ABSTRACT

There is anecdotal evidence as well as a small but growing research literature indicating there may be a higher incidence of dyslexia amongst entrepreneurs compared to business managers and to the general population. Studies indicate that while dyslexics may resist entry into mainstream businesses due to their generally low literacy levels, there appears to be no such barrier for dyslexics wanting to start new ventures. Given that dyslexics also dislike imposed structure, have strong oral and spatial skills, are intuitive/insightful/curious as well as resilient and determined, it is not surprising that they gravitate towards self-employment as opposed to highly organised corporate professions.

INTRODUCTION

This paper is part of the primary author’s PhD research that aims to define and explore the emerging field of Dyslexic Entrepreneurship. The present paper explores the literatures of dyslexia and entrepreneurship to ascertain commonalities and differences and constructs three tentative typologies that illustrate these. Some previous research has been carried out in the UK and the US, but we have located no similar research in Australia.

A small but growing body of evidence has found that there may be a higher incidence of dyslexia amongst entrepreneurs compared both to corporate business managers (managers of established businesses) and to the general population. Additional evidence indicates that, while many dyslexics may resist entry into or may be discriminated against in mainstream business (due primarily to literacy issues), there may be no such barrier for dyslexics in creating a new venture, that is, in becoming entrepreneurs.

The present exercise aims to identify fruitful theoretical orientations in this sparse field and further to map the possible communalities or congruities against the various difference or incongruities. Four theoretical orientations come to mind.

Psychological trait theory

Researchers and writers have been interested in identifying traits common to entrepreneurs (Shaver and Scott 1991; Bolton and Thompson 2000) and to dyslexic individuals (Logan 2008; Smith 2008). This approach is grounded in the study of people who tend to exhibit similar characteristics. For example, achievement, creativity, determination, family development, educational development, and technical knowledge are factors that usually are exhibited by successful entrepreneurs. This reasoning promotes the belief that certain traits established and supported early in life will lead eventually to
entrepreneurial success. For dyslexics, there are also certain traits that arise; persistence, conceptual thinking, intuitiveness, visual spatial skills and resilience are all recognised as characteristics of those with this disorder.

Studies hint that visual thinking, innovation, delegation of authority and problem solving are common in both dyslexics and entrepreneurs. Given that dyslexics also dislike imposed structure, it is not surprising that they gravitate toward self-employment as opposed to organised, literacy-focused professions such as business management.

Logan (2009) found in the UK and the US that there is a significantly higher incidence of dyslexia in entrepreneurs than in corporate business managers and in the population in general. Her research also found that dyslexic entrepreneurs are able to grow their businesses more quickly and that they usually own more businesses than non-dyslexic entrepreneurs. Logan indicates that these factors were mainly attributed to the various coping strategies employed by dyslexics, such as good levels of oral communication and their ability to delegate.

An initial review of the literature reveals that dyslexics and entrepreneurs do have a several common traits. Characteristics such as innovative problem solving, big picture thinking and a general dislike for ‘rules’ and structure are cited in both the entrepreneurial literature and the dyslexia literature (Becherer and Maurer 1999; Everatt, Steffert et al. 1999; Cross and Travaglione 2003; Ehardt 2009). This leads us to speculate that parallel character traits may form an initial explanation of the high incidence of being both dyslexic and entrepreneurial.

Nonetheless, trait theory of entrepreneurs has always been problematic. The idea that the characteristics of entrepreneurs cannot be taught or learned, that they are innate traits one must be born with, has long been prevalent. Like all disciplines, entrepreneurship has models, processes and case studies that allow the topic to be studied and knowledge to be acquired.

**Social Margination and Displacement**

This school of thought holds that society affects or eliminates certain factors that project the individual into an entrepreneurial venture. As Rondstadt (1984) has noted, individuals will not pursue a venture unless they are prevented or displaced from doing other activities. The point is that being disadvantaged may actually lead one to become more entrepreneurial. For example, Sease and Goffee (1980) (Willsdon 2005) suggest that “entrepreneurs may be more likely to emerge from those groups in society which are deprived or marginal; that is, groups which are discriminated against, persecuted, looked down upon or exceptionally exploited” (pp. 107). Some research has even looked at entrepreneurs in the context of being deviant or marginalised characters. Shaperso (1975) addressed the issue of the entrepreneur as being a displaced person. This corresponds with what is called the social marginality theory put forward by Stanworth and Curran (1976), who suggest the perceived incongruity between an individual’s prodigious personal attributes and the position they hold in society might propel them to be entrepreneurial. Hagen (1962) suggests that where the behaviour of a group is not accepted or where a group is discriminated against, then a psychological disequilibrium would occur. This might drive a person into enterprising behaviour to compensate for this imbalance. Dyslexics are also subject to displacement and social marginalisation due to their learning disability. Usually isolated at school owing to the literacy inabilities, dyslexics face increasing childhood adversity as they progress through the school system (Smith 2008).

**Neurobiology**

Beyond this, there is even some tantalising evidence indicating that there may also be neurobiological determinants for entrepreneurship. For example, research has shown that higher testosterone levels can facilitate entrepreneurial behaviour and that higher-than-usual testosterone levels in utero were found to be underlying learning disorders such as dyslexia (Geschwind and Behan 1982; Geschwind 1983; White, Thornhill et al. 2006). Another biological determinant may even be gender: A higher male-to-female gender ratio in both entrepreneurs and dyslexics has been shown (Duane 2001; Acs,
Arenium et al. 2004; Gupta, Turban et al. 2009; Hawke, Olson et al. 2009). The neurobiology of dyslexic entrepreneurs has yet to be explored.

**Environmental factors**

This school of thought deals with external factors and surrounding conditions and influences that affect a potential entrepreneur’s lifestyle. These can be either positive or negative forces in the moulding of entrepreneurial desires. The focus is on institutions, values and more, that when grouped together, form a socio-political environmental framework that strongly influences the development of entrepreneurs (Van de Ven 1993). For example, if a middle manager experiences the freedom and support to develop ideas, initiate contracts, or create and institute new methods, the work environment will serve to promote that person’s desire to pursue an entrepreneurial career. Another environmental factor that often affects the potential development of entrepreneurs is their social group. The atmosphere created by the support of friends and relatives can influence the desire to become an entrepreneur.

**DYSLEXIA**

**Background**

Dyslexia was first recognised in the 1890s when it was known as ‘congenital word blindness’ and it is now considered to be one of the most common childhood learning disorders. It affects 5% - 17.5% of the general population (Shaywitz, Shaywitz et al. 2001; Fisher and DeFries 2002; Taylor and Walter 2003; van Kraayenoord 2008; Ehardt 2009). Dyslexia might be defined as an impairment of phonological processing which manifests in a lower level of literacy, particularly reading and spelling (Castles, Bates et al. 2006; Coltheart 2006; Hudson, High et al. 2007). Dyslexia also negatively affects an individual’s executive functioning abilities particularly in the area of working memory (Helland and Asbjørnsen 2000; Reiter, Tucha et al. 2005). Dyslexia occurs in people with average or above-average intelligence that have had adequate exposure to educational opportunities, it is therefore not considered to be correlated with intelligence or associated with the childhood environment (Fisher and DeFries 2002; Zambo 2004).

As most dyslexics experience ongoing struggles within various academic environments, they usually experience low levels of self-efficacy and self-esteem and often do not feel like they fit within schools, universities, corporate or even social systems (Hall, Spruill et al. 2002; Taylor and Walter 2003; Lackaye, Margalit et al. 2006; Griffin and Pollak 2009). Studies conducted in the UK, Sweden and the USA found that up to 52% of the prison population in these countries are dyslexic, which highlights the social isolation that can be experienced by people with this disorder (Morgan and Klein 2000). Although some report dyslexia as a gift (West 2005; Davis and Braun 2010), it is primarily considered a disadvantageous disorder that is familial, inheritable and incurable (Geschwind 1983; Shaywitz, Shaywitz et al. 2001; Castles, Bates et al. 2006; Coltheart 2006; Olson 2006; Hudson, High et al. 2007; Ehardt 2009).

**Strengths and talents of dyslexics**

Although the disorder is considered unfavourable, it can be accompanied with certain talents. These strengths include: excellent mechanical skills, logical problem solving skills, global visual spatial skills, enhanced creativity and innovation, 3D visual abilities and conceptual thinking (Everatt, Steffert et al. 1999; Morgan and Klein 2000; von Károlyi, Winner et al. 2003; West 2005; Ehardt 2009; Tafti, Hameedy et al. 2009). Certain professions such as medicine, engineering, art and design, appear to have higher numbers of dyslexics within their cohorts when compared to other professional groups and there is certainly no shortage of dyslexics in the Nobel Laureate lists (West 2005). It is important to note that these are correlations and the causal direction of these hypotheses has yet to be confirmed.
Testosterone, gender and learning disorders

An interesting related notion has become known as “The Testosterone Hypothesis”. Geschwind and his colleagues undertook research in relation to testosterone levels and the incidence of left handedness, learning disorders and immune diseases (Geschwind and Behan 1982; Geschwind and Behan 1982; Geschwind 1983; Galaburda 1990). According to the hypothesis, elevated levels of testosterone present in the developing brain in utero slow neural development resulting in delayed growth of the left hemisphere of the brain and creating abnormalities in the left temporal speech area of the brain, which may account for the higher incidence of learning disorders such as dyslexia (Geschwind and Behan 1982). This higher level of testosterone may also explain the gender ratio of dyslexia which is generally believed to favour males, although there are differing opinions in relation to the extent of this incidence (Geschwind and Behan 1982; Miles, Haslum et al. 1998; Shaywitz, Shaywitz et al. 2001; Hawke, Olson et al. 2009).

Traits of Dyslexics

The table below summarises the characteristics of individuals with dyslexia as reported in the literature we have reviewed to date. In addition to the strengths and talents previously discussed, Davis (2010) asserts that dyslexics are also “highly intuitive and insightful” and “more curious than average” (pp. 5). Interestingly, the literature also reveals that dyslexics are very determined. Those who are able to persevere in their academic study or professional careers, especially ones that utilise their special abilities in areas that are of strong interest to them, appear to be able to transcend their literacy barriers to enjoy successful outcomes in their chosen fields (Hall, Spruill et al. 2002; Taylor and Walter 2003; West 2005). The key to these successful outcomes appears to be the need for an extremely high level of interest by the dyslexic person in their chosen field (Hall, Spruill et al. 2002). Highly successful dyslexic entrepreneurs include Richard Branson, Jamie Oliver, Bill Gates, Steve Jobs and Anita Roddick, to name a few.

Table 1 Characteristics of dyslexics

<table>
<thead>
<tr>
<th>Dyslexic</th>
<th>Low self-esteem/efficacy</th>
</tr>
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<tbody>
<tr>
<td></td>
<td>Low level literacy skills</td>
</tr>
<tr>
<td></td>
<td>Dislike of structure</td>
</tr>
<tr>
<td></td>
<td>Poor executive functioning skills</td>
</tr>
<tr>
<td></td>
<td>Socially isolated, perceived by others and self as ‘different’</td>
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<tr>
<td></td>
<td>External locus of control</td>
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<tr>
<td></td>
<td>Expert delegator</td>
</tr>
<tr>
<td></td>
<td>Conceptual /3D thinker</td>
</tr>
<tr>
<td></td>
<td>Excellent mechanical skills</td>
</tr>
<tr>
<td></td>
<td>Strong global spatial skills</td>
</tr>
<tr>
<td></td>
<td>Intuitive/insightful/curious</td>
</tr>
<tr>
<td></td>
<td>Logical problem solver</td>
</tr>
<tr>
<td></td>
<td>Resilient/determined</td>
</tr>
<tr>
<td></td>
<td>Innovative</td>
</tr>
<tr>
<td></td>
<td>Proficient verbal communicator</td>
</tr>
</tbody>
</table>

ENTREPRENEURS

Background

Entrepreneurs have long been regarded as playing a central role in job creation and economic development, and as such have been the subject of many years of academic research (Drucker 1985; Timmons and Spinelli 2003; Poh Kam, Yuen Ping et al. 2005; Rhee and White 2007; Loos, Koellinger et al. 2010). There are many differing views in the literature in relation to the validity of using specific theories such as cognitive, trait and motive in relation to the defining entrepreneurship. Timmons and...
Spinelli offer a succinct description of entrepreneurship as “a way of thinking, reasoning, and acting that is opportunity obsessed, holistic in approach, and leadership balanced” (2003, pp.47). Issues such as heredity, testosterone levels, adversity, familial business background, external environment and emotional intelligence have all been raised as possible contributors to entrepreneurship, but definitive causality still alludes us (Miner 2000; Cross and Travaglione 2003; Timmons and Spinelli 2003; Kirby 2004; Schaper and Volery 2004; White, Thornhill et al. 2006; White, Thornhill et al. 2007; Smith 2008; Tang, Tang et al. 2008).

Characteristics

It is generally agreed that entrepreneurs have the following key characteristics. They are innovative and proactive. They have a high need for achievement and an internal locus of control. Their tolerance for ambiguity is high and they are single-minded in their determination. They have high levels of self-efficacy, are autonomous, and seek and exploit opportunities wherever possible (Boyd and Vozikis 1994; Cross and Travaglione 2003; Timmons and Spinelli 2003; Schaper and Volery 2004; White, Thornhill et al. 2006; Levander, Raccuia et al. 2008; McGee, Peterson et al. 2009).

Entrepreneurs are also considered to be committed and determined leaders who are self-reliant and highly motivated to succeed and therefore make the necessary sacrifices required in order to achieve their goals (Cross and Travaglione 2003; Timmons and Spinelli 2003). Their ability to innovate is another key entrepreneurial characteristic. In fact, Drucker (1985) stated that “innovation is the specific instrument of entrepreneurship” (pp. 27). It is repeatedly reported in the literature that entrepreneurs take calculated risks as opposed to having a high risk propensity (Drucker 1985; Timmons and Spinelli 2003), however, research conducted by Levander (2008) found that uncalculated risk-taking was a permeating characteristic of the sampled entrepreneurs. Delegation can also pose a problem for entrepreneurs as they are autonomy seekers and generally very self-reliant. Whilst this lack of delegation allows them to get things done on their own terms, it also inhibits the growth of an organisation and can cause discord amongst those working for them as it can be construed as a lack of trust and belief in his or her team members (Carlopio, Andrewartha et al. 2001).

The table below summarises the characteristics of entrepreneurs as reported in the literature reviewed to date.

Table 2 Characteristics of entrepreneurs

<table>
<thead>
<tr>
<th>Entrepreneur</th>
<th>Determined/persistent</th>
<th>Opportunity seeking</th>
<th>Innovative</th>
<th>Highly motivated</th>
<th>Autonomous/self-reliant</th>
<th>High EQ</th>
<th>High tolerance of ambiguity</th>
<th>Internal locus of control</th>
<th>High propensity for risk</th>
<th>High need for achievement</th>
<th>Conceptual thinker</th>
<th>High self-efficacy</th>
</tr>
</thead>
</table>

Neurobiological determinants of new venture creation

Neurobiology is the scientific study of the brain and nervous systems which incorporates other research areas such as psychology, medicine and chemistry. Research in this interdisciplinary area has improved greatly since the advent of MRI’s, as neurobiologists are now able to investigate live brain activity in a non invasive fashion in patients. Variables such as gender and testosterone and their affect
on new venture creation have also been investigated in this field, as have learning disorders such as dyslexia and ADHD.

Testosterone levels, which Meikle et al (1988), (White, Thornhill et al. 2006) assert are 80% heritable, have been linked with behaviours such as risk-taking, assertiveness and persistence, which are known entrepreneurial traits (White, Thornhill et al. 2006; White, Thornhill et al. 2007). White et al (2006) conducted an exploratory study utilising saliva samples to establish the effect of testosterone on new venture creation based primarily on risk-taking behaviour as a common characteristic in both the testosterone and entrepreneurial literature. The study concluded there was a positive correlation between higher testosterone levels and risk-taking. In fact, White et al (2006) went as far to state “A specific heritable characteristic of each individual, their testosterone level, explains something about the likelihood of that individual being significantly involved in a new venture” (pp. 30). Interestingly, in a further study conducted by White et al (2007) found there was a higher likelihood of new venture creation from individuals who have high levels of testosterone combined with a family history of business.

Gender presents another interesting variable in the neurobiological profile of entrepreneurs. Although a definitive reason is unknown at this stage, more men than women are involved in entrepreneurial activities (Acs, Arenium et al. 2004; Bosma and Levie 2009). Access to venture capital, male business networks, and appropriate education opportunities have been reported as potential issues for female entrepreneurs entering new venture territory, however these problems are dispelled as myths by Brush, Carter et al (2010). Bosma and Levie (2009) report that key factors such as differing cultures and customs can affect entrepreneurial participation opportunities and therefore the incidence of women in these activities. Nonetheless, as reported by Acs, Arenium et al (2004) “there are almost twice as many men who are active entrepreneurs than women, and these differences are consistent across age groups and across most countries” (pp.27).

Other neurobiological determinants of entrepreneurial behaviour may include learning disorders such as dyslexia and ADHD (Levander, Raccuia et al. 2008; Smith 2008; Logan 2009). Although there is a limited body of research at this time, studies conducted by Logan have contributed greatly to the current knowledge in this field. Logan’s research in the USA and the United Kingdom have given an insight into the incidence of dyslexic entrepreneurship with studies revealing that of the entrepreneurs sampled, 35% in USA and 19% in the UK were dyslexic. Both the UK and the USA studies also showed statistically significant differences between the dyslexic and non-dyslexic cohort of entrepreneurs in the sample. The dyslexic entrepreneurs owned more businesses, employed more people, delegated more, had a higher risk profile and owned their businesses for less time than non-dyslexic entrepreneurs. Both the dyslexic and the non-dyslexic entrepreneurs were strongly influenced by family role models or external mentors.

Smith (2008) has taken an innovative research approach trawling the internet for information pertaining to well-known dyslexic entrepreneurs. He draws parallels between the educational and familial backgrounds of dyslexics and entrepreneurs in an effort to understand the combined phenomenon. Smith correlates the resiliency required by dyslexics to overcome their formative school years with the perseverance and determination commonly attributed to the ‘single mindedness’ of successful entrepreneurs. Smith also surmises that the well-documented talents of dyslexics fit within the framework for successful entrepreneurial activities.

Conceptual thinking is a common trait ascribed to dyslexics and entrepreneurs. Dyslexics are predominantly visual thinkers and as such are able literally to see the ‘big picture’, a characteristic repeatedly credited to entrepreneurs. Both are also strongly influenced by mentors and both are recognised as engaging verbal communicators. Dyslexics and entrepreneurs are also both cited in the literature as being very innovative, that is, they are people who can see things that others cannot (West 2005; Smith 2008; Davis and Braun 2010).
Figure 1 Trait typology of entrepreneurs and dyslexics showing commonalities

Congruities and incongruities

For all the commonality, however, there are also incongruities that open new research questions.

- The literature generally agrees that entrepreneurs have high self-efficacy, whereas dyslexics have particularly low self-esteem (Hall, Spruill et al. 2002; Lackaye, Margalit et al. 2006; Rhee and White 2007; Tang, Tang et al. 2008). Given that this is the case, how do so many dyslexics become entrepreneurs when belief in self is usually paramount to success?

- Studies show that dyslexics generally have an external locus of control whilst the literature confirms that entrepreneurs usually have an internal locus of control (Bosworth 1983; Carlopio, Andrewartha et al. 2001; Hall, Spruill et al. 2002; Tang, Tang et al. 2008). Internal locus of control is accepted in the literature as having a positive impact on success (Carlopio, Andrewartha et al. 2001). If this is the case, what then is the implication for an entrepreneur who is also a dyslexic and therefore inclined to have an external locus of control? Is their success potential diminished or have they found compensatory strategies to work around their perceived lack of control of their future and environment?

- Delegation is another key area of difference; entrepreneurs by nature seek autonomy (Sexton and Bowman 1985; McKenna 1996). Dyslexics on the other hand are forced at a young age to depend on, rely on and trust other people as a strategy to cope with their learning disorder (Davis and
Braun 2010). That means that effective delegation is a very necessary part of their everyday life. How then does an entrepreneur who seeks autonomy cope with conflicting requirement for high levels of delegation?

- The need for achievement is also cited as a fundamental entrepreneurial trait; however the dyslexic literature does not generally report that this is present in those with this particular learning disorder. If the need for achievement is not high, how does a new venture get off the ground? These questions lead to yet another pertinent point. Are certain disadvantageous traits in dyslexic entrepreneurs (such as lack of self-efficacy, low need for achievement, external locus of control) compensated by strengths (such as expert delegation, creativity and conceptual thinking)? Or is there a sub-group of dyslexics who do not actually have the commonly accepted cognitive traits usually present in individuals with this disorder? If so, is it this group that gravitate toward entrepreneurial endeavours?

Figure 2 proposes a trait typology of dyslexic entrepreneurs based on the literature reviewed to date. The hypothesis offered presumes that the dyslexic entrepreneur utilises the known commonalities of dyslexia and entrepreneurship (see Figure 1) coupled with the complementary strengths existent in both dyslexics and entrepreneurs that would add value to a new venture project and therefore increase success potential.

**Figure 2 Trait typology of dyslexic entrepreneurs**

The typology presented suggests the hypothesis that the combined strengths present in the dyslexic and the entrepreneur would outweigh the limitations of low literacy skills of the dyslexic entrepreneur. For
example, the need for high levels of literacy are offset by the compensatory strategy of delegation; if the dyslexic entrepreneur surrounds themselves with a strong team with sound literacy skills this deficit can be managed appropriately. On the other hand, an entrepreneur who effectively delegates to, communicates with, and empowers his or her team is uncommon (Sexton and Bowman 1985; McKenna 1996). Such an entrepreneur would certainly be able to grow a business far more effectively than one who does not possess this crucial leadership skill. In addition the dyslexic ability of 3D visual thinking presents a new meaning to the term ‘big picture thinking’ that is so important in the creation, innovation and growth of new ventures. Yet another dyslexic trait of solving problems logically would surely add to the success potential of any new venture whilst the entrepreneurial skills of single mindedness and opportunity seeking would combine to create quite a formidable business person. To explore the dyslexic entrepreneur profile further, Figure 3 presents a hierarchy of biological, environmental and cognitive determinants of entrepreneurs, dyslexics, and dyslexic entrepreneurs. It is hypothesised that traits shared by dyslexics and entrepreneurs would inherently be present in dyslexic entrepreneurs, however assumptions are made to ascertain which would be the stronger trait when there is disparity (or incongruity). As dyslexia is a disadvantageous neurobiological disorder, it has been assumed that strengths and weaknesses associated with dyslexia may be found to be stronger than the generally accepted cognitive traits of entrepreneurship, for example, no matter how successful a dyslexic entrepreneur may become, he or she will still have low literacy levels and as such probably low self-esteem.

Figure 3. Hierarchy of determinants of the dyslexic entrepreneur

<table>
<thead>
<tr>
<th>DETERMINANTS</th>
<th>Entrepreneur</th>
<th>Dyslexic entrepreneur</th>
<th>Dyslexic (non-entrepreneur)</th>
</tr>
</thead>
<tbody>
<tr>
<td>COGNITIVE</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Visual &amp; Conceptual Thinker-- “can see things that others cannot”</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>High self-esteem</td>
<td>Low self-esteem</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Above-average EQ</td>
<td>Intuitive/curious</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Voracious Reader</td>
<td>Uses technology/visual/audio/people to learn due to low level literacy skills</td>
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<tr>
<td></td>
<td>Strong verbal communicator</td>
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<tr>
<td></td>
<td>Weak executive functioning skills</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Average/above-average IQ</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENVIRONMENTAL</td>
<td>Highly influenced by mentor(s)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Self reliant</td>
<td>Proficient delegator/reliant on others</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Seeks autonomy</td>
<td>Dislike of structured environments</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Resilient</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Father/Mother entrepreneur</td>
<td>Familial History of dyslexic &amp; entrepreneurship</td>
<td>Father/Mother dyslexic</td>
</tr>
<tr>
<td>SOCIAL MARGINALITY</td>
<td>Perceived by self and others as being different</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Underachievement at school</td>
<td>Negative school experience</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Experienced childhood adversity</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BIOLOGICAL</td>
<td>Higher incidence of non-right handedness</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Male gender ratio</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Higher than average testosterone</td>
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</table>
CONCLUSION

Much research is yet to be done in the emerging field of “dyslexic entrepreneurship”, however as established in this paper, the literature does demonstrate analogous neurobiological, social marginality, environmental and cognitive traits in both entrepreneurs and dyslexics. In addition, the talents found in the disadvantageous disorder of dyslexia appear to naturally complement the creativity and innovation required for entrepreneurship and hence may offer a preliminary explanation of incidence, but clearly the issue of causality still remains unanswered. Do dyslexics pull entrepreneurship toward them because it fits their creative, innovative and conceptual thinking strengths or is it their low level of literacy that pushes them into new venture creation as one of the few viable employment options available in a world still hooked on the written word?

This question and others will form the foundation of a PhD research project that will take an epidemiological approach to identifying factors and causations of the dyslexic entrepreneur phenomenon during 2011/2012.

NOTES

1 An interesting study conducted by Hall et al (2002) researched “emotional resiliency, stress levels, locus of control and need for achievement” in 17 college students with learning disabilities (LD) and 17 without (NLD) and found that the usual traits present in people with LD were not evident in the group studied. The LD group (88.24% of which had reading disabilities) attained considerably higher scores for Need for Achievement than the NLD cohort; there was no significant difference in Locus of Control results for both groups of students; the LD group actually displayed higher resilience, initiative and goal orientation when compared to NLD students (Hall, Spruill et al. 2002). Although this was a small sample, it does raise the possibility that some dyslexics may not have the usual cognitive styles generally associated with this learning disorder and accepted in the literature.
REFERENCES


Davis, R. D. and E. M. Braun (2010). The Gift of Dyslexia. Why some of the brightest people can't read and how they can learn., need to add.


Levander, A., I. Raccuia, et al. (2008). Entrepreneurial Profiling- stimuli, reaction, action A COGNITIVE APPROACH TO ENTREPRENEURSHIP.


