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The influence of homeschooling on entrepreneurial activities: a collective case study

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Abstract

Purpose – The purpose of this paper is to investigate how a homeschool education influences entrepreneurial characteristics and activity.

Design/methodology/approach – A collective case study design was used to investigate how a homeschool education influences entrepreneurial characteristics and activity.

Findings – From the participant interviews, surveys, and document analysis, three salient themes emerged. First, participants noted that their home education, at least in later years, was largely self-directed and that this independent, self-motivated type of learning impacted their subsequent entrepreneurial activities. Next, participants also related that they believed the alternative nature of their homeschooling education and its emphasis on being comfortable with being different influenced their entrepreneurial pathway. Finally, the third theme to surface was the idea that homeschooling helped develop an internal locus of control, a belief that is helpful in entrepreneurial undertakings.

Research limitations/implications – Research limitations included a lack of generalizability due to a small sample size and possible selection bias.

Practical implications – Despite these shortcomings, however, several implications exist. For example, the findings from this study show that homeschooling may be a viable alternative education method for parents looking to encourage entrepreneurial traits and activities in their children.

Social implications – Future areas of research were also identified, including a call to research the role locus of control plays in homeschooled students.

Originality/value – This study addresses an area that, to the knowledge of this researcher, is completely lacking from the research literature.

Keywords Entrepreneurship, Entrepreneurial traits, Alternative education, Homeschooling

Paper type Research paper

Background

With nearly 14 percent of Americans, and almost 9 percent of Britons starting or running a new business in 2014, entrepreneurship is alive and well (Kelley *et al.*, 2014a, b). Pinpointing what led those people to become entrepreneurs, however, is another matter entirely. Nonetheless, Brockhaus and Horwitz (1986) note that the decision to become an entrepreneur is generally influenced by two main avenues: personality and past experiences. Similarly, Morrison (2000) reports that socio-cultural characteristics, prior experiences, and the education and religion of entrepreneurs all influence the decision to pursue entrepreneurship. Turan and Kara (2007) concur, noting that particular cultural groups predispose their members toward entrepreneurship and that certain values and beliefs can encourage entrepreneurship. Education in particular can greatly influence entrepreneurial behavior, with Gibbs (1996) noting that the way people are educated from a young age significantly impacts the development of entrepreneurial characteristics and behavior. Similarly, Ekpe *et al.* (2011) report that individual attributes like education play an important role in entrepreneurial activities. However, while studies have been conducted researching the impact of traditional educational avenues on entrepreneurial characteristics and activities (Gorman *et al.*, 1997; Marques *et al.*, 2012), there has been no research explicitly addressing how one method of education, homeschooling, impacts entrepreneurial characteristics and activity. While lacking from the research literature, however, a search of the internet revealed that a number of homeschooling websites and curriculum sites



emphasize the influence homeschooling can have on entrepreneurial characteristics and activity. For example, on the website Let's Homeschool High School, Jamie Gaddy (2013), an Education Professor and Homeschool Mother, claims that entrepreneurial skills and homeschool skills run on parallel lines, with each requiring dedication, hard work, and a willingness to think outside the box. Similarly, the website Homeschool Entrepreneur (2013) states, "Homeschool families already know that learning is so much more than academics. Teaching an entrepreneur is not just about the mechanics of starting a business, but about WHO you become as an entrepreneur." This gap between the research literature and the website beliefs is what prompted this study. Furthermore, the research literature supports the study of individual-level entrepreneurial analysis, with Cromie (2000) noting that since entrepreneurship is an individualized phenomenon, it is important to know more about the individuals behind the phenomenon. Muñoz-Bullón *et al.* (2015) concur, and emphasize in their research the need and importance of studying the individual characteristics of entrepreneurs. As such, the general aim for this study was to examine how homeschooling impacts entrepreneurship. Specifically, the following research question framed this study:

RQ1. How does a homeschool education influence entrepreneurial characteristics and activity?

Literature review

A background on entrepreneurs

While defining what an entrepreneur is can be difficult (Mitton, 1989), the research literature provides a number of definitions. For example, Bolton and Thompson (2000) define an entrepreneur as "a person who habitually creates and innovates to build something of recognized value around perceived opportunities" (p. 13), while Drakopoulou Dodd and Anderson (2007) define entrepreneurs as people that capture or produce change and manifest that change in entrepreneurship. For the purposes of this study, Bolton and Thompson's (2000) entrepreneur definition will be used. Cunningham and Lischeron (1991) also identified six major schools of thought on entrepreneurs: The Great Person School, The Psychological Characteristics School, The Classical School, The Management School, The Leadership School, and lastly, The Intrapreneurship School. Cunningham and Lischeron (1991) categorized these schools of thought based on the school's interest in studying personal characteristics, opportunities, management, or adapting an existing venture. Additionally, from a theoretical standpoint, McClelland's (1961) achievement theory and Rotter's (1966) locus of control theory are often used to help describe entrepreneurs. From McClelland's viewpoint, entrepreneurs have a strong need to achieve. Similarly, in Rotter's theory, entrepreneurs tend to have an internal locus of control, a factor that is associated with entrepreneurial activity (Cromie, 2000). In addition to possessing a strong need to achieve and an internal locus of control, entrepreneurs tend to possess other specific characteristics. In fact, Turan and Kara (2007) state, "entrepreneurs possess a number of personality characteristics different from nonentrepreneurs" (p. 26). For example, in the research literature the characteristics often associated with entrepreneurs include a risk-taking propensity, a high tolerance of ambiguity, persistence, and self-efficacy (Brockhaus and Horwitz, 1986; Cromie, 2000; Thomas and Mueller, 2000; Turan and Kara, 2007).

A background on homeschooling

Homeschooling, as the name implies, is the practice of schooling a child at home. While a number of homeschooling methods (online, correspondence, co-op, etc.) exist, this paper relies on Cogan's (2010) definition of homeschooling: education occurring in the home with a child's parent or guardian serving as the main educator. This practice, once considered a fringe

practice, now has close to two million adherents in the USA and has a growth rate of 2-8 percent annum in the USA (Ray, 2015). Additionally, while homeschool families have traditionally been white, middle class, Christian, and conservative (Masters, 1996), that composition has become more diverse in recent years (Collum and Mitchell, 2005; Kunzman, 2009). That diversity is also present in the motivation to homeschool – the research literature points to a variety of home education motivations. However, in general, the research consensus shows that most home educators make the decision to homeschool largely because they believe they are personally responsible for their child's education, have the ability to provide that education, and can do the best job accomplishing that education (Green and Hoover-Dempsey, 2007; Ice and Hoover-Dempsey, 2011; Kunzman, 2009; Patterson *et al.*, 2007). Likewise, Collum and Mitchell (2005) state that the decision to homeschool is usually motivated by religious values, dissatisfaction with traditional schools, academic and pedagogical concerns, and a concern for family life. In addition to a variety of motivations, there are also a wide variety of homeschool teaching styles, with many home educators using a prepared curriculum as a starting point and then supplementing the curriculum with real-life experiences (Davis, 2011; Kleist-Tesch, 1998). In Williams' (1991) study, he also found that home educators tended to use flexible schooling approaches with a moderate to high level of autonomy, thus encouraging intrinsic motivation. In the same vein, Goodman (2008) found that an autonomous learning environment was one of the primary homeschool environments. This blended, flexible, autonomous approach does appear to benefit students. Several studies point to the high achievement of homeschool students, particularly on standardized tests (Cogan, 2010; Ray, 2010; Taylor-Hough, 2010). In fact, in reference to standardized test scores, Taylor-Hough (2010) states, "the research shows that any method of homeschooling will most likely raise their child's test scores above those of their traditionally schooled counterparts" (p. 6). Despite academic achievement, however, a common public concern is the perceived lack of socialization for homeschool students. On the other hand, a review of the literature reveals that most homeschool students are adequately socialized, and may actually be more involved in social activities and leadership positions in the community than traditionally schooled children (Medlin, 2000; Montgomery, 1989; Sutton and Galloway, 2000).

A background on entrepreneurship education

Entrepreneurship as an academic discipline has grown significantly in the past several decades (Katz, 2008; Piperopoulos and Dimov, 2015). Indeed, Morris *et al.* (2001) found that by as early as 2000, over 700 business schools in the USA provided entrepreneurship classes, up significantly from the roughly 25 schools that offered the same classes in 1980. Many of those schools also extended their entrepreneurial education, offering complete undergraduate, graduate, and in some cases, doctoral degrees in entrepreneurship (Bennett, 2006). According to Piperopoulos and Dimov (2015), this growth was based on the premise that entrepreneurship education has a positive effect on students' entrepreneurial attitudes, abilities, and skills. Mitra and Matlay (2004) and Neck and Greene (2011) concur, noting that entrepreneurship education can make a positive difference. However, a review of the literature reveals that in many cases, the actual effect of entrepreneurship education on students' entrepreneurial education is unclear (Walter *et al.*, 2011). In fact, Oosterbeek *et al.* (2010) found that in some instances, entrepreneurial education can actually have a negative impact on entrepreneurial intentions. This may be due in part to the fact that there is little regularity or standardization among the entrepreneurship course content offered across various schools (Shane and Venkataraman, 2000). However, while the findings on the value of entrepreneurship education differ, Higgins *et al.* (2013) state that there is a "widespread consensus that traditional pedagogical methods of learning alone are insufficient to adequately develop entrepreneurs to deal with the complexities of running and creating

innovating business opportunities” (p. 155). Indeed, McAuley (2013) notes that there is a great opportunity for innovation in entrepreneurship education and that entrepreneurial effectiveness recognizes the importance of learning in and outside the curriculum.

Methodology

Design

To best investigate how a home education influences entrepreneurial characteristics and activity, a case study design was employed. Baxter and Jack (2008) define a case study as a qualitative research design that helps explore a phenomenon using a variety of data sources. Additionally, Bogdan and Biklen (2007) note that case studies focus on small samples, which allow them to provide a rich description of variables and environments. Case studies can also help to sharpen existing theory by identifying gaps and beginning the process of filling them (Sandberg *et al.*, 2013). As such, a case study design has become “one of the most common ways to do qualitative inquiry” (Stake, 2006, p.435). For this study, a collective case study, or multiple case study, design was used. According to Creswell (2007), a multiple case study examines only one phenomenon, but multiple cases are used to explore and illustrate that phenomenon. Similarly, Stake (1995) notes that a collective case study focuses on one issue as it pertains to multiple cases. Additionally, because these multiple cases allow for comparison between cases, a collective case study design is preferable for expanded generalizability of findings and theory building (Sandberg *et al.*, 2013; Yin, 2009). As a result, a collective case study approach seemed most appropriate for this study as the goal of the study was to begin theory building by providing a full description of the five cases (participants) within the bounded system of homeschooled entrepreneurs. Additionally, a case study design with its smaller sample size, compared with other qualitative approaches like phenomenology, seemed more appropriate for this study as it allowed for a richer description (Bogdan and Biklen, 2007).

Participants

While there is generally no prescribed number of cases for a case study, Creswell (2007) recommends no more than four or five cases. As such, for this collective case study, purposeful sampling was used to identify five participants that matched the criteria of being a former homeschooled student and current entrepreneur. In keeping with Bolton and Thompson’s (2000) definition of entrepreneurs, all of the participants were involved in creating and innovating something of recognized value around perceived opportunities, with two of the participants self-proclaimed serial entrepreneurs. Two of the participants were also personally known to the researcher, while the remaining participants were identified through snowball sampling. Snowball sampling, according to Creswell (2007), is a type of sampling that “identifies cases of interest from people who know people who know what cases are information rich” (p. 127). From this sampling, five participants that resided in the southeast or southwest USA were identified. These five participants were ideal for several reasons. First, all of the participants had been homeschooled for kindergarten through 12th grade, and all had successful businesses, making them extreme exemplars (Eisenhardt and Graebner, 2007). Table I provides

Participant	Age	Gender	Ethnicity	Years of current entrepreneurial experience
Jonathon	33	Male	Caucasian	10
Kyrie	29	Male	Caucasian	6
Theo	30	Male	Caucasian	3
Peyton	23	Male	Caucasian	1
Mitchell	26	Male	Caucasian	1

Table I.
Participant
demographics

demographic information, while “participant profiles” outlines additional information about the participants, including post-secondary education and business information, with pseudonyms being employed for all participants. The information used to compile “participant profiles” was taken directly from the participants’ websites, from survey responses, and from interviews with the participants.

Participant profiles

Jonathon: a married father of three, Jonathon is an author and serial entrepreneur that enjoys creating web startups. He owns a portfolio of close to 1,000 domain names, with most of the domains functioning as fully developed websites. He has an undergraduate degree in business, an MBA, and is currently earning a Master’s of Divinity.

Kyrie: a former division one basketball player and Sports Management degree recipient, Kyrie is a co-founder and co-owner of an online basketball training website. Kyrie also owns several other websites, as well as a company that provides private basketball training.

Theo: the owner of a successful photo booth company, Theo is a married father of two. A former division one basketball player, he obtained his Bachelor’s degree in History after completing his homeschool education.

Mitchell: co-owner of a lawn care and landscaping company with his brother, Peyton, Mitchell obtained an Associate’s degree, and completed significant coursework toward a Bachelor’s degree in Biomedical Science after his homeschool education.

Peyton: co-owner of a lawn care and landscaping company with his brother, Mitchell, Peyton obtained a four year degree in Criminal Justice and Criminology while playing college baseball at the division one level.

Data collection

According to Yin (2009), there are six primary sources of evidence for case studies: documents, archival records, interviews, direct observation, participant-observation, and physical artifacts. For this study, three methods of data collection were used: surveys, documents, and interviews. Triangulating the data were important because it helped bolster the accuracy, validity, and reliability of the study (Stake, 1995; Yin, 2009) and increased the likelihood that the phenomenon in question would be understood from various points of view (Ary *et al.*, 2006).

Interviews

Yin (2009) states that interviews are an important and essential part of a case study. As such, to best understand how homeschooling influences entrepreneurial characteristics and activity, the five participants were interviewed in-depth using the open-ended questions outlined in “standardized open-ended interview questions”. Question 1 was designed to help participants feel comfortable in the interview process and helped establish an overall picture of each participants’ homeschooling experience. The purpose of Question 2 was to ascertain if any values or beliefs that contribute to entrepreneurial activity were developed in the participants’ homeschool education, since Turan and Kara (2007) note that certain values and beliefs can encourage entrepreneurship. Question 3 was asked to establish if the participants felt that their unique form of education had any impact on their entrepreneurial activity, as both Gibbs (1996) and Ekpe *et al.* (2011) report that the method of education can affect entrepreneurial activities. Next, the purpose of questions four and five was to determine if homeschooling encouraged personality traits associated with entrepreneurial activity. This line of questioning was in keeping with research that holds that entrepreneurs possess specific personality characteristics (Brockhaus and Horwitz, 1986; Cromie, 2000; Thomas and Mueller, 2000; Turan and Kara, 2007). Question 6’s purpose was designed to help the participants switch gears from talking about homeschooling to talking about entrepreneurship. In respect to homeschooling, Question 7 was in line with Brockhaus and

Horwitz (1986) and Morrison's (2000) contention that the past experiences of people influence their future entrepreneurial activity. Lastly, Questions 8 and 9 were asked so participants could clarify or expound on any issue they felt was relevant to the topic. Due to the geographical distance between the researcher and the participants, all of the interviews were conducted over FaceTime or Skype audio. The interviews were audio recorded and ranged in length from approximately 13 minutes to 27 minutes. Later, the interviews were transcribed by the researcher.

Standardized open-ended interview questions:

- (1) Please describe your homeschool experience?
- (2) What main values or beliefs were developed in you during your homeschool experience?
- (3) What influence, if any, did homeschooling have on your career path?
- (4) What influence, if any, did homeschooling have on your personality?
- (5) What entrepreneurial characteristics, if any, were developed in your homeschooling? How were they developed?
- (6) Please describe your entrepreneurial activities.
- (7) Why did you decide to become an entrepreneur?
- (8) What do you value about entrepreneurship?
- (9) Is there anything you would like to tell me about homeschooling or entrepreneurship that I have not asked?

Survey

While surveys are traditionally seen as a quantitative data collection method, descriptive surveys can be suitable for a qualitative study and are useful in triangulating the data (Glik *et al.*, 2005; Mitchell *et al.*, 2013). In this study, the survey questions helped to compile the participant profiles, and helped to reinforce findings from the interviews.

Documents

Since site documents can corroborate evidence gathered from other sources and provide an opportunity for recurrent review (Yin, 2009), the participants' business websites were analyzed. The information gained from the websites helped to compile demographic information about the participants and shed insight into the participants' businesses. For example, investigation of the websites revealed links to external articles about the participants and their businesses. This information contributed to the study by helping showcase the entrepreneurial achievements of the participants and providing a more complete picture of their entrepreneurial activity.

Data analysis

Data collection and data analysis usually occur concurrently and in an iterative process in a qualitative study (Creswell, 2007). However, there were several specific data analysis steps that this study employed after the data collection was complete. First, a within-case analysis was undertaken (Creswell, 2007). In this stage, the transcribed data for each individual interview was first descriptively coded and then pattern coded. Next, following the within-case analysis, a cross-case analysis was conducted (Creswell, 2007). Stake's (2006) cross-case analysis worksheets were used to aid in this step. Finally, the assertions that emerged from the within-case and cross-case analysis were recorded and categorized.

Themes

Upon completion of the cross-case analysis, three salient themes emerged. First, all of the participants noted that their home education, at least in later years, was largely self-directed and that this independent, self-motivated type of learning impacted their subsequent entrepreneurial activities. Next, four of the five participants also related that they believed the alternative nature of their homeschooling education and its emphasis on being comfortable with being different influenced their entrepreneurial pathway. Finally, again with four of the five participants, the third theme to surface was the idea that homeschooling helped develop an internal locus of control, a belief that is helpful in entrepreneurial undertakings.

Theme 1: self-directed, independent work that is self-motivated

Throughout the interviews, all of the participants overwhelmingly related how self-directed their homeschooling education had been, and how this self-directed and self-motivated education influenced not only their decision to become an entrepreneur, but the carrying out of their current entrepreneurial activities. For example, Kyrie noted, “So I think homeschooling, like I mentioned before, a lot of it is done on your own, a lot of it is self-motivated, so rather than feel like someone has to tell me what to do, someone has to show me, someone has to be with me to do it, I can just go do it.” Later, Kyrie also shared:

Entrepreneurs, a big thing with them is that they are self-motivated; they are not needing someone to tell them, “This is what you do, this is when it finishes.” You can kind of follow those lines from homeschooling where yes, there is stuff that is required to do, but it is on your own and you are not always needing someone to tell you what to do – you are kind of given the general idea – “This is reading, this is whatever,” but you are kind of allowed your own way to do it, and your own time.

Similarly, Mitchell related:

You have to be self-motivated for homeschooling and that really helps for entrepreneurship. When you work for someone else I think it is more similar to regular school where you are told what to do, and what time to do it at – “At this time you show up” and then they tell you, “Ok, next you have this,” but with homeschooling you have a little more leeway as far as what you do throughout the day or the order of tasks and the speed at which you get it done is up to you. So I think that helps with entrepreneurship.

Theo also shared Mitchell’s sentiments about how homeschooling differs from traditional education:

I think that homeschooling is a large factor [in entrepreneurship] mostly because, well two parts: the reality of homeschooling is that a lot of the work you are doing you having to kind of self-teach and so you are developing problem solving skills at a young age without realizing it. Whereas in school systems, or anytime you are with a large group of people, you are kind of taught to follow the instructions a little more as opposed to, “Here are the guidelines, go and figure it out” and that is a pretty blunt explanation, but I just think that you are required to do more problem solving from a young age than you would be if a teacher was kind of just spoon feeding you information.

Later in the interview, Theo also shared how his self-directed homeschool education impacted his decision to become an entrepreneur: “I have always been able to control my own schedule, so I think I never really considered having someone tell me what to do.” Interestingly, Peyton related that in his home education, not only was he given the freedom to self-direct large portions of his study, his schooling was actually compared to a career: “I liked it [homeschooling] because they [parents] didn’t force us into anything”,

but they kind of made it, “It’s your career” mentality – “This is your life, you better make the most of it.” Additionally, when asked what his homeschooling experience was like, Jonathon also related:

So I would describe it for someone who maybe hasn’t been homeschooled or hasn’t done it themselves, as very different from a classroom setting because it is very self-directed. I was surprised when encountering people in college and others who maybe hadn’t had that homeschool experience that they maybe didn’t have that handle on how to study on their own, or how to function in a non-guided learning type of study.

Finally, again thinking about how the independent nature of homeschooling affects the decision to become an entrepreneur, Jonathon also shared:

So when you become comfortable reading and studying on your own for big blocks of time, and some of that is just personality, but when you start to realize that you can accomplish some different things, and learn, and work, you don’t need to be in a class with 25 other people, and you don’t need to be in an office or a cubicle with 25 other people, that maybe reinforces the idea that, “Hey, I can do this with just a computer, with just a book, with just whatever, and it is just me.”

Theme 2: not a cookie cutter approach

Four of the five participants in this study related that they felt that having a non-mainstream education at least partially influenced their decision to become an entrepreneur. Additionally, the participants also felt that because homeschooling was an alternative schooling approach that was outside the box, it encouraged them to take more risks and be comfortable with failing. For instance, when asked what values or beliefs were developed in his homeschooling education, Jonathon replied:

Maybe a self-reliance and definitely there is this idea of not being afraid to buck the system or question the way things are done traditionally and conventionally. So that I found has been very helpful, either in just thinking critically about certain things or now as an entrepreneur being willing to take a non-traditional career path. Or do something where maybe your peers are encouraged to finish college, get an internship, get a full-time job, follow this certain career trajectory with very precise plot points and you say, “No, I am going to try my own thing, even though I have no guarantee of success” And there is no guarantee of success the traditional way too, but we are pushed to believe maybe there is.

In a similar vein, Mitchell also shared how he felt that homeschooling allowed for more a more diverse, non-traditional way of thinking than traditional educational settings did:

The one thing I noticed from when I went to college is that traditional school, as I saw it, was preparing people to work for someone else. I think that homeschooling does help you work for yourself, or not work for yourself, but not think about just, “Oh, I am going to work for someone else.” Just the way they prepare you, at least in college, is like we are all being prepared to be a robot to work for someone else.

Additionally, when describing his homeschool experience, Peyton similarly remarked, “The learning style that we were able to engage and move through was kind of ‘this isn’t a cookie cutter approach.’” Furthermore, Theo argued that because homeschooling is an alternative educational approach, it allows people to feel more comfortable with risk and failure:

Oftentimes you are in a smaller atmosphere with not as much peer pressure and so I would argue that there is perhaps more room to fail and perhaps not feel embarrassed at a young age, which would encourage an adventuresome spirit. So whereas if you are around your peers more often that spirit of adventure might be subdued a little bit because you are more concerned about doing what other people are doing as opposed to perhaps doing your own ideas.

In fact, Theo shared that he wanted to homeschool his own children because of that spirit of adventure: “I fully plan on homeschooling, at least a portion of the time, my kids because I think that it encourages that style of thinking – it encourages free thinking, the ability to make a mistake, the ability to fail without peers pressuring you at every turn.” Similarly, Jonathon’s thoughts echoed Theo when he related:

The risk tolerance thing, maybe that is affected in some small way [by homeschooling], just being comfortable with being outside of a traditional setting. And your peers, and your peer’s parents, maybe you might hear jokes about being a homeschooler or just this idea of “This is different, weird, not normal,” and you are okay with that. So there is maybe that reputation risk and becoming comfortable with, “Hey, I am okay if I am not doing things exactly like everyone else,” so maybe that tends to reinforce some of that comfortability with taking a risk.

Lastly, Jonathon succinctly summed up the heart of Theme 2, when he remarked that homeschooling supported “a willingness to do things in a non-traditional, non-conventional kind of way and be comfortable with that.”

Theme 3: an internal locus of control

Again, like Theme 2, four of the five participants related that homeschooling at least partially encouraged their internal locus of control, which in turn, helped them in their future entrepreneurial activities. For instance, Theo shared, “We were grounded young to know and have confidence that we can do what we set out to do, and if you fail it is not the end of the world.” Likewise, when asked what entrepreneurial characteristics, if any, had been developed in his homeschool education, Kyrie replied, “Just the idea of you being responsible for your work and getting stuff done that you need to get done.” Similarly, Jonathon clearly referred to an internal locus control in his interview when talking about his homeschooling experience:

I do think that when you are all alone, so to speak, and you have the textbook and it is not so much that you are sitting in a class and that is your learning experience, but you are told, “Here is your assignment, take care of it” maybe that would tend to develop this idea, you have an internal locus of control, and it is all up to you, and you alone are the decider of your performance, versus “I am going to heavily rely on this teacher and this lecture and this whatever, external thing, and that is going to get me through the class.”

Additionally, Peyton shared that two main values were fostered in his homeschool education: “Time management [...] and fate is in your hands, those were kind of fostered with homeschooling. Big time those two.” Finally, Peyton also shared his motivation for becoming an entrepreneur:

I guess the simple fact that I wanted to control my own destiny, I wanted to be able to get out what I put in, and I think with homeschooling you kind of got that. I don’t know, I didn’t like having a ceiling on my learning when I was a kid and I don’t like to have a ceiling on what I can do in the business world either. So I guess, looking back on it, that mentality was brought about by not wanting to limit myself and knowing that I didn’t limit myself.

Discussion

Since education can have a significant impact on entrepreneurial characteristics and behavior (Gibbs, 1996), the purpose of this paper was to see how a homeschool education influenced entrepreneurial characteristics and activity. The findings from this study proved to be helpful, not only in answering the research question, but by shedding light into an area largely unexplored in the current research literature. Specifically, this study showed how a home education can support and encourage entrepreneurial traits like self-direction, a willingness to be different and take risks, and an internal locus of control. These findings

help to demonstrate the role education can play in not only developing entrepreneurial characteristics, but developing the desire and decision to become an entrepreneur. Indeed, while the effect of a homeschooling education on entrepreneurial characteristics and activities is not clearly represented in the literature, the findings from this study do comport with and add to the existing literature in regards to the influence education can have on entrepreneurial activity (Ekpe *et al.*, 2011; Morrison, 2000).

Next, the findings from this study helped to provide insight into the perspectives of homeschool students, an area where research is needed (Goodman, 2008; Green and Hoover-Dempsey, 2007). Furthermore, the idea of homeschooling being a self-directed, do-it-yourself, autonomous type of learning comports with and add to the existing research on homeschool education (Goodman, 2008; Meighan, 1995; Williams, 1991). Indeed, all of the participants in this study related that their high school years was largely autonomous, with their parents serving more as educational guides rather than disseminators of information. This is in keeping with Ray's (2000) findings that homeschooling can often be student directed. Additionally, the idea of homeschooling being a flexible, non-traditional learning style was articulated by the majority of the participants. This flexible, non-cookie cutter approach allowed the participants in this study to not only have a say in how they learned, but what they learned. This finding reinforces Meighan (1995) and Patterson *et al.* (2007) studies that showed that homeschooling incorporates flexible scheduling and student-centered learning choices. Finally, the findings from this study also helped to reinforce the existing literature on the relationship between internal locus of control and entrepreneurship. For example, Cromie's (2000) contention that an internal locus of control is associated with entrepreneurial activity was supported in the affirmative in this study.

The findings from this study also helped to support some of the claims made in the homeschooling community. For example, the claim that entrepreneurial skills and homeschool skills run on parallel lines, with each requiring a willingness to think outside the box, was supported in the affirmative in this study (Gaddy, 2013). This finding, while not able to be generalized because of the small sample size, suggests that homeschooling may be an ideal method of education for those looking to encourage entrepreneurial characteristics and activity in their children. Indeed, the participants in this study corroborated Turan and Kara's (2007) claim that specific cultural groups can predispose their members toward entrepreneurship and that certain values and beliefs can influence and encourage entrepreneurial traits and activities. Additionally, the findings from this study also substantiated the idea that the way people are educated significantly impacts the development of entrepreneurial characteristics and behavior and that education plays a large role in the development of entrepreneurial activities (Ekpe *et al.*, 2011; Gibbs, 1996).

From a practical viewpoint, this study also identified several areas of future research. Specifically, this study revealed that while a number of studies address the role locus of control plays in traditionally educated students (Cohen *et al.*, 1978; Epstein and McPartland, 1976; Eslami-Rasekh *et al.*, 2012; Nordstrom and Segrist, 2009; Ogden and Trice, 1986), studies addressing the locus of control in homeschooled students are largely absent from the literature. As such, future studies may want to investigate locus of control in homeschooled students, as an internal locus of control is associated with academic achievement (Eslami-Rasekh *et al.*, 2012; Nordstrom and Segrist, 2009), school satisfaction (Epstein and McPartland, 1976), better grades (Ogden and Trice, 1986), and motivation and learning (Cohen *et al.*, 1978).

Conclusion

There were several inherent limitations in this study. First, while the number of cases in this study was in keeping with the literature (Creswell, 2007), the small sample size does not

allow for theoretical assumptions or generalizability (Creswell, 2007). Additionally, while it was revealed that participants in this study believed their homeschool education at least partly influenced their entrepreneurial characteristics and activity, this influence cannot be taken as causation. Indeed, “one event’s influencing another is neither a necessary nor sufficient condition for its being a cause of that event” (Bigaj, 2012, p. 1). Second, since snowball sampling was used, selection bias could have been present and could have limited the representativeness of the sample (Cohen and Arieli, 2011). As such, additional research about homeschooled entrepreneurs should be undertaken, especially with a larger, more diverse demographic set. Additional studies should also focus on the teaching styles of home educators and the impact that teaching style has on the entrepreneurial characteristics of their children, as this study revealed that the participants in this study largely had a self-directed education. Furthermore, since all five participants in this study had gone on to higher education after their homeschooling, future studies may want to focus solely on homeschooled entrepreneurs who did not complete higher education as it is unclear what role this higher education played on the development of the participants’ entrepreneurial activities. Until then, however, this study has highlighted the role homeschooling plays in the development of entrepreneurial characteristics and activities and has narrowed the gap on this subject in the existing research literature.

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