



Through the Looking Glass: Enhancing Public University Librarians' Entrepreneurial Competencies in Facing the Impact of Globalization (Conceptual Paper)

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ABSTRACT

Human capital and employees' performance are recognized as the premium key resource for organizational competitiveness. However, changes in global finance and organizations are affecting many organizations, including public sectors. Albeit changes, employees across sectors are constantly required to sustain accountability towards performance. Thus, to survive changes while sustaining competitive advantage, organizations and its employees are recommended to initiate new practices and behaviors. For example, the current financial's condition restricted the public university libraries' abilities to better serve the community. To accommodate this situation, public universities are recommended to practice self-funding, despite their anticipating role as a public service provider. This direction creates dilemma to micro units such as the libraries, which existence is solely to serve its community. The libraries are constantly criticized as a cost center and being opted to cease service as its functions may be replaceable by other information provider such as Google. Thus, it is important that, the librarians must voluntarily make efforts to re-tool their current competencies and revise their patrons' preferences as well. The efforts are critically needed if the librarians desire to survive the changes and stay relevant. Thus, this paper postulates a multi-construct antecedents, which consist of entrepreneurial inclinations which may be useful. The overarching theory is based on the Theory of Planned Behavior and Resource Based View. This paper reviews literatures associated with the constructs and recommend the advantages of applying it accordingly. It is hopeful that this investigation will contribute additional knowledge on the influence of those constructs towards individuals' work performance as well as adding optional information.

Keywords: Change, Entrepreneurial Competencies, Public Universities, Public University Librarians

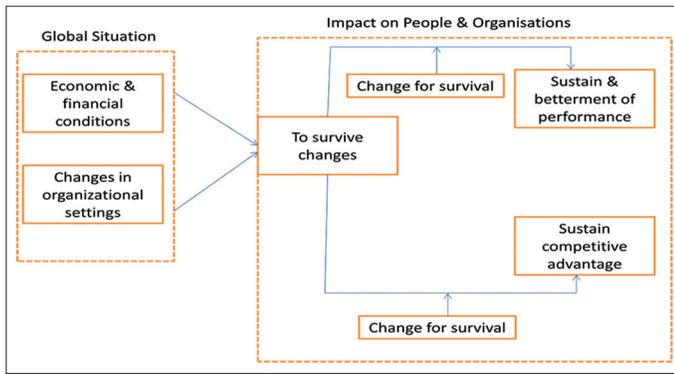
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1. INTRODUCTION

Human capital and employees' performance are the premium key resource for national competitiveness (Aguinis, 2007; Gaston, 2014). Nevertheless, changes within global financial and organizational settings challenge performance. Changes include uncertainty, hostility and heterogeneity conditions (Alarape, 2009; Miller and Friesen, 1983; Morris et al., 2007). Likewise, it is also known as the forces of dynamism, munificence, complexity, chaos and contradiction (Alarape, 2009; Morris et al., 2002). Changes may create "Janus face" effect – two sharply contrasting relationship between context. For instance, changes transformed industries through innovation (Miller and Friesen, 1983) and

increases hostility in competitiveness (Frese and Fay, 2001). Innovation creates a better product and services, but complicate work environments as completing an individual's job task becomes sophisticated. Figure 1 highlights the impact of changes and how people and organizations may address these changes to sustain performance and competitiveness in the longer term.

Figure 1 demonstrates the recurring global effect that manifest in the form of economic, financial and organization's transformation. The changes include new market possibilities and technological advancement, which amplifies through the incremental rate of innovation (Miller and Friesen, 1982). Innovation boost technology development and refurbish organizational settings. In other word,

Figure 1: Changes and impact towards people and organizations

change is a catalyze that transforms economic, financial and organization. Nevertheless, changes intensify heterogeneity within markets through product diversification, increase hostility in competitiveness, multi marketing orientation and complicates the employees' job scope and working environment as well (Alarape, 2009; Frese and Fay, 2001; Miller and Friesen, 1982). Amidst the changes, organizations and employees are unceasingly expected to sustain accountability (Mahmood, 2003; Morris et al., 2007). However, the latter situation does increases managers' anxieties, as they are expected to conduct acute prediction on profit generation as well. Their capabilities are at stake as they must be wise enough to position their judgment and decision ability with the swift expansion in the industrial growth, technology, customer preferences and complex demand for a new product or services (Alarape, 2009). Hence, everyone must demonstrate the ability to survive. To further withstand global transformation, firms and employees must be vigilant towards recursive changes in people's demand, the trending technology and competitive environment to preserve performance and competitiveness (Ruiz-Ortega et al., 2013). Likewise, it is now a necessity for employees to voluntarily embrace change for their very own survival.

1.1. Change and Challenges

Changes swept across national economy sectors; the private sectors, the social or non-profit sectors and public sectors (Tosterud, 1999). In public sectors, the unconstructive side of changes includes economic volatility and poor monetary controlled. This has forced the central authorities to employ vigilant spending and cost cutting (Kont and Jantson, 2013). Financial restriction affects public welfare system support and reduces government sponsorship (Morris et al., 2007). Even worst, the declining government's sponsorship may affect public education sectors like the public universities. Consequently, most universities regulate prudent expenditure among their departments. Nevertheless, the financial restriction affects departmental operations such as the academic library. For the library, besides elevating operational cost, the fee for several compulsory subscriptions such as the online databases, accelerate continuously. Universities in Greece, Hong Kong, Pakistan and USA has reinforced cost cutting on their library units to reduce the operating cost, or worse, shutting down the libraries (Garoufallou et al., 2013a; Ka, 2005; Mahmood, 2003; Spalding and Wang, 2006). Unfortunately, it has been perceived that the libraries and the librarians are replaceable with the virtual information provider, such as Google. Therefore, to survive, the

libraries and the librarians must courageously explore beyond the usual managerial solution to accommodate changes and challenges. It is now a necessity for the employees to recognize new profit opportunities and dare to take action towards the success of the new opportunities.

Likewise, organizations are constantly experiencing transformation to determine its future competitiveness. For public universities, the new landscape consists new accreditation strategies, global ranking competitiveness and challenge from private and virtual universities (Anis et al., 2015; Gaston, 2014; Ujang, 2012). It is important for employees to re-evaluate their current skills, knowledge and attitude to support their organizations' effort. Together with changes, customers' need, wants and demands are becoming complex than their predecessors. For public universities, "customers" is represented by the clients (students, academics, interdepartmental employees and related agencies) and stakeholders (the premier sponsors or policy makers) (Morris et al., 2007). Thus, the changes within the academia, should be re-matched strategically with employees' competencies in order to attain customer's satisfaction and sustain competitiveness.

1.2. Managing the Challenges

Due to the aforementioned conditions, non-profit sectors are recommended to engage in entrepreneurship to keep up with the current challenges (Morris et al., 2007). Entrepreneurship is viewed with great interest by public sectors as a profitable option towards the growth of national assets, citizens' wealth and performance enrichment (Chell, 2008; Morris et al., 2007). Moreover, entrepreneurship corresponds well with changes in economic and innovations as it allows the "act of discovering, creating, evaluating and collaborating unique resources into new profit opportunities and possibilities" (York and Venkataraman, 2010). Etzkowitz (2003) in Todorovic et al. (2011) explicate that universities are "slow-changing bureaucracies" as changes must first occur at the departmental level known as "quasi-firms." Etzkowitz (2003) further defines quasi-firms as a "series of research groups that have firm-like qualities," which permit them to function in a more commercial manner (Todorovic et al., 2011. p. 130).

In Malaysia, public universities are encouraged to take up self-funding by getting more entrepreneurial. Universiti Teknologi Malaysia for instance, empowered departments, including the libraries, to engage in self-financing activities (UTM Vice Chancellor Office 2015). Endorsed by the claims that entrepreneurship is capable to generate "value beyond a business border," (Baron and Henry, 2011; Krueger and Brazeal, 1994; Pitelis, 2002; Scanlon and Crumpton, 2011) the librarians are being convinced to venture into new fund possibilities by employing entrepreneurial mind-set and actions (Sen, 2006; 2010). Likewise, more library administrators demonstrated high interest in entrepreneurship as a means of fund generation (De Vries, 2003). Table 1 explicates the present academic transformation and the challenge confronted by public university libraries which have been discussed by authors such Ujang (2012), Gaston (2014) and Anis et al. (2015).

Table 1: Academia landscape and the library challenge

Criteria	Conventional academia	New academia	The library challenge
Income resources/ generation	Student fees; government funding	Endowment, entrepreneurship activities, sponsorship	Overcoming criticism as cost absorber Suggestion: Fundraising, incorporating entrepreneurial mindset, efforts and actions
Focus courses	Undergraduates	Postgraduates, researchers (local and alliances)	Budget limitation to pursue related materials/innovations Suggestion: Re-tool competencies and re-align competitiveness – e.g., Employs new competencies, more market orientated, new strategies
Teaching methods	Face-to-face	Combination between face-to-face and e-learning	Clarity about patrons' expectation - market orientation Suggestion: Strategize clearly, collaboration efforts (with Google, university's business unit), strengthen inter functional coordination
Staff specialization	Focused area, staff expertise and departmentalized	Cooperation between faculties, research centre and team work	Overcoming the risk averse, bureaucratic and complacent attitude Suggestion: Inculcate new competencies (entrepreneurialism, strategic decision making)
Academic period	Long summer holidays	Operating throughout the year	Higher operational cost than before Suggestion: Employ voluntary assistance from supporters of the library; innovate; revamp market strategies
Research funding	Government grants	Involvement of undergraduate in research progress; external sponsor; self-sponsor; corporate funder	Additional information and competency to fulfill the patron's expectation Suggestion: New skill, knowledge and attitude; new market direction and strategies

Source: Ujang (2012), Gaston (2014) and Anis et al. (2015)

Table 1 indicates several areas that highly affected by the new academia landscape. But most of all, operational cost, sponsorship and fund generation are the major concern due to current financial restriction. Instead of being totally dependent on government sponsorship or academic's fees, the universities are suggested to acquire self-sponsorship and embark on entrepreneurial attempt. Following the central organization's effort, less critical departments such as the library, must tactfully demonstrate the relevancy to overcome criticism as a cost absorbing unit by incorporating new entrepreneurial mindset, efforts and actions among its managers and employees. Thus, the authors articulate the usefulness of employing new skills, knowledge and attitude among librarians to align dynamically with the current academic challenge. To start-off, it is very important to examine the capability of the library's workforce to pick up new opportunities, ability to formulate judgment and decision based on forecasted profits and finally, boldness to actually take action to pursue the intended profits. Thus, understanding the librarians' entrepreneurial competencies will be a useful start-up towards the self-financing activities.

Consequently, the decision to conduct the intended behaviors must originate from a person's desire or intention to actually act upon his or her beliefs (Ajzen, 1991). This assumption is strongly supported by the influential theories of human behaviors, the Theory of Planned Behavior. The theory is basically about understanding and predicting a person's behavior (Armitage and Conner, 2001; Nishimura and Tristán, 2011; Gibson and Frakes, 1997). Thus, the prediction of the degree of the librarian's abilities in behaving entrepreneurially, is transpired by the general rule of Theory of Planned Behavior, which predicts that, "the more favorable of the person's attitude towards the behavior, and the more a person actually believes that others will also favor him or her to perform the behavior, the person's intention or desire to actually perform the behavior will be stronger" (Ajzen, 1991). Likewise, resource

based view is a strategic based theory that further supports the entrepreneurial intention. Resource based view indicates that, a competent person is an individual with the capability of acquiring and exploiting the resources towards value creation process (Mitchellmore and Rowley, 2010). Competency approach, does match the long-term orientation characteristic of competitiveness (Man et al., 2002; Rungwitoo, 2012). It is paramount to emphasis on developing and utilizing competencies because human capabilities are a significant intangible asset that are able to increase superior performance, barricades challenger's replication and sustain competitive advantage in a longer term (Aguinis, 2007; Alvarez and Busenitz, 2001; Barney, 1991; Hayward, 2005). Moreover, entrepreneurship does involve what Schumpeter (1934) termed as "new combinations" of resources, that suggest that an entrepreneurial person is the one who combined productive factors in some new way; a product; a production method or a market (Alvarez and Busenitz, 2001).

2. ENTREPRENEURIAL COMPETENCIES

Entrepreneurship themes are largely driven by economics, psychology and sociology studies (Frese and Gielnik, 2014). The earliest research is on economic development by Schumpeter (1934). Next, it revolves towards psychological perspectives by focusing on people, pioneered by McClelland (1967). Earlier studies on entrepreneurs begun with the personality trait approach (Li, 2009) and it is also marked as "competencies" (Sánchez, 2011). Within the psychological constructs, personality traits are the most researchable variables as entrepreneurial behavior (Sánchez, 2011). Competency is emphasized through one's ability in capturing a related or different set of behaviors, following the person's foremost intention (Boyatzis, 2008). Intention, as affirmed by the Theory of Planned Behavior, directs the person to carry on certain actions (Ajzen, 1985; 1991). Competence

and competency are actually distinct in meanings. Competency refers as “behaviors that an individual demonstrates to achieve superior performance” (Mitchelmore and Rowley, 2010. p. 93). It is popularized by Boyatzis (1982) and American scholars such as Spencer and Spencer (1993) and Baum (2007). Whereas, competence is more applicable in the United Kingdom and refers as “achieving a minimum standard of performing in their given job” (Mitchelmore and Rowley, 2010. p. 93). According to Man et al. (2002. p. 133), research on competency include inputs (antecedents to competencies), process (task or behavior leading to competencies) or outcomes (achieving standards of competence in functional areas). This article will utilize on both meanings and refers competency as “*the underlying individual characteristics such as the knowledge, skills, and/or abilities required to perform a specific job effectively and maximizing superior job performance*” (Baum et al., 2007; Spencer and Spencer, 1993).

Entrepreneurship is continually linked with the competency domain (Baum et al., 2007; Li, 2009; Man et al., 2002). Within entrepreneurship, competency is analogous to the quality of

action, adopted by entrepreneurs as well as the overall activities and behavior of entrepreneurs themselves (Bird, 1995; Gilmore, 2011). It is also referred as a set of behaviors, related to being entrepreneurial, which exhibited by individuals to achieve higher performance (Boyatzis, 2008; McClelland, 1973). Thus, entrepreneurial competencies are the characteristics carried by individuals, with ability to commence and transform opportunity into profits (Mitchelmore and Rowley, 2010). This article refers entrepreneurial competencies as “*the underlying characteristics carried by individuals across occupational classifications, that include risk taking, need for achievement, self-efficacy, locus of control and tolerance of ambiguity towards attaining survival, accountability and competitiveness. The characteristics resulted in the individual's ability to perform a job role beyond prescribed minimal job tasks as well as ability to recognize, conduct risk take, take proactive action, innovate and transform unique possibilities into profits*” (Bird, 1995; Man et al., 2002; Mitchelmore and Rowley, 2010; Morris et al., 2007; Pitelis, 2002; Shane and Venkataraman, 2000; York and Venkataraman, 2010). Table 2 depicted literatures on entrepreneurial competencies which

Table 2: Literature review on entrepreneurial competencies

Author	EC components	Sector	Findings	Future recommendations
Man et al. (2002)*	<ul style="list-style-type: none"> • Opportunities • Relationship conceptual • Organizing • Strategic commitment 	Profit sector	Model of SME competitiveness	<ul style="list-style-type: none"> • The need to identify which individual competencies lie in each area • The appropriate variables within each construct • Empirical studies in the form of qualitative methods • To carry out inter-industry or cross-cultural comparisons of different competency areas • The affect on other constructs of SME competitiveness
Llewellyn and Wilson (2003)	Big five model	Profit sector	A conceptual article	<ul style="list-style-type: none"> • More empirical evaluation on the topic • Identify the precise measurement • Researchers engage in a wider dialogue on the development of the field
Rodermund (2004)*	<ul style="list-style-type: none"> • Agreeableness • Conscientiousness • Extraversion • Neuroticism • Openness 	Profit and non-profit sector	Personality traits (big five) predicted entrepreneurial competence	Personality profiling for entrepreneurial success
Man and Lau (2005)*	<ul style="list-style-type: none"> • Opportunities • Relationship • Analytical • Innovative • Operational • Strategic 	Profit sector	Significantly higher in innovative, strategic learning	<ul style="list-style-type: none"> • Investigate new pattern of entrepreneurial competencies • Comparison between countries
Rauch and Frese, 2007b*	<ul style="list-style-type: none"> • Big five model • Need for achievement • Innovativeness • Proactive personality • Generalized self-efficacy • Stress tolerance, • Need for autonomy • Internal locus of control • Risk taking 	Profit sector	Traits matches with entrepreneurship: <ul style="list-style-type: none"> • Self-efficacy • Proactive personality • Need for achievement • Stress tolerance • Goal orientation • Need for autonomy • Innovativeness • Endurance • Flexibility • Passion for work 	<ul style="list-style-type: none"> • To develop a fuller contingency theory of owners' personality traits (along the lines of Situation x Traits interactions) • Models of entrepreneurial success should include: Owners' personality traits as supplemental variables. To develop a consistent theory about entrepreneurship, it does takes personality variables into account

(Contd)...

Table 2: (Continued)

Author	EC components	Sector	Findings	Future recommendations
Li (2009)	<ul style="list-style-type: none"> • Opportunities • Relationship • Conceptual • Organizing • Strategic • Commitment 	Profit and non-profit sectors	EC among entrepreneurs are higher than non-entrepreneurs	<ul style="list-style-type: none"> • Develops specific competency training modules for universities and aspiring business person • Develops entrepreneurial typology
Mitchelmore and Rowley (2010)*	Personality constructs	Profit sector	A meta-analysis article	Consensus on entrepreneurial competency terminology; comprehensive framework on entrepreneurial competency; comparison between entrepreneurial and managerial competencies and between individual and organizational competencies; investigate the entrepreneurial competencies from various context As central focus towards business success
Noor Hazlina Ahmad, et al. (2010)*	Strategic, conceptual, opportunity, learning, relationship, personal, ethical, familism	Profit sector	<ul style="list-style-type: none"> • A strong predictor for business success • Important to determine business success within hostile and dynamic business environment 	Longitudinal studies on: <ul style="list-style-type: none"> • Entrepreneurial ventures across occupational classification • Entrepreneurial competencies portfolio within entrepreneurial firms Develops a portfolio of entrepreneurs competencies
Jain (2011)	<ul style="list-style-type: none"> • Entrepreneurial motives • Psychological (traits and characteristics) • Attitudinal • Demographic 	Profit sector	A meta-analysis article	Longitudinal studies on: <ul style="list-style-type: none"> • Entrepreneurial ventures across occupational classification • Entrepreneurial competencies portfolio within entrepreneurial firms Develops a portfolio of entrepreneurs competencies
Kochadai (2011)	<ul style="list-style-type: none"> • Attitudinal (tolerance of ambiguity, locus of control, performance) • Behavioral (need for achievement, risk taking, innovation) • Managerial competencies 	Profit sector (SME)	Higher levels of tolerance of ambiguity, locus of control, need for achievement, innovation	Develops a portfolio of entrepreneurs competencies
Sánchez (2011)*	<ul style="list-style-type: none"> • Risk taking • Proactiveness • Self-efficacy 	Education sector	Higher EC for students in the entrepreneurial programme than the controlled group	Develops entrepreneurial programme for aspiring entrepreneurs
Osman and Rahim (2012)*	<ul style="list-style-type: none"> • Behavioral • Managerial competencies 	Education sector	Managerial competencies all significant	Larger respondent
Haziah Sa'ari et al. (2013)	<ul style="list-style-type: none"> • Opportunity recognition • Strategic thinking • Initiating innovation 	Public sector	EC influence innovative performance	<ul style="list-style-type: none"> • Develops innovative performance measurement • Comparison between public and private sectors in term of innovative performance • Replication of the study • Model to establish EC and business growth • Qualitative research
Mitchelmore and Rowley (2013)*	Personal and relationship; business and management; entrepreneurial personality; human relations	Profit sector	EC is higher among female entrepreneurs	<ul style="list-style-type: none"> • Model to establish EC and business growth • Qualitative research
Jena and Sahoo (2014)*	N/A	Profit sector	EC is significant towards managerial competencies	Investigate various types of managerial competencies to improve managerial performance
Leutner et al. (2014)*	Big five personality	Random sector	Extraversion and agreeableness are the big five dimensions that significantly predicted entrepreneurial success	<ul style="list-style-type: none"> • Include non-self-report measures of entrepreneurial achievements to assess the predictive validity of independent variables • The need to examine other relevant constructs that vary amongst individuals, IQ and motivation • Establish big five and META's incremental validity in the prediction of entrepreneurial success • Longitudinal studies will be useful in establishing the causal nature of these relationships

(Contd)...

Table 2: (Continued)

Author	EC components	Sector	Findings	Future recommendations
Kyndt and Baert (2015)*	<ul style="list-style-type: none"> • Perseverance • Self-knowledge • Orientation towards learning • Awareness of potential • Decisiveness • Planning for the future • Independence • Building networks • Ability to persuade • Seeing opportunities • Insight into the market • Social and environmentally conscious conduct 	Profit sector	<p>Study 1: Entrepreneurs with more experience would score higher on the competencies than those with less or no experience</p> <p>Study 2: Market and perseverance are crucial for entrepreneurs</p>	<ul style="list-style-type: none"> • Investigation of entrepreneurs' learning process • Longitudinal study to determine behavioral change over times
Tehseen and Ramayah (2015)*	<ul style="list-style-type: none"> • Strategic • Conceptual • Opportunity • Relationship • Learning • Personal • Ethical • Familism 	Profit sector	N/A	N/A
Barazandeh et al. (2015)	<ul style="list-style-type: none"> • Entrepreneurial skills • Entrepreneurial personality 	Profit sector	EC impact business performance	Qualitative approach

*The journals are indexed in SCOPUS. SME: Small and medium enterprises

indicate the construct as diversified components across various entrepreneurial proclivity (Mitchelmore and Rowley, 2013).

Table 2 indicates the continuity of personality traits as a favorable theme among articles associated with entrepreneurial competencies from the year 2000 onwards. This affirms that personality traits are a constant predictor to act and behaving entrepreneurially (Rauch and Frese, 2007b); a valid predictor of employees' job performance which exists across all occupational groups (Leutner et al., 2014); useful to explain regularity in individual behavior and; demonstrate explanation why people behave differently in similar circumstances (Llewellyn and Wilson, 2003). The Table 2 also indicates the usefulness to take up investigation from the non-profit perspectives as entrepreneurialism is no longer resides solely among entrepreneurs or business owners (Baron and Henry, 2011; Jain, 2011; Pitelis, 2002).

Five well-known personality traits are identified by Jain (2011), Rauch and Frese (2007b); risk taking, need for achievement, self-efficacy, locus of control and tolerance of ambiguity (Jain, 2011; Rauch and Frese, 2007b). Risk taking has a strong history with entrepreneurship (Gürol and Atsan, 2006). It describes a person's ability to perceive the probability of receiving the rewards associated with success of a proposed situation (Brockhaus, 1980), regardless of the severe situation or the consequences of failures. McClelland's (1961) regard the need for achievement as a tendency to choose and persistence in activities towards achievement regardless of any failure (Okholina, 2010; Rauch and Frese, 2007b). Self-efficacy is about confidence in one's own ability and judgment to carry out a particular behavior to produce results

(Armitage and Conner, 2001; Jain, 2011). Likewise, it shares a similar concept with Perceived Behavioral Control as indicated in the Theory of Planned Behavior. Locus of control is described by Rotter (1954; 1966), as the degree to which people believe they are in command of their behavior towards the events in their lives (Fauziah, 2010). Levenson (1981) divides it into three dimensions; an individual belief in internal control, control of others and chance (Littunen 2000). Finally, tolerance of ambiguity is a person's ability "to handle rejection or attraction, and how he or she react to stimuli perceived as unfamiliar, complex, dynamically uncertain, or subject to multiple conflicting interpretations" (Fauziah, 2010; Furnham and Marks, 2013). The characteristics of this trait include individual's tolerance, which could either be positive or negative against risk and disorder or setbacks to overcome the lack of sufficient resources (Fauziah, 2010; Kuratko and Hodgetts, 2004). These personality traits are argued as a factor that influence a person's towards the action of discovering, evaluating and exploiting entrepreneurial opportunities (Jain, 2011; Lee and Peterson, 2000). Moreover, personality characteristics are postulated as an effective predictor of coping with uncertain and changing situations (Pulakos et al., 2000).

Over the years, the personality traits research produced a mixed result (Llewellyn and Wilson, 2003). Table 3 depicts the related discussion and unveils that, despite the critics on the usefulness of personality studies in entrepreneurship, Gartner (1989) for instance, admits that it is still relevant, provided that researchers offer better measuring scales and broader setting especially with supporting numbers of meta-analysis studies. Thus, the usage of traits to discuss a person's personality is still appropriate (Chell

Table 3: Entrepreneurial personality traits discussion

Issue	Author (year)	Statement	Recommendation/future research
Opposing articles	Miller (2015)	“Janus face” effect – two sharply contrasting relationship between the traits	Investigate the possible downsides of the entrepreneurial personality to distinguish between entrepreneurs who contribute and those who don't
	Okhomina (2010)	Psychological traits alone aren't significance in explaining entrepreneurial behavior	Employ a more representative sample from multiple industries with provisions for inter-industry variations in life cycles
	Aldrich and Wiedenmayer (1993) and Aldrich (1999) in Crant (1996) and Gartner (1989) and Gartner (1989)	Unsatisfactory and questionable measuring instruments in explaining entrepreneurial behavior and performance	N/A Ground studies in the context of previous research; articulate a specific theory about the nature of entrepreneurship and its relationship to the entrepreneur; define key ideas and variables, conscientiously identify and select samples; and use current social psychology and personality theory-based measurement instruments or provide construct validity evidence for newly constructed measures
Supporting articles	Frese and Gielnik (2014)	Meta analytic studies rebuttal the previous empirical findings by clearly states the usefulness of personality variables in entrepreneurship	Psychological perspective could further improve entrepreneurship concept
	Østergaard (2014)	More accurate measurement scales will proven the usefulness of personality variables in explaining entrepreneurial inclination	To warrant valid measurement tools
	Suárez-Álvarez et al. (2014)	Accurate and improved measurement scales will proven the usefulness of personality variables	Extent to culture other than Spain develop enterprising portfolio
	Rauch and Frese (2007a) Rauch and Frese (2007b)	Specific personality traits like risk taking, need for achievement, etc., explains better than broad traits like big five personality variables must be taken into account to develop a consistent theory about entrepreneurship	Future studies and meta analytic studies includes cognitive ability into the variables: <ul style="list-style-type: none"> • Identify moderating variables of the constructs • Develops a fuller contingency theory of owners' personality traits • Success - models of entrepreneurial success should include owners' personality traits as supplemental variables
	Brandstatter (1997)	Personality structure stimulate a person intention towards entrepreneurial action	Information on an aspiring founder's personality structure, together with information on motives and abilities, may be useful for an individualized training in entrepreneurial behavior

et al., 1991; Crant, 1996; Frese and Gielnik, 2014; Rauch and Frese, 2007a; 2007b). Moreover, the authors hope that, through the investigation of entrepreneurial personality traits among librarians, it could facilitate the libraries to transform from the cost centre to profit centres as being done by the public universities in Australia and USA (Blanchard, 2005; Cuillier and Stoffle, 2011; Eisenhower, 2011).

Any individuals can take an entrepreneurial conduct (Baron and Henry, 2011; Pitelis, 2002). Venkatraman (1997) argues that the existence of opportunities in any environments will not be materialized unless there is an “entrepreneur” who knows how to exploit those opportunities (Jain, 2011). The “know how” capability

is the reflection of one's competence or competency (Mitchelmore and Rowley, 2010). Likewise, the term “entrepreneur” is transferable within any individuals or groups across all types of firms despite of their position or occupational classifications (De Vries, 2003; Pitelis, 2002; Shane and Venkataraman, 2000). Moreover, Krueger and Brazeal (1994) explicitly states that “the environment need not be already rich in entrepreneurs, but has the potential for increasing entrepreneurial activity.” A study by Allen (1998) that reports that librarians are risk averse and lack of achievement orientation could be contended due to today's context. Librarians are recommended to venture into fund possibilities by employing entrepreneurial mind-set and actions (Sen, 2006; 2010). The shift towards entrepreneurial inclination is influenced by the

current changes within economic and financial conditions as well as organizational settings (Morris et al., 2007).

3. CONCLUSION

There are three categories of change; those who observe change, those who participate in change and the agent of change. To move forward and become more relevant, the public university libraries and librarians should embrace entrepreneurialism as a means to transform from a cost absorbed unit to profit initiator (Blanchard, 2005; Eisenhower, 2011). Yet, success is rare as in the case of the internal system, developed in the Goa University Library (Madhusudhan, 2008). Nevertheless, the librarians must embrace the paradigm shift as a way forward for the libraries to emerge as an agent of change instead. Thus, by employing new competencies such as being more entrepreneurial, it is hopeful to position the library as one of the university's strategic business units and continue to be relevant to the central organization in the longer term.

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