Abstract
In this paper we use interview data to demonstrate the efficacy of training as a mechanism of knowledge transfer of entrepreneurship education within a conflict environment. In particular, we found that entrepreneurship education is indeed a vital component that impacts the entrepreneurial knowledge and skills acquisition as well as the entrepreneurial intentions amongst a group of University students severely affected by the Boko Haram insurgency in northern Nigeria. We draw from our findings to outline the central tenets and policy implications of using training as a mechanism of knowledge transfer.

Introduction
Entrepreneurial and enterprise education are high on the agenda for many higher education institutions. It helps to justify their role as catalysts for regional, economic and workforce development, especially in regions that suffer persistent poverty and unemployment (Harrington & Maysami, 2015). The 2009 report by the Organisation for Economic Co-operation and Development (OECD) and the entrepreneurship 2020 Action sub-strategy issued by the European Commission not only emphasised the need to embed entrepreneurship in all education sectors, but they also provide best practice models that can be transferred from one regional context to another for the purpose of fostering entrepreneurial effectiveness (Uslay, Teach, & Schwartz, 2002). Unfortunately, most scholarly works (e.g., Wang, 2015; Ulhe, Neergaard & Bjerregaard, 2012; Wei, Zheng & Zhang, 2011; Wij, Jansen, & Lyles, 2008; Easterby-smith, Lyles & Tsang, 2008; Inkpen & Tsang, 2005; Tsai, 2001) investigating the transfer of knowledge from one context to another focus heavily on the most visible forms of knowledge transfer, based primarily on inter or intra organisational networks (e.g., joint ventures and unit-level R&D collaboration) and commercialisation of patented technologies and products protected by intellectual property (IP). While such focus is clearly important, they fail to recognise other forms of knowledge transfer not based primarily on commercialisation of IP rights, such as, collaborative research and training. Even though the latter is more common, research has tended to underestimate its role and impact.

By definition, knowledge transfer is a distinct pathway by which individuals and organisations learn, usually through knowledge and information flow from one context to another. Thus, the multidimensionality, the sociology and the process of learning sheds a whole new light into the complexity and its associated concept of knowledge transfer, particularly within a conflict environment, and this makes it an interesting context for investigation (Argote, 2013). Moreover, most extant studies in entrepreneurship domain are related to non-conflict or post-conflict environments of advanced knowledge economies (e.g., Demirguc-Kunt, Klapper, & Panos, 2011; Klandt, 2004), and very scant evidence, if any, has ever been reported from low to middle income economies of sub-Saharan Africa where conflict is often caused and exacerbated by poverty and unemployment (Bruck, Naude & Verwimp, 2011). From a research perspective, entrepreneurial awareness, entrepreneurial mindset, entrepreneurial capability, and entrepreneurial effectiveness are four key levels that characterise entrepreneurial behaviour development (Bird, Schjoedt & Baum, 2012; Littunen, 2000). Aside from entrepreneurial mindset, which is explained in terms of characteristics innate to the individual, the other three levels are associated with knowledge, attributes and skills, which could be learnt, acquired or shaped by external factors, such as, formal education or training (Easterby-smith, Lyles & Tsang, 2008).

Although distinct, entrepreneurship and enterprise education share complementary pre-requisites for entrepreneurial effectiveness – which is the ability to function as an entrepreneur or in an entrepreneurial capacity. Whereas enterprise education is the process of equipping students with an enhanced capacity to generate business ideas and exhibit entrepreneurial skills, entrepreneurship education equips students (or graduates) with the

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1 A 34-member country organisation that promotes policies that seeks to improve the economic and social wellbeing of peoples around the world.
knowledge, attributes and capabilities for entrepreneurial effectiveness in the context of business management or new venture formation. Entrepreneurship and enterprise education are therefore, by definition, “transdisciplinary, with a high degree of application of key issues such as employability, innovation, knowledge transfer, commercialisation, and intellectual property” (Quality Assurance Agency\(^2\), 2012, p. 2). For clarity, entrepreneurship education is our preferred usage in this paper, and can contribute to the acquisition of entrepreneurial knowledge and skills, which in turn influence entrepreneurial behaviour. At a macro level, local contexts of geography, politics, policies and institutions have been reported to have significant impact on the success or failure of entrepreneurship education intervention programmes, especially in an environment in which poverty and unemployment are the main conflict drivers (Jones & Matlay, 2011). Alongside, and from a micro-level perspective, depending on the individual’s level of vulnerability to conflict, “entrepreneuring” have also been shown to have a transformative effect in conflict situations by rebuilding trust and lowering ‘outgroup prejudice’ (Verwimp, Justino & Tilman, 2009; Tobias, MAir, & Barbosa-Leiker, 2013).

In addition, in any conflict environment, particularly in sub-Saharan African context, people’s perceptions of security and their socio-economic wellbeing are likely to influence whether or not conflict becomes violent or remains latent (Goodhand, 2003). In other words, people who are socially and economically disadvantaged are more likely than not to engage in violence, which implies that poverty and violent conflict may be interrelated. There is a consensus (e.g., Nafziger & Auvinen, 2002; Luckham et al., 2001; Stewart & Fitzgerald 2000; Collier, 2000a; 2000b) that greed based analysis (i.e., where resource rather than poverty causes conflict), grievance-based analysis (i.e., where chronic poverty is seen as the primary cause of conflict\(^3\)) and cost of conflict analysis (i.e., where conflict causes poverty) encapsulate three levels of intersection between poverty and conflict. Similarly, others (e.g., Brixiova, Ncube & Bicaba’s, 2015) have emphasised that entrepreneurship education provides access to entrepreneurial knowledge and skills that influence entrepreneurial behaviour and employment generation, which can help to mitigate poverty and provide the incentive for non-participation in a violent conflict.

Notwithstanding the positive impact of these studies, the relationship between entrepreneurship education and conflict environments is less well rehearsed in the literature. A major gap is how to use training as a mechanism to transfer entrepreneurial knowledge and skills in a context of lack of human capabilities and weak educational institutions brought about by terrorist conflict. Besides, the view of entrepreneurship education as a means of mitigating poverty and unemployment - perceived as the underlying causes of most conflicts in sub-Saharan Africa - is not mainstreamed in entrepreneurship education studies. Very often, the debate is mainly focused on understanding and quantifying the impact of conflict, specifically civil wars and not terrorism, on entrepreneurial activities usually directed at the provision of public goods and services (e.g., transportation, telecommunications, and water, sanitation) because of the collapse or inability of State institutions to cope with the impact of the conflict (Bruck, Naude & Verwimp, 2013). Given the widespread occurrence of terrorism across the world and their repercussions for global peace and socio-economic development, the lack of understanding of the relationship between conflict brought about by terrorism and entrepreneurship education presents a significant knowledge gap.

As such, this study has sought to fill this gap by examining the impact of entrepreneurship education on the entrepreneurial knowledge and skills acquisition and the entrepreneurial intentions of tertiary education students severely affected by the Boko Haram insurgency in northern Nigeria. Specifically, our findings showed that training was an effective knowledge transfer mechanism for influencing the acquisition of entrepreneurial knowledge and skills and the development of entrepreneurial intentions amongst this population, which in turn allowed them to cope with the socio-psychological impact of the Boko Haram’s conflict. In fact, it emerged that utility of training served well to unravel peculiar individual learning and entrepreneurial tendencies (e.g., resilience) under volatile conditions of conflict in a way that would have been unknown under stable conditions. Thus, this paper offers a powerfully vital new context for advancing our theoretical understanding of the impact of entrepreneurship education on the entrepreneurial skills acquisition and

\(^2\) Quality Assurance Agency (abbreviated to QAA) is an independent body responsible for monitoring and advising on standards and quality in UK higher education sub-sector.

\(^3\) It is widely believed that the conditions of chronic poverty and unemployment are the underlying causes why disaffected youths in northern Nigeria join the Boko Haram terrorist group in Nigeria.
entrepreneurial intentions of university students affected by Boko Haram’s conflict. We begin by highlighting how illiteracy, poverty and unemployment are the underlying causes of Boko Haram conflict and the role of entrepreneurship education in helping to mitigate this conflict. Next, we explain our knowledge transfer project and the rationale for using training. We present preliminary insights into the role and impact of our entrepreneurship education training. Finally, we conclude by outlining the central tenets of a holistic approach to training as a mechanism of knowledge transfer within a conflict environment.

What is Boko Haram?
Mohammed Yusuf, a radical Islamic cleric from Bornu State Nigeria, formed the Boko Haram terrorist group in 2002. The group recruits its members mainly from disadvantaged population including university students and unemployed graduates across but not limited to northern Nigeria. Boko Haram’s ideology stems from a misguided notion that denounces Western education and civilisation as ‘sinful’, and therefore forbidden’ (Salaam, 2012, p.148; Adesoji, 2010, p. 100). The group’s fundamentalist teachings seek to replace Nigeria’s socio-political and legal institutions with traditionalist Islamic values and practices that challenge secularism. The blurred nature of the relationship between Boko Haram and northern Nigerian political elites makes it difficult to fully understand and define the group’s composition and political agenda (Olojo, 2013). However, as a group, in the past few years their activities have steadily grown, as they have devised similar methods including “improvised explosive”, “targeted assassinations”, and “suicide bombings” to cause mayhem and instability in Nigeria (Onuoha, 2014, p. 2). Moreover, the Boko Haram group and their activities have attracted a global attention. This can be seen from the group’s abduction of hundreds of schoolgirls from Government School Chibok (eighty miles southeast of Maiduguri), which sparked the global ‘BringBackOurGirls’ campaign.

Since 2013, 14.8million Nigerians including 7.3 million children have been severely affected by Boko Haram’s violent activities. Of this population, 2.3 million people (mostly children and women) with 95% located in north-eastern Nigeria are known to have been internally displaced (UNICEF, 2016). Additionally, between May 2011 and May 2015, more than 23,000 deaths have been linked to Boko Haram violent conflict alone. Illiteracy, poverty and unemployment, exacerbated by the system of early child education prevalent in northern Nigeria, are widely perceived as the underlying causes of Boko Haram’s violent conflict. Thus, to better understand how illiteracy, poverty and unemployment are helping to fuel the Boko Haram’s crisis in Nigeria, some understanding of the early child education system in northern Nigeria warrants attention.

Boko Haram conflict and entrepreneurship education
The misperception that those who pursue formal education are ‘infidels’ is symptomatic of widespread cultural bias towards Western or secular education in northern Nigeria. Because of this, many parents from northern Nigeria prefer to send their children to Qur’anic (or informal) schools rather than to secular (or formal State) schools (Yusuf et al., 2013). In part, this bias can be blamed for the high illiteracy rate amongst school age children in northern Nigeria. Qur’anic education or the ‘Almajiri’4 heritage schools, as they are popularly known in northern Nigeria, is similar to Madrasas in Central Asia and Pakistan (Awofeso, Ritchie & Degeling, 2003, p.314). Mostly male pupils aged 5-15 years old, mainly from poor family backgrounds, who migrate to cities from rural northern Nigerian communities attend Qur’anic schools, which also serve as their residential home. The curriculum focuses on a single text - the Quran - determined and overseen by an imam, who also serves as a role model and offers parental care and protection for the pupils (Hoechner, 2011).

Although Qur’anic schools have produced eminent Islamic scholars in the past, in recent times, however, the rapid increase in the number of pupils and the rising economic disparities in Nigeria meant that their current composition has become unsustainable (Awofeso, Ritchie & Degeling, 2003). Hence, pupils and graduates (i.e., Almajirai) from Almajiri schools have resorted to begging for “alms” and hanging around as “street urchins”, notably in northern Nigeria, at the expense of more time spent in schools (Aghedo & Eke,

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4 Almajiri is an altered spelling of ai-muhajirin – an Arabic word that describes one who leaves home in search of knowledge or for the sake of advocating Islamic knowledge (Salaam, 2015, p.152)
In northern Nigeria, more than in any other sub-regional African context, there has been more enrolment in *Almajiri* or informal schools than in formal (or State) schools. Latest reports by UNICEF suggest that about 9.5million pupils are currently in *Almajiri* schools in northern Nigeria compared to about 7.0million pupils about a decade ago, which shows there is a rapid growth in the *Almajiri* population in Nigeria (Aluaigba, 2009; Oladosu, 2012).

Apart from unmanageable growth in the *Almajiri* population, the curriculum in *Almajiri* schools “de-emphasises critical thinking” and places more “emphasis on passive rather than active learning” (Usman, 2008, p.64). There is lack of emphasis on subjects taught in formal or secular schools, especially entrepreneurship. As such, there is a deficiency of knowledge and skills in basic science, English language, mathematics, information and communication technology, as well as problem-solving and entrepreneurial skills development. Whereas the curriculum may provide pupils with teachings and practices in religious piety, it disempowers rather than empowers them socio-economically. By contrast to those in the formal (State) school system, the deficiency in the curriculum makes the *Almajiri* pupils ‘unemployable’ in the real sector after graduation (Khalid, 2001).

In reality, the system of early child education prevalent in northern Nigeria does not lend itself meaningfully to the acquisition of entrepreneurial knowledge and the critical employability skills required for survival in a contemporary and rapidly changing Nigerian society, known for its high rates of poverty and unemployment. To compound matters, various statutory measures (e.g., schooling collaboration) introduced by the Nigerian government under the Universal Basic Education (UBE) programme to tackle the issue of alienation amongst the *Almajiri* population as well as the wider issue of ‘systemic exclusion’ from a formal early child education have yet to live up to expectations. In most cases, these measures have been impossible to implement because of disconnect between such measures and the values of the individual. For instance, because of prejudice against pupils in secular or formal education, socialisation difficulty remains the known most significant factor preventing the successful take-off of UBE’s ‘schooling collaboration’ agenda - whereby pupils in formal and informal schools are expected to exchange study visits (Usman, 2008).

These realities show that the quality of early child education in northern Nigeria is severely compromised. With no way of coping with their state of social and economic deprivation, many *Almajiri* graduates have become ambivalent, often resorting to “thuggery” and “theft”, thereby turning themselves into “social misfits” exposed to drug use, alcoholism and alienation (Aghedo & Eke, 2013, p.104). In addition, without any formal system in which to socialise as well as cater to their well-being, combined with the lack of any serious educational programme centred on creating a productive linkage between the informal and the formal education systems in Nigeria, the *Almajirai*, thus, become vulnerable to “indoctrination by any fundamentalist group”, such as, Boko Haram (Salaam, 2008, p.152). This is not surprising. Illiterate and poor people tend to be more vulnerable to brainwashing and radicalisation, as they lack the intellectual and the economic means of challenging and defending their beliefs and freedoms.

The situation is such that pupils and graduates from the *Almajiri* school system have continued to exist under dire conditions of ignorance, poverty and unemployment, thereby perpetuating a cycle of economic deprivation and insurgency more pronounced in the north than in any where else in Nigeria. Economic deprivation is in fact far worse amongst the *Almajirai* population, and this makes them far more vulnerable to Boko Haram’s recruitment tactics (e.g., monetary favours in return for membership, housing) than any other population. For instance, the *Almajirai* ‘foot soldiers’ captured following the 2012 series of violent attacks in Nigeria, admitted to have been given “$30 each and a keg of petrol by Boko Haram members” to kill innocent civilians and government security personnel (Aghedo & Eze, 2013, p. 106). As such, joblessness, lack of income-earning potential, lack of basic needs such as food, housing, health and other socio-economic conditions of life amongst the *Almajirai* population makes them vulnerable to manipulation by the Boko Haram group.

Generally speaking, poverty remains a big problem in sub-Saharan Africa, particularly in Nigeria where labour productivity is very low and the number of workers in vulnerable employment is very high at 77% (International Labour Organization, 2014). With an estimated population of 175 million, about 71% of Nigerians are reportedly living in relative poverty and this percentage is set to rise with increasing urbanisation. Even more worrying is the fact that a great number of those employed are under-employed (World Bank 2013; Rogers 2012). For instance, the latest unemployment figures for the first quarter of 2016
show that 12.1% (higher than the global average) of the world’s unemployed are Nigerians – with 56.1% of youths (aged 15 – 34 years old), especially in northern Nigeria, either unemployed or underemployed (National Bureau of Statistics, 2016). As a correlate of unemployment, poverty rate in the northeast is unsurprisingly the highest at 76.3% coupled with the region’s lowest rate of access to University education at 3.7% compared with 33.4% in Nigeria’s southeast region (National Bureau of Statistics, 2016).

Although illiteracy, poverty and unemployment, especially among the Almajirai population, have been shown to provide powerful incentives for radicalisation by the Boko Haram group, entrepreneurial skills development through entrepreneurship education training can provide people access to socio-economic benefits, opportunities and economic empowerment, and thereby enhance their overall sense of wellbeing, especially under transient conditions of volatility caused by conflict. Brixiöva, Ncube & Bicaba, (2015) found that entrepreneurship education provides access to entrepreneurial skills acquisition that fosters entrepreneurial activity, which in turn generates employment, especially amongst disadvantaged youths in South Africa. Moreover, recent indicators (e.g., economic growth, macro-economic stability) emerging from sub-Saharan Africa, especially regions affected by conflict, show that entrepreneurship education can make a real contribution to efforts directed at employment generation and poverty reduction, thereby help to reduce an individual’s tendency to support non-State armed groups and participate in conflict.

Tobias et al., (2013), for example, suggest that entrepreneurship education can have a transformative impact in a conflict situation, and this notion applies particularly to northern Nigeria where Boko Haram’s terrorist conflict has been consistently associated with very high levels of illiteracy, poverty and unemployment (Rogers 2012). Yet, the entrepreneurship literature, and entrepreneurship education in particular, offers little or no insight into the potential of using entrepreneurship education training to influence the entrepreneurial skills of individuals affected by such conflict. Our study addresses this critical issue by providing analysis of impact in the process of using training as a mechanism to transfer and embed entrepreneurial effectiveness within a University setting in northern Nigeria where the effects of Boko Haram’s conflict are most apparent.

**Entrepreneurship education through knowledge transfer – what we did**

Debates about whether or not entrepreneurial knowledge and skills can be transferred from one context to another and how entrepreneurs emerge remain a central focus of extant entrepreneurship education studies (Kuratko, 2005). Alongside, researchers have equally employed different concepts including creativity, innovativeness, learning, and risk-taking propensity to explain the attributes of an entrepreneur (Krueger, Reilly, & Carsud, 2000; Bird, Schjoedt, & Baum, 2012). In addition, the economic role of the entrepreneur has also been characterised by Schumpeter’s description as someone who causes continual disequilibrium through ‘creative destruction’. The commercialisation of innovation outcome mostly defined by but not limited to “intense and continuous competition between new products and ideas” (Priege et al., 2016, p. 96), typically in advanced Western economies becomes the basis of this characterisation (Bird, Schjoedt & Baum, 2012; Naude, 2011).

However, such Schumpeterian notions of an entrepreneur may not be universally applicable, especially in environments prone to volatility and conflict, such as, in an emerging sub-Saharan African context where ‘necessity-driven’ rather than ‘opportunity-based’ entrepreneurship dominates (Bruton, Ahlstrom & Obloj, 2008; Naude, 2011). Opportunity-based entrepreneurship is driven by the belief that the expected but uncertain outcome from exploitation of an opportunity far outweighs a paid employment, in contrast, poverty and the need for survival rather than opportunity motivate necessity-driven entrepreneurship (Demirguc-Kunt, Klapper & Panos, 2011). In such a context, particularly in volatile and conflict environments of northern Nigeria, entrepreneurship education can have a positive impact by providing individuals with the entrepreneurial knowledge and skills for creativity and income-earning potential, thereby reducing the individual’s tendency and vulnerability to participate in conflict. Conflict is one of a number of external shocks that increases vulnerability to poverty and vulnerability to violence. In particular, degrees of poverty and vulnerability to violence may drive individuals into conflict (Justino, 2009), just as the lack of viable economic alternatives, at the start of or during the conflict, may also provide the incentive for poor people to engage in violent conflict and vice versa (Goodhand, 2003). As Tobias et al., (2013) observe, this is true given the fact that conflict reduction and poverty alleviation are sequentially linked.
Therefore, entrepreneurship education training can be viewed as a way of providing individuals, such as university students, with the learning conditions to foster and nurture their creativity and innovation-related skills essential to the acquisition of entrepreneurial knowledge and skills. Entrepreneurship knowledge and skills are required in order to transform ideas into opportunities including the creation of new ventures, and thereby tackle the endemic issue of economic deprivation as a way of facilitating social change (Jones & Matlay 2011). Many (e.g., Klinger & Schündeln, 2011; Usman, 2009) believe that the challenges associated with economic deprivation and social change can be overcome by the acquisition of entrepreneurial knowledge and skills through vocational training in entrepreneurship. Seen in this context, particularly vocational training, we set out in 2014 to work on an entrepreneurship project in partnership with the University of Maiduguri (UNIMAID) in northeast Nigeria – the Boko Haram heartland.

By using a series of training interventions we were able to provide the learning conditions that allowed UNIMAID students to acquire the entrepreneurial knowledge and skills for creativity and innovation. We viewed that UNIMAID showed the appropriate context in which to demonstrate for the first time, and from a practical perspective, the effectiveness of using training as a mechanism to transfer entrepreneurship education knowledge within a conflict environment. From a knowledge transfer and knowledge acquisition perspectives, two crucial factors to success in any learning or training process include the environmental context in which the knowledge is shared and the characteristics of the knowledge generator and the knowledge recipients i.e., whether or not there is a presence of the necessary competences and the adaptive capacity for learning to occur (Inkpen, 1998; Szulanski, 1996). Consideration of these factors helped to ensure that all parties to the knowledge transfer process have the sufficient and the necessary knowledge base to learn, and to understand each other. In that way, the transferred or the acquired knowledge was more easily internalised and institutionalised. Thus, to account for these success factors and the levels of entrepreneurship education development highlighted above, we divided the training delivery in two separate but mutually dependent phases.

The first phase, undertaken in the UK over a six-week duration occurred in form of training of trainers’ knowledge transfer workshops. Working closely with UNIMAID staffs responsible for supporting their students in entrepreneurship knowledge and skills acquisition provided a solid context for mutual exchange of ideas and values, which enhanced the process of information and knowledge flow between the trainer and the trainee. The symmetry of information and knowledge flow between trainers and trainees can enhance the development of mutual trust essential to internalisation of ideas during the knowledge transfer process. Specifically, our UK staffs experienced in the delivery of knowledge transfer partnerships were required to mentor UNIMAID staffs in the underpinning pedagogies and practices of our entrepreneurship education as well as how we effectively support our students and graduates to develop entrepreneurial attributes and capabilities. Mentoring took various forms, sometimes in a one-to-one setting, in a classroom or in an industrial setting outside the University. In addition, we invited graduates on our entrepreneurship degree programme to share their personal experiences, particularly those who have overcome serious challenges to set up their own businesses under our Student Placement in Entrepreneurship in Education (SPEED\textsuperscript{+}) Plus project. In turn, UNIMAID staffs provided the cross-cultural contexts in which the emergent knowledge could be tested with a view to embedding or adapting aspects of this to the UNIMAID context. The outcome of phase one was development of entrepreneurship education awareness amongst the trainees and entrepreneurship effectiveness. Entrepreneurship effectiveness can be evidenced in the course template developed in collaboration with UNIMAID staffs and the further training activities which informed the basis for implementing phase two.

Phase two was undertaken within UNIMAID against a background of Boko Haram’ crisis and political unrest. It was executed in form of trainers’ knowledge transfer workshops and curriculum design. In this way, UNIMAID staffs that completed our UK training of trainers workshops including the head of UNIMAID’s Centre for Enterprise and Entrepreneurship Development (CEED) were required to design their entrepreneurship education degree course, and more importantly diffuse the acquired knowledge more widely to enhance the employability skills of UNIMAID students and graduates’ respectively. Essentially, phase two

\textsuperscript{+} SPEED Plus is a business start-up project, coordinated within several Universities in the United Kingdom led by the University of Wolverhampton, part funded by the European Regional Development Fund (ERDF), which aims to support the creation of new businesses in the West Midlands
training was led by UNIMAID staffs under our supervision and mentorship, and in an atmosphere of mutual trust particularly essential in a volatile and conflict environment such as in Maiduguri. Phase two training lasted over a 12 month period. Broadly, our entrepreneurship education training contributed to entrepreneurial effectiveness, entrepreneurial awareness and development of institutional capability, which can be assessed through change in mindsets, the emergence of an entrepreneurship degree curriculum and the presence of human capacities in entrepreneurship education delivery within UNIMAID. Overall, from a delivery view point, we ensured that the training tools used to transfer knowledge within the UK and from the UK to UNIMAID contexts followed the iterative nature of Kolb’s experiential learning, which Gopinath and Sawyer (1999) found reinforces the objective of any knowledge transfer programme associated with entrepreneurship education.

Data collection
Consistent with Marshall and Rossman (2006), we employed snowballing sampling technique to collect in-depth interview data from those who participated in our entrepreneurship education training in both UK and Nigeria. Our participants were mostly males aged between 23 to 55 years, and they were UNIMAID staffs, students and graduates living and working in Maiduguri, Bornu State, Nigeria. Although the literacy rates in Maiduguri were low, the participants in our sample were mostly literate who have completed or at least undergoing university education, some were qualified university lecturers employed to provide teaching and assessment to students within UNIMAID. Snowballing sampling technique was an effective way to collect data for this study as movement of people in Maiduguri was severely restricted and travel by foreigners to the region was forbidden because of the threat posed by the Boko Haram group. To put the travel situation into perspective, the UK’s Foreign and Commonwealth Office (FCO) advice against all travel to Maiduguri remains in force, and has barely changed over the last few years. Moreover, snowballing has been frequently employed to obtain primary research data (Blaikie, 2010), particularly in studies (e.g., Bullough, Renko & Myatt, 2014; de Groot & Goskel, 2011) undertaken within conflict or post-conflict contexts where potential participants were likely to be dispersed if not internally displaced.

Essentially, we relied on our relationships with BUK to contact participants for telephone interviews undertaken between August 2015 and January 2016. To mitigate the risk of participants’ reticence or parsimony common in non face-to-face interviews, we followed Burnard’s (1994) and Irvine’s (2011) advice to create an atmosphere of mutual trust during the telephone interviews. We achieved this by first introducing shared memories of our social engagements with participants during our visit to Maiduguri in 2014. Each interview on average lasted for thirty-five minutes, and was recorded and transcribed verbatim. Despite the bias about telephone interview as inferior to face-to-face interview, Sturges & Hanrahan (2004) reported no significant differences in terms of results between the two. If anything, use of telephone interview has shown to be effective especially in situations in which participants might be required to discuss sensitive subjects, such as, the effect of pain and trauma on their overall well being (see Carr, 1999). As such, the use of telephone interview in this study was necessary and particularly useful as a means to obtain data from our participants, as majority of them were dealing with the painful and traumatic effect of the Boko Haram conflict. To bring out the insights and value associated with the impact of our entrepreneurship education training, we undertook content analysis of the transcribed interviews, and the key themes emerging from these interviews are summarised below (Sekaran & Bougie, 2013).

Analysis and summary of findings
First-hand accounts into the impact of our knowledge transfer have been provided based on selected interview excerpts. It emerged from the interviews that ‘entrepreneurship awareness’, ‘entrepreneurship knowledge’, ‘business skills acquisition’ and ‘entrepreneurial intention’ were prominent features associated with our entrepreneurship education training. Themes frequently used to describe the impact of these features range from awareness of ‘entrepreneurship’ and ‘business strategy’ to skills about ‘management of customer and supplier relationships’, ‘advertising’, ‘business plan writing’, ‘record keeping’, ‘market analysis’
and ‘business growth and diversification’. The following interview excerpt sums up the overall perception of the impact of our knowledge transfer through training:

“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. After the training I know better how to deal with companies who supply our goods. Before then I did not have much knowledge about how to control and manage the business” (p1, August 2015).

This perception reflected the view of another participant who visited the UK for the training of trainers’. According to him:

“Following the October 2013 training at Wolverhampton, my thinking has changed regarding entrepreneurship. I have come to understand that entrepreneurship is multidisciplinary. It is not something exclusive to faculty of social sciences or the department of Business Administration... we were enlightened in the area of curriculum development. We have made several representations [i.e., visits] there, and what we have now for the entrepreneurship course running as a General Studies programme at the university has our input. Sincerely speaking, I can tell you that our contributions to the new university curriculum were drawn from our experience, our discussions and our interactions at XYZ regarding entrepreneurship curriculum design. And this is what the students are being exposed to” (p13, January, 2016).

Also, the perception of the training as ‘timely’ resonated across the interviews given the general perception that the Boko Haram conflict disrupted people’s business and means of livelihood. P3 articulates this sense of disruption: “When I started I had three employees, but due to the insurgency I had to sack some of them”. Participants reaffirmed the general suspicion that Boko Haram has exploited the poverty, unemployment and illiteracy pervasive in the northeast as bases of radicalisation and recruitment (Adesoji, 2010; Salaam, 2012).

Echoing similar sentiments, p4 pointed out that idleness made the youths more vulnerable to the Boko Haram ideology, thus: “When the Boko Haram insurgency started, we realised that the major problem is that many of the youths who are idle became involved in Boko Haram. If the youth have something doing and are getting themselves busy, I don’t think they will be thinking of fighting illegal war against the government”. However, there was a consensus that entrepreneurship education could be a useful and effective weapon against idleness, poverty and joblessness. For instance, there was a feeling that students have begun to develop an entrepreneurial mindset and also nurtured entrepreneurial intentions as a direct result of participating in our training. P13 says: “I am very happy that the students are beginning to rethink. So changing students’ mindsets is the one thing I know we have seriously gained from the training at XYZ”. P7 underscored this change in mindset: “I benefitted a lot from the training. I plan to start a business in the future. I am planning to go into transport business”.

Apart from developing entrepreneurship intentions, the participants also acknowledged that they have acquired different business skills as a direct result of our training. For instance, one female graduate acknowledged: “From the training I knew that I had to keep records. Those records help me to be clear in my mind about my inflows and outflows.” (p2, August 2015). Another male participant who gained a mix of skills commented: “You must also know how to gain the attention of your customers...how to package your product very well” (p5, August 2015). Linked with product packaging skills is the acquisition of relationship management skills:

“The training really assisted me in how to relate to my customers, because if you don’t have the right skills and knowledge on how to relate to your customers you end up losing them. Also the people who supply me things or lend me money, it helped me to relate with them well and pay them as and when due (p6, August 2015).

Knowledge about how to diversify, promote and expand a business also featured prominently as another dimension of the impact, especially in an uncertain and conflict environment of northeastern Nigeria. P4 says: “Before [i.e., the training], I restricted myself to servicing of electrical equipment, but after the training I diversified more. Now I do things like install inverters, and other similar things”, while p1 affirms: “the training helped me to advertise my business differently. So I went to small hamlets to get people to sell and buy my goods...I give them complimentary cards, encouraging them to call me”. Others said the
training reinforced and provided better knowledge about developing a good business plan. For example, p5 says: “One of the main lessons I learnt during the training was writing a good business plan. With the format they gave I was surprised by how much I was able to write”. It would seem that participants also developed knowledge and confidence in using market analysis and intelligence as bases to make strategic business decisions regarding expansion and growth, thus:

“Because of the problem of the insurgency I plan to expand to other locations where there is good demand for my goods. I want to open new branches in Kano, in Yobe (because Yobe is near Maiduguri). I hope to employ like 50 people in the next four years. I have also visited some places in Jigawa and can see that it is a very nice place for my business. Jigawa is especially hot at some points of the year so it is a very good place to sell drinks” (p1, August 2015).

These insights show evidence of the role and impact of training as a mechanism to transfer entrepreneurial knowledge and skills from one context to another. In particular, there is a positive link between entrepreneurship education and entrepreneurial intention as others (e.g., Krueger, Reilly & Carsrud, 2000) have found. Although some studies (e.g., Brixiová, Ncube, and Bicaba, 2015; Fatoki & Chindoga, 2011) have shown that lack of training or market awareness (i.e., market analysis and market intelligence) were some of the major obstacles to entrepreneurial success and entrepreneurial intention particularly amongst youths in Africa, we have seen from the above interviews that these constraints could be overcome by the provision of entrepreneurship training even under stressful conditions of conflict (Krueger, & Maleckova, 2003). Overall, our findings show that participation in entrepreneurial training provided access to knowledge and acquisition of business planning and market analysis skills essential for business success. Furthermore, and consistent with the findings of Bae, Qian, Miao, & Fiet (2014), our findings also showed that participation in the entrepreneurship training significantly influenced entrepreneurial intentions.

**Key tenets of knowledge transfer through training within a conflict environment**

Over the past decade, most sub-Saharan African economies have invested heavily in entrepreneurship education to tackle poverty and unemployment (Co & Mitchell, 2006). In Nigeria, for instance, the government in 2006 made entrepreneurship education a compulsory component of the higher education (HE) curriculum as part of a wider strategy to address the growing poverty and youth unemployment (Ojeifo, 2013), widely perceived as the underlying causes of Boko Haram insurgency in northern Nigeria (Arogundade, 2011). Perhaps, entrepreneurship education was seen by the Nigerian government as an effective means by which their disparate poverty, unemployment and conflict mitigation initiatives could be linked – and given greater coherence. However, there are very serious broad (e.g., lack of entrepreneurship education and curriculum guidelines) and narrow (e.g., lack of entrepreneurship education pedagogy and institutional delivery capabilities) challenges that must be overcome in order for entrepreneurship education to function as a coherent strategy for tackling unemployment and poverty, seen as the underlying causes of conflict in Nigeria (Garba, 2010). It was precisely these challenges that we set out to confront in northern Nigeria through knowledge transfer, whilst also providing for a concept of training that ensured the presence of entrepreneurship education pedagogy and delivery capability within UNIMAID. Training of course can be effectively used as a coherent practical and intellectual strategy for embedding entrepreneurship education knowledge and delivery capabilities, particularly within the higher education sector in a sub-Saharan African context where poverty and unemployment are known drivers of violent conflict. Our utility of training thus, shines a spotlight on the need for a critical reflection about other viable forms of knowledge transfer not based primarily on commercialisation of patented products protected by IP rights, particularly within a conflict environment, the outline of which includes the following basic principles:

a. Violent conflict as understood in this paper, based on our experience in northern Nigeria, is the conscious and organised use of violence by non-state actors, usually armed groups, such as Boko Haram, to achieve a specific socio-political agenda, often with macro and micro level consequences for the State and the individual.

b. Boko Haram’s conflict is widespread across sub-regional boundaries spanning northern Nigeria, Niger and Mali. The causes are rooted in fundamentalist religious
ideology and radicalisation by Boko Haram members of mainly but not only disaffected northern Nigerian youths (Onuoha, 2012; Walker, 2012). A deeper understanding of the underlying causes and consequences of this conflict both entails an appreciation of the complex motivations of the actors, the local dynamics of poverty, illiteracy and unemployment coupled with designing effective and sustainable means of addressing these through creation of entrepreneurial knowledge ecosystems.

c. Entrepreneurial knowledge ecosystems can be created through a process of knowledge transfer. Knowledge transfer process involves learning, knowledge acquisition and adaptation and knowledge retention (Inkpen, 1998; Argote, 2013). As such, in certain circumstances, for instance in conflict environments, the knowledge transfer process may demand consideration of cultural or contextual factors in a way that it can only be effectively operationalised through specific forms, such as, training.

d. Training – its analysis, effectiveness and ultimately its evaluation - as the process of knowledge transfer for entrepreneurial effectiveness within a conflict environment rests on the presence of effective training interventions and the extent to which training outcomes are able to lay claim, unequivocally, to efforts aimed at tackling the underlying causes as well as help in minimising the value of the incentives why individuals or groups may choose to join armed groups or support the conflict. By incorporating more contextualised considerations, in particular conceiving of individuals or groups in conflict as either abducted or coerced by their circumstances (Humphreys & Weistein, 2008), then more effective training interventions are more likely to be fashioned out and better outcomes achievable. Populations in conflict environments often have a symbiotic association with the conflict, which in some way determines and shapes substantially their circumstances including lives, choices and individual behaviours. Conflict shapes ‘risk perceptions’, impacts on ‘welfare levels’, determines ‘occupational choices’, “thereby affecting the overt and covert incentives and constraints that people face in their daily lives” (Verwimp, Justino & Bruck, 2009, p. 308). Armed groups constantly manipulate the dynamics of these circumstances in order to advance their own agenda, often to the detriment of the individual and the State. We saw evidence of this manipulation in Maiduguri where the Almajirai admittedly took money from Boko Haram members to kill and maim innocent civilians and government security personnel.

e. Fundamentally, following the logic that the challenges associated with economic deprivation and unemployment can be overcome by the acquisition of entrepreneurial knowledge and skills through vocational training in entrepreneurship education (Klinger & Schündeln, 2011; Usman, 2009), particularly in low to middle income economies where poverty and unemployment are triggers of conflict (Bruck, Naude & Verwimp, 2011), a realistic approach to training as a mechanism of knowledge transfer must therefore consider the cultural and contextual factors in which the knowledge transfer occurs, i.e., the processes and characteristics of learning, motivations and the needs of the knowledge recipients.

f. At the same time, the efficacy of training as a knowledge transfer mechanism in fact must not downplay the significance of local cultures of knowledge recipients and their learning processes – which act as important catalysts of change. Rather, it must seek to enhance and incorporate these factors in the design and the implementation of any training interventions.

These basic principles, whilst not exhaustive, at least represent a holistic approach to understanding the significance and utility of training as a knowledge transfer mechanism within a conflict environment. They challenge the status quo by emphasising the vital need to consider cultural and contextual factors associated with learning. From a theoretical standpoint, the paper builds on existing theories of entrepreneurial development by showing how entrepreneurship education can facilitate entrepreneurial skills acquisition and contribute to new venture creation and business survival and growth in an environment marked by terrorist conflict. It also expands on a fledgling theory of transformativeentrepreneuring (Tobias et al., 2013), by showing how entrepreneurial knowledge and skills can be further investigated to help re-orientate young people and draw them away from the radius of terrorist propaganda. Alongside, it highlights the need to further consider the role and impact of entrepreneurship education on individual’s propensity to exploit the knowledge and skills (e.g., business planning, marketing skills, advertising) acquired from training in more creative
and innovative ways even in non-conflict settings. At a practical level, the study provides some basic principles that delineate useful ways of using entrepreneurship education training to exponentially design policies that seek to enhance the effectiveness of higher education institutions as catalysts for socio-economic development, particularly in regions affected by conflict. In conclusion, better insights are gained from understanding these basic principles and the processes taken to successfully transfer the vital entrepreneurial knowledge and skills, thereby provide a more positive alternative to University students threatened by terrorist propaganda in a sub-Saharan African context.
References


