3 HERE

Methodology

As Iacono et al. (2011) noted, the main goal of a case study is to provide in-depth understanding of the interaction between theory and practice. This process requires prior identification of initial themes and variables in the extant literature, followed by an iterative procedure of matching them with data obtained from the field (Eisenhardt, 1989). In line with this principle, this case study seeks to illuminate the theories of emancipatory and transformative entrepreneuring by investigating how entrepreneurship training is contributing to employment and venture creation, and reducing youth vulnerability to terrorist recruitment. Furthermore, as Rowley (2002) observed, whereas multiple case studies are generally preferred, a single case is desirable where it is “extreme, unique, or has something special to reveal” (Rowley 2002, pp. 21). This paper focuses on a single case study, rather than multiple case studies, of an entrepreneurship education intervention in Northeast Nigeria. We judge that the case described in this study is indeed unique, and has something special to reveal about how entrepreneurship education can contribute to skill development and new venture creation in a conflict, terror-laden environment. Further details of the research context are provided in section 2.

Data collection

This study uses data obtained from interviews and documents, which comprise two of the six possible sources of evidence for case studies highlighted by Yin (2013). Relevant data was gleaned from documents and memos. In addition, using an interview guide, in-depth interviews were carried out with key personnel and trainees and users associated with the entrepreneurship training provided at the newly established Centre for Entrepreneurship and Enterprise Development (CEED) at the University of Maiduguri (see summary of data sources in table 1). The interviews were undertaken by the researcher between August 2015 and February 2016 by phone with respondents based in Nigeria, and physical one to one with respondents based in, and visiting, the UK. Respondents were purposively selected based on their participation as student and staff trainees, as well as expert trainers. Care was taken to cover gender balance and different areas of entrepreneurial ventures.

INSERT TABLE 1 HERE

Specifically, we interviewed the former director, the current acting director of the centre, and three heads of units who participated in a series of intensive training at the University of Wolverhampton. In addition, we interviewed two Business Solutions specialists from the University of Wolverhampton who were directly involved with the partnership. The specialists from Wolverhampton spent several weeks with the Nigerian partners at the University of Maiduguri. That was followed by more months of intensive training for the Nigerian academics at the University of Wolverhampton. We also interviewed two senior academics at the University of Wolverhampton who, in addition to providing training for the Maiduguri team, were heavily involved in the process of developing a new and suitable entrepreneurship curriculum for CEED. Finally, we conducted in-depth interviews of six randomly selected trainees who benefitted from the pilot intervention launched at the University of Maiduguri in 2013. Respondents were asked to describe their overall experience of the training programme, and their views about the impact of the insurgency on the region and on their own lives and livelihoods. They were also asked if and how the entrepreneurship training has helped them to set up and grow their businesses, and whether and how they think similar intervention can help tackle poverty and youth unemployment in the region. The audio recordings of the interviews were transcribed and fed into NVivo 10, where the following themes were generated in an iterative process: access to good education; benefits from training; curriculum and training strategy; knowledge transfer; Boko Haram and gender issues; poverty and joblessness; business details; entrepreneurship and poverty reduction; entrepreneurship and women empowerment; external engagement; entrepreneurship culture; future business plans; and government support and responsibility.

Data analysis

This paper uses a combination of pattern matching and explanation building to analyse our case study evidence (Baškarada, 2014; Yin, 2013). This strengthens the internal validity of the data, and enables us to compare and contrast the observed patterns in the field data with predicted patterns in the extant literature (Almutairi et al., 2014; Tellis, 1997). In this respect we adopt a process theory, which specifies that a number of conditions must follow in a temporal order to achieve the expected outcome (Hak and Dul, 2009). Therefore this paper uses thematic coding system to examine if and how entrepreneurship education has generated increased awareness and skill development, and if and how entrepreneurship intention and new venture creation has been influenced by this awareness and entrepreneurial skill, as specified in the literature (see table 2). To build on the existing theory, we further examine if knowledge partnership-exemplified by the CAEL/CEED partnership- is a sufficient antecedent to effective entrepreneurship education.

INSERT TABLE 2 HERE

The CEED story

Promoting new venture creation through skill acquisition and incubation

CEED was founded in response to a 2007 directive of the Federal Government of Nigeria that all Universities should establish centres for entrepreneurship development as a matter of urgency. The aim of this government directive was to improve the capacity of youth to develop entrepreneurial mindset as well as acquire vocational skills, as part of the strategy to stimulate venture creation and curb rising graduate unemployment. CEED was therefore supported by the CAEL to launch the entrepreneurship programme at the university of Maiduguri.

Through the support of CAEL, the newly developed entrepreneurship curriculum at CEED incorporates elements of classroom-style lectures, as well as practical instructions on selected vocations. This is in consonance with Fayolle et al. (2006)'s highlight of lecture-style and "learning by doing" approaches to entrepreneurship education. The entrepreneurship course is compulsory for all enrolled students in their third and fourth years¹. Students went through lecture sessions in Business Planning, Risk Analysis, Book Keeping, and Marketing, among others. These components are embedded across the whole spectrum of disciplines and entrepreneurial endeavours, although other researchers have urged the need for a discipline-based framework, where entrepreneurship education is designed around the specific needs of each disciplines, distinguishing between technical-focused and business focused disciplines (Johnson et al., 2006) . Instead, the offering at CEED Maiduguri provides each student with the opportunity to select a vocational area, which may or may not be directly related to their main programme of study at the university. These vocational areas include fashion designing, computer and electronic services, bakery, brick-making, fishery, etc, on which students then undergo three months of practical training at their chosen unit in the centre. This incorporation of vocational training for undergraduates underscores the peculiarity of the Nigerian, and specifically Northeast Nigerian, context. The economy is not adequately developed and the market is not sufficiently sophisticated to encourage and support the creation of high-tech new ventures, for which intellectual capital and innovation confer competitive advantage (Hayton, 2005). Therefore, graduates need to broaden their vocational skills such that they are more versatile and adaptable in their skill sets and future entrepreneurial endeavours. The entrepreneurial module is assessed through a combination of written tests, oral examination and practical demonstration of skills learned. The marks from all components are computed for the overall course grade.

A key component of the centre's provision is the Business Incubation Unit², which is modelled after the incubation unit at the University of Wolverhampton:

...we have different types of business incubation units (at the University of Wolverhampton). There is a specific programme of graduate enterprise that people can apply for. Or you simply apply for office place,

¹ A typical undergraduate programme in a Nigerian university runs for 4 years. Engineering, Pharmacy, Agriculture and Law programmes last 5 years, with courses in Medicine taking 6 years to complete.

²The trainees interviewed for this study were drawn from both start-ups at CEED's incubation unit and other trainees who have established their ventures outside the university. The incubation unit itself was launched as part of the collaborative intervention between University of Maiduguri and University of Wolverhampton.

based on normal commercial rates in town. This university has generated about 75 businesses in the graduate scheme over the last five years. You apply for the SPEED programme. This gives you training and two mentors for a 12-month period. Trainings are incorporated into this scheme, and you are given a hot desk. And you have an academic mentor and a business mentor, as well as a funding of about £3,500, basically to spend around marketing materials, website, business development and sales drive. And you are given every opportunity by the University to promote yourself. The SPEED programme was heavily promoted (Birch, 2015).

Presently CEED has spaces to host 45 businesses in the incubation unit. Funding support is highly restricted, but most of the businesses are still running. Other graduates from the centre have explored opportunities outside the University.

The graduates who went on to get slots at the incubation units, as well as others who started new businesses outside the university, recounted how the training has helped them to survive and thrive in their new ventures. Some of them revealed high levels of ambition to grow and expand, while others expressed frustration at the lack of capital to grow their businesses;

The training helped me a lot as I gained a lot of knowledge about business strategy. Before the training at the University of Maiduguri I did not have much knowledge about the business. I know better now how to plan, invest my money, and motivate our customers (Trainee 01)

I plan to expand to other locations where there is good demand for my goods. I want to start new branches in Kano, in Yobe (because Yobe is near Maiduguri). I will have another in maybe Bauchi, which is also near. I hope to employ like 50 people in the next four years (Trainee 01)

...But you know, actually I have not been able to expand my business much because we don't have capital... For now I have only one branch. I want to have like five branches within my locality. If possible I also want to expand my business to other states within Nigeria. I also want to employ more people (Trainee 04)

I have not started a business of my own yet, but I plan to do so. My problem is that I don't have Business capital (Trainee 05)

The conditions at Maiduguri were far removed from conditions in European cities or other developed countries in terms of security, market opportunities and infrastructure. Nevertheless, even in this turbulent circumstance, the university campus was a significant market opportunity. There were close to 50,000 students and staff within the university, apart from other residents including staff family members.

Mitigating conflict; changing mindsets

The Boko Haram insurgency has changed people's lives and businesses, not only in Maiduguri, but in the entire Northeast region. Businesses have had to shut down, move locations, or adopt new strategies. Some of the trainees highlighted how the training has helped them to cope and thrive amid the insurgency:

The training helped me to advertise my business differently. So I went to the small hamlets and villages to get people to sell and buy my goods. Sometimes I give them my complimentary cards, encouraging them to call me. I also offer discounts for the retailers, to encourage them (Trainee 01).

Others expressed their views on how poverty and illiteracy have caused and aggravated the insurgency, by making disillusioned and idle youth vulnerable to Boko haram propaganda.

Entrepreneurship education can help mitigate the crisis by up-skilling the youth and creating opportunities for employment and poverty reduction, in effect giving them a stake in society.

The reason why Boko Haram has gained a lot of followers is because some people are jobless and others are illiterate. It is interesting that many of the original members of Boko Haram are students from various higher institutions. Poverty has contributed a lot to the Boko Haram problem (Trainee 01).

I think part of the problem we have is that people who are poor and illiterate are vulnerable to Boko Haram propaganda about education. Illiteracy and poverty is a big problem. Entrepreneurship can help people see possibilities of what education can do to empower people so that they can fend for themselves (Trainee 02).

You know they say that idleness is the devil's workshop. The people Boko Haram is recruiting are idle people. I believe there are a lot of opportunities in society, but such are not being used. With entrepreneurship education people will learn to do things for themselves, so they won't be idle any longer (Trainee 05).

Thus, entrepreneurship is seen as a critical instrument to transform the status of youths as outsiders and fringe elements, into economically and civically empowered citizens with stakes in the peace and progress of society. In other words, entrepreneurship transforms otherwise disillusioned and potentially destructive youths into active stakeholders and co-custodians of public good, as Nigel Birch- the Wolverhampton Business Solutions expert- points out:

We also reckon that, if people participate in creating something, they are unlikely to be part of those who destroy it by terrorism. Many studies have affirmed this, for example in Northern Ireland. There is an interesting study in Gaza, where both Jews and Palestinians are involved in an entrepreneurship centre (Birch, 2015).

Thus, the views of both trainees and facilitators are consistent with the findings of Strong (2009) and Tobias et al. (2013) that entrepreneurial opportunities can bring about positive social change and have a transformative impact on conflict situations. In this case, the trainees- who have themselves been touched by the scourge of terrorist violence- affirm that entrepreneurial opportunities bring a sense of ownership and responsibility in the youth, a sense of dignity and a positive outlook. These, in turn, make the youth more resistant to Boko Haram propaganda, transforming them from potential recruits for terrorism into positive agents for social and economic progress.

Policy implications

This study has identified opportunities for job creation, poverty reduction and conflict mitigation through entrepreneurship education (EE) in Northeast Nigeria. However, it has also highlighted a number of key challenges and potential obstacles to up-scaling and effectiveness of EE intervention, not only within the context of Northeast Nigeria, but Nigeria as whole. Four key issues are worth emphasizing in this respect: the need for capacity building, the importance of dynamic EE curricula, seed funding for new ventures, and the need to revamp EE provision outside the HE sector.

An urgent need for investment in capacity building

While the Nigerian government underlined the critical importance of entrepreneurship development with its policy directive making entrepreneurship education compulsory in the nation's HE institutions, this directive has not been matched by necessary investment in capacity building for entrepreneurship teaching and learning in Nigeria's higher institutions. There is therefore an urgent need for investment in continuous training of academic staff engaged in preparation and delivery of entrepreneurship education curricula in Nigeria's higher institutions. The agenda for capacity building should include support and incentive for universities to be entrepreneurial in their activities, for example through better structured consultancies and closer linkages and collaborations with industry and business stakeholders. It should also include support and training for academic staff to engage more actively in consultancy and commercialisation of research. This will enable teaching staff to draw on their individual practical experience, and their institution's entrepreneurial outputs and facilities, to enrich students' learning. The necessary investment is not just about injection of funds, but a development of a comprehensive strategy that incentivises HE institutions towards entrepreneurial practice, encourages inter-institutional networking and knowledge sharing, and provides a framework for ongoing quality monitoring and evaluation of entrepreneurship education in the nation's higher education institutions. In furtherance of this, each institution should be required to develop a staff training programme, business incubation unit, and a formalised linkage with industry and business stakeholders.

The imperative of relevant and dynamic curricula

One of the key issues emanating from this study is the need for entrepreneurship curricula that is relevant to local contexts and dynamic enough to accommodate and respond to changing realities both within the domestic context as well as international market. It has long been recognised that entrepreneurship education is not homogenous (Fayolle and Gailly, 2008; Hynes, 1996). Entrepreneurship education programmes lend themselves to a wide spectrum of differences in ideas and practice not only with respect to meanings and definitions of entrepreneurship, but also with respect to objectives, target groups, course content, and teaching method (Mwasalwiba, 2010). In Nigeria, entrepreneurship education curricula need to reflect and address peculiar geo-political contexts in terms of employment opportunities, market demands, culture and infrastructure in the northern and southern regions. For example, the southern states have seen a significant expansion of the ICT and mobile telecommunication sector, and there will be more entrepreneurial activities in these sectors in the next few years compared to other sectors. Therefore, EE provision in southern Higher Education should respond to these opportunities, although not to the exclusion of the other sectors. Similarly in the North, with more agricultural land, cheaper labour and increasing urbanisation, there are better opportunities for mechanised farming and a booming market in the construction industry, to mention a few. Thus, in addition to traditional university courses, say in agriculture and construction, entrepreneurship training should be geared towards preparing graduates to take advantage of these opportunities. This is the case with CEED in Maiduguri, where the entrepreneurship provision focused on opportunities in construction, farming, bakery, and apparel making, among others. New opportunities will inevitably emerge as both the local and

the national economies evolve, as the national market becomes increasingly connected with the international market. Therefore, entrepreneurship curricula have to be dynamic and adaptive to changing market conditions and opportunities both locally and internationally.

Seed funding for new ventures

This study also underlines the fact that, in order for entrepreneurship education intervention to be successful in a context like Nigeria, it has to be backed up with funding support for nascent entrepreneurs. Given the high levels of poverty and youth unemployment in the country, it is not enough to create awareness about entrepreneurial opportunities or equip graduates with requisite skills, it is equally important to support the creation of new ventures through provision of seed capital. In the study context, the vast majority of students and graduates who participated in entrepreneurship education had entrepreneurial intentions following the training, some perhaps driven more by necessity than opportunity. Nevertheless, most of those with positive intentions about entrepreneurship do not have the financial capacity to actualise their intentions. Over time, they could become de-skilled due to dis-use of the skills they acquired during their entrepreneurship training. This can also become costly to society in other ways. For example, youth frustrated with lack of entrepreneurial opportunities can become more vulnerable to terrorist propaganda, or get involved with gangs or other violent anti-establishment activities. Investment in seed funding reduces this risk to society, in the process saving cost for, say, post conflict reconstruction. In Northeast Nigeria, aside from losses of lives which cannot be valued in monetary terms, billions of dollars have been lost to destruction of property and infrastructure arising from terrorist insurgency and other violent forms of anti-state activities. Investment in seed funding, if it is well structured and managed, can produce very good returns to investment, in terms of increasing overall national productivity, creation of jobs, raising income levels of the employed, and strategic support for national agenda on food security, peace-building, and other key development goals. While it is necessary for government to engage directly in the provision of seed funding, it is more beneficial, within the logic of productive entrepreneurship, for government to partner with the private sector for effective distribution and management of seed capital for nascent entrepreneurs.

EE beyond the HE sector

Currently, the Nigerian government's policy initiative on entrepreneurship education is focused mainly on the HE sector. This became necessary in the context of the need to address the alarming rate of graduate unemployment and growing concerns about the relevance and quality of higher education provision in the country. However, there is an equally critical concern about the dearth of opportunities for millions of less educated or illiterate youth in the country, both those in expanding urban centres, as well as those based in remote locations in the rural areas. Given that they are generally poorer and more lacking in transferrable and vocational skills, and have less access to, and less capacity to process, information, lack of attention on this group can precipitate bigger social problems. Currently, the entrepreneurship centre in Maiduguri is exploring partnerships with local governments in the region in their drive to expand entrepreneurship education provision to non-university educated youth. This strategy needs to be further developed and replicated across the country for less educated youth,

many of whom can be productively engaged in both the formal and informal sectors. The content and approach of EE delivery will need to be adjusted to suit the needs and requirements of less educated youth. One strategic approach is partnership with small and medium scale, vocational businesses in the informal sector, for example those in automobile services, carpentry and interior decoration, and building services. There is an apprenticeship system which has existed for centuries in the informal sector, but its impact and contribution to the national economy have been hindered and limited by its slow adaptability and struggle to keep pace with technological progress and new market challenges and opportunities in the 21st century. An appropriate EE intervention should therefore entail provision of training for these informal businesses with the aim of upgrading their technical skills and technological capabilities, and then working through a reformed system of apprenticeships to provide entrepreneurship training for less educated youths.

Conclusion

This study shows that entrepreneurship education has contributed to entrepreneurial awareness and skill acquisitions of participants, and these have in turn contributed to the set-up and expansion of new enterprises in conflict ridden Maiduguri. The creation of new ventures by newly trained youth has triggered transformative entrepreneuring through poverty reduction and conflict mitigation. The new opportunities created through entrepreneurship training and related support have a transformative effect on otherwise unemployed youths, turning them from disillusioned and aggrieved outsiders to responsible stakeholders in societal peace and active contributors to the nation's economic development. This positive transformation is reinforced by improved social capital accruing from increased business transactions between different and previously hostile groups in the region. However, in order for EE provision to be effective, it has to be dynamic and responsive to local contexts, in terms of curricula contents and methods of delivery. There is therefore a critical need for increased government commitment and investment in capacity building and provision of resources.

The study also indicates that majority of the training participants who have gone on to establish thriving businesses are those who have benefitted from additional support, for example in terms of spaces in the university's incubation units. Thus, while findings from the case study support the theory that entrepreneurship education contributes to new venture creation, it appears that entrepreneurship education is not always a sufficient antecedent, taking in isolation from other factors, especially venture capital and institutional support. Therefore, government policies should, in addition to funding and commitment to capacity building, focus on provision of seed capital for nascent entrepreneurs.

This study is limited by its focus on entrepreneurship education provided in a university environment to university undergraduates, recent graduates and generally, participants with post-secondary education. Therefore, there is a need, in the overarching context of combating poverty and mitigating conflict, to investigate an expanded entrepreneurship training provision to young people with basic or little education. These less educated young people constitute a significant majority of the population, and are arguably more vulnerable to Boko Haram propaganda. Currently, CEED is partnering with CAEL to explore a new entrepreneurship

education intervention specifically targeted at illiterate and less educated youth in the region. Furthermore, future research can use quantitative data to examine the mediating and moderating impacts of venture capital on the success of entrepreneurship education, in terms of creation and growth of new ventures. There is also a need for further illumination on the role of government policies, with respect to capacity building, facilitation of inter-sectoral linkages, and quality assurance and monitoring of entrepreneurship education programmes in the country.

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