

COMPARING THE FINANCIAL LITERACY AND TECHNOPRENEURSHIP BEHAVIOUR OF UNEMPLOYED AND EMPLOYED GRADUATES

Hassan Barau Singhry
Abubakar Tafawa Balewa University Bauchi, Nigeria
hbarausinghry@gmail.com

ABSTRACT

The objectives of this paper were (1) to compare the financial literacy and technopreneurial behaviour of unemployed and employed graduate and (2) to examine the relationship between graduate financial capabilities and technopreneurship behaviour. The study employed a post-positivism cross-sectional survey where 122 unemployed graduates and 100 employed graduates completed the financial literacy and technopreneurship behaviour questionnaire. Data was analyzed through non-parametric 2 independent samples and simple linear regression with SPSS 20.0. Result showed that data was not normal and therefore, Mann-Whitney U test was employed to compare the perception of unemployed and employed graduate on financial literacy and technopreneurship behaviour. The finding showed that (1) there is significant difference between the financial literacy of unemployed and employed graduate (2) there is significant difference between the technopreneurship behaviour of unemployed and employed graduate (3) there is a significant relationship between financial literacy and technopreneurship behaviour. The limitation of this research lies in the sample size. Future research is suggested to use larger sample size as well as predict the causal effect between introduce a mediator or moderator on financial literacy and technopreneurship behaviour. The study strongly suggests the need to incorporate financial literacy and literacy in entrepreneurial development studies. Thus it is relevant to agencies that finance and trained nascent graduates entrepreneurship. The original value of the study is that it examines entrepreneurial financial literacy and technopreneurship behaviour of unemployed graduates and employed graduates which was not examine in the past and therefore, serves as a first stream of empirical research. The paper also contribute to theory testing by using the lenses of financial literacy theory and theory of planned behaviour (TPB) to explain entrepreneurial financial literacy and technopreneurship behaviour.

Keywords: 1) Financial literacy 2) technopreneurship behavior 3) unemployed graduates and employed graduates 4) theory of financial literacy 5) theory of planned behaviour

1. Introduction

Entrepreneurship is a strategy for graduate employment, wealth distribution, poverty eradication, economic growth and development. Graduate entrepreneurship will continue to remain an emergent and topical area of research in Nigeria. Every year Nigerian institutions of higher learning produces large number of graduates

who cannot be holistically employed in both the public and organized private sectors (Adawo, 2013). Each year, approximately 1.8 million students graduates from higher learning institutions in Nigeria. Statistics have revealed that more than 80% of these graduates remain unemployed (Chinyere & Faith, 2012). Furthermore, statistics from NBS (2014) shows that of the total level of employment across economic

activities in Nigeria, only 11.9 graduate are employed. As a result, most graduate are encouraged to consider self-employment as a strategy to earn a living.

Success of graduate entrepreneurial development rely on the combination of entrepreneurial skills, financing skills and motivation (Odia & Odia, 2013). Even though Nigerian graduates possess basic entrepreneurial skills, lack start-up capital continues to affect their entrepreneurial behaviours (Kerr & Nanda, 2009; Ovat, 2013). Adeniyi, Foluke, Omotoso, & Shobanke (2014) suggested that graduates face financial difficulties and access to formal and informal finance due to lack of resources, credit history credibility, and collateral. Furthermore, new graduates have not work, have limited income and savings and thus find it difficult to start a new venture. On the other hand, employed graduates who are mostly married do not have savings because their limited income are spent on children and family. While satisfying family needs are the main stimulus why parents save, they remain the foremost reason why parents cannot do so.

Financial literacy is essential for the success of new businesses (Tremblay, Daou, & Brie, 2014). Financial capabilities have been investigated from consumers' decision making perspective (Hilgert et al., 2003), South African youths (Oseifuah & Oseifuah, 2011) and further studies are needed to relate financial capabilities with youth entrepreneurship. Thus, the objective of this study are twofold: (1) to examine the relationship between graduate financial capabilities and technopreneurship behaviour; and (2) to compare the financial capabilities and technopreneurial behaviour of unemployed and employed graduate.

2. Literature Review

Technology entrepreneurship is concerned with transformation of theoretically feasible technological ideas and knowledge into prosperous ventures. Technology entrepreneurship is an

entrepreneurial approach with pronounced effect on wealth creation, employment and poverty reduction and has therefore attracted academics, practitioners and policymakers. However, this area of entrepreneurship is under-research with empirical studies largely concentrating on corporate entrepreneurship, social entrepreneurship, and academic entrepreneurship (Singhry. 2012). In fact studies looking at financing technopreneurship is not clear and this may be owing to the assumptions that all types of entrepreneurship followed the same methods and approaches of financing.

Financial literacy is a combination of financial literacy and financial management and therefore, includes mathematical literacy, comprehension skills, decisions about how to use money, and financial responsibility. The US Financial Literacy and Education Commission defined financial literacy as "the ability to make informed judgments and to take effective actions regarding the current and future use and management of money" (Basu, 2005). Financial literacy is: "[. . .] the combination of consumers'/investors' understanding of financial products and concepts and their ability and confidence to appreciate financial risks and opportunities, to make informed choices, to know where to go for help and to take other effective actions to improve their financial well-being" (Atkinson & Messy, 2010).

Thus, financial literacy includes knowledge, skills, attitudes, action and behavior of the individual about the role and relevance of informal and formal financial bodies. On the other hand, financial management includes ability to manage money while meeting financial obligations; ability to keep track of expenses; ability to plan and save for future sake; ability to make decision and invest using own and borrowed fund; and ability to be constantly informed about various source and types of finance as well as economic activities (Hoelzl & Kapteyn, 2011).

Different countries have developed varied programmes aimed at encouraging

graduate entrepreneurship, self-employment, job creation, wealth creation, and economic development. These programmes have tripartite agenda such as helping nascent and existing entrepreneurs to develop networks, skills, and overcome financial difficulties (Tremblay et al., 2014). Therefore there is need to investigate how nascent graduate entrepreneurs perceive as the best options to finance their future technology entrepreneurs. The aim is to mitigate bureaucracy of accessing entrepreneurial financing and high cost of borrowing to graduate technology entrepreneurs.

Theoretical Framework

The paper uses the theory of financial literacy and the theory of planned behaviour (TPB) (Ajzen, 1988; Fishbein & Aizen, 2010) to explain the financial literacy and technopreneurship behaviour of unemployed graduates and employed graduates. Financial literacy theory argues that the behavior of people with a high level of financial literacy might depend on the prevalence of two thinking styles according to dual-process theories: intuition and cognition (Glaser & Torsten, 2013). Dual-process theories embrace the idea that decisions can be driven by both intuitive and cognitive process. The theory argue that financial skills and competence help individuals' budgets, save, and invest. Financially literate individuals are capable of putting pressures on financial organizations to develop, improve and deliver quality financial services (Stone, 2012). Van Rooij, Lusardi & Alessie (2011) show that people with less financial literacy are unlikely to invest in shares. Abreu & Mendes (2010) suggest that financial literacy determine individuals' portfolio diversification strategy. Thus, the paper argues that the theory of financial literacy can be applied in a study of technopreneurship behaviour and therefore incorporated with the theory of planned behaviour (TPB).

The theory of planned behaviour (TPB) is a very dominant theoretical lens for studying entrepreneurial behavior (Armitage & Conner, 2001). The (TPB) presupposes that behaviour is planned and intentional (Ajzen, 1988). The theory postulates that a greater control over behaviour is largely linked with strong intentions to engage in or withdraw from that behaviour (Fishbein & Aizen, 2010; Todd & Mullan, 2011). Intention is thus determined by attitude, subjective norms, and perceived behavioral control. Armitage & Conner (2001) suggested that the theory of planned behaviour is effective in predicting individual behaviors and behavioral intention determines action (Donald, Cooper, & Conchie, 2014). The theory is also very useful at predicting entrepreneurial behaviour (Maes, Leroy, & Sels, 2014; Karimi, Biemans, Lans, & Chizari, 2013; Linan & Chen, 2009).

Sources and types of start-up financing of graduate entrepreneurship in Nigeria

Operating a technology-based firm is more expensive and as a result, founders have to explore different bundles of financing options. To develop capabilities of acquiring finances from funding bundles, individuals needs financial literacy and capabilities, negotiating skills with funding sources, and strategies for launching a new firm (Atherton, 2010). There are two major sources of financing graduate entrepreneurship in Nigeria. These are the informal and formal sources. The type of financing in the informal sources comprises of own savings and funds from family and friends. The informal sources is important especially when acquiring funds from the formal sources is difficult and non-accessible.

This source is easier to new graduates when family and friends thought that the prospective owner possess the capabilities, social ties, and entrepreneurial traits to operate a successful technology-intensive firm. Having an own funds provides a 'signaling effects' advantage.

The signaling effect is a show of commitment and confidence of the owner. It is capable of attracting attention from funding bodies by indicating that the venture has potentials because risk has already been taken by the owner. However, while many unemployed graduates understand the importance of savings, they are unable to do so because they have not work. On the other hand, employed graduate are not able to save because the income may not be enough to even cater for basic and family needs.

The formal financing options is most preferred for its long-term effect. The types of financing under the formal sources includes government grants, business partner, bank loans, and venture capital. The government of Nigeria is introducing various measures for the development of graduate entrepreneurship. Programmes of National directorate of employment (NDE) and SURE-P have policies targeting the training of graduate. Being aware that funding is critical to new venture success, government has introduced funding after training Within this programme, graduate are trained into craftsmanship and upon completion of the training are given grants to start a venture.

Realizing the benefits of entrepreneurship, governments are active at funding start-up businesses (Wonglimpiyarat, 2013a). The government finance start-up through the Central Bank of Nigeria (CBN). The apex bank established the Entrepreneurship Development Centres (EDCs) which organized entrepreneurial training and financing for unemployed graduates across Nigeria. Between April 2008 and December 2009, EDCs have trained 40,435 prospective entrepreneurs and generated 358 enterprises. The EDCs have equally assisted 375 of their graduates to access N107.9 million loans from financial institutions (Polycarp & Dangana, 2012).

Equity financing is the “process of raising money for company activities by selling common stocks or preferred stocks

to individual or institutional investors” (Wonglimpiyarat, 2013b). This method of financing is difficult for new venture and therefore not appropriate for graduate start-up. As a result the may seek finance from partnership. Usually through active or dormant partners. Entrepreneurs that approach banks for loans must comply with banks’ requirements. One of the conditions is provision of collateral to leverage risks as well as double-digit interest on loans. These conditions makes bank loans unattractive for graduate entrepreneurs (Iakovleva, Solesvik, & Trifilova, 2013).

Even though, most fresh graduate do not have financial resources for start-up, their level of education is an advantage at negotiating and obtaining bank loans (Abbasian & Yazdanfar, 2013). Despite their level of education, formal financial institutions such as banks usually reject outright loan application from unemployed graduate. This discrimination is due to lack of credit worthiness which are evaluated based on lack of previous loan history, business experience, business plan and personal wealth and risk (Atherton, 2010; Abbasian & Yazdanfar, 2013).

Venture capital (VC) is an innovation financing strategy that is more suitable for funding high-growth technology firms. Venture capital finance provides an early finance to new and technology-intensive enterprises. Venture capitalist are actively involved in equity participation, long-term investment; and venture management. Graduate can attract venture capitalist financing by developing a good business plan (Adawo, 2013). Even though venture capitalists control a firm shares at early stages, they divest their shares over period of 3-5 years as an exit strategy. The exit strategy is started when the venture goes public and begin selling shares on a stock market. Venture capital usually has financial intervention of government agencies and companies. The aim of government participation is to provide a facilitating condition and inspire

people into entrepreneurship and commercialization (Wonglimpiyarat, 2013a). Government partners with venture capital to attract and motivate promising entrepreneurs to finance their businesses (Wonglimpiyarat, 2013b). While, sufficient venture capitalization improves future growth of new firms, probability of failure is associated with insufficient funding.

Hypothesis Development

Financial capabilities and techno -preneurship behaviour

Financial capabilities helps individuals to budget properly, identify suitable financial services and products, know how and where to seek for entrepreneurial and innovative financial advice, and are make them an exploited by financial swindles (ASIC, 2003). Financial literacy leads to decrease in loan defaults, increase in spending power, innovation, and competitiveness, foster the confidence of financial service institutions; as well as having multiplier effect on both social and economic activities (Currie, 2005). Poor financial literacy has been related with low saving rates, escalating consumer, poor retirement plans, high rate of social, mental, and emotional tensions (Oseifuah & Oseifuah, 2011). The Global Entrepreneurship Monitor in 2006 report that poor financial capabilities limit entrepreneurial activity of South African youth (Bosma & Harding, 2006). While Hilgert et al., (2003) suggest a correlation between financial capabilities and entrepreneurial behaviour.

Atherton (2010) point that lack of financial capabilities discourage people from starting new ventures. Previously studies have investigated access to both formal and informal sources of finance of immigrants and natives, men and women. Despite these studies, research on the relationship between graduate financial capabilities and entrepreneurial behaviour of new-venture creation remain unknown. While there is difference between access to bank loans between immigrants and

natives in Sweden (Ram, Smallbone, Deakins, and Jones, 2003), no difference was found in Australia and (Abbasian & Yazdanfar, 2013). Oseifuah & Oseifuah (2011) concluded that there is above average financial literacy among South African youths. In line with this argument and the entrepreneurial life cycle approach and theory of planned behaviour (TPB), the following hypothesis is postulated:

H1: There is no difference between the financial literacy of unemployed graduates and employed graduates.

H2: There is no difference between the technopreneurship behaviour of unemployed graduates and employed graduates.

H3: There is a significant relationship between financial literacy and technopreneurship behaviour.

Sample and Measurement

The study is parametric and psychometric where perception of 122 unemployed and 100 employed graduates was investigated in Nigeria. The graduate were randomly targeted and those who qualified to participate in this study were asked to fill a questionnaire. Liñán & Chen (2009) show that university graduates have higher predisposition toward starting a new firm. All scales used in this study have already been developed and validated. However, while some of the scales were adapted, the wordings of others were modified to suit the context of this study. All the variables were measured on 7-point Likert-type measurement scales depicted by 1 = strongly disagree to 7=strongly agree. The measure for technopreneurial behaviour was adopted and modified from Liñán & Chen (2009), which was also used by Iakovleva, Kolvereid, Stephan, Iakovleva, & Kolvereid, (2011) and Chen (2011). Lastly, measures of financial literacy were obtained from Atkinson, Mckay, Kempson, & Collard (2007; 2006) and Chen (2011).

Table 1: Test of Normality

		Financial capabilities	Technopreneurship behaviour
N		222	222
Normal Parameters ^{a,b}	36.0450	38.9955	38.3559
	6.76548	6.88923	7.03414
Most Extreme Differences	.096	.108	.144
	.048	.051	.067
	-.096	-.108	-.144
Kolmogorov-Smirnov Z		1.437	2.150
Asymp. Sig. (2-tailed)		.032	.000
Test distribution is normal			

Table 2: Kaiser-Meyer-Olkin Measure of Sampling Adequacy (KMO - MSA), and Bartlett's Test of Sphericity (BTS), Reliability Test and Factor Loading.

Items	Cronbach's Alpha	Factor Loading	KMO -MSA	Approx. Chi-Square	BT S	Sig
Financial Literacy	.636	.	.746	404.635	28	.000
FNL1	.648	.636				
FNL2	.635	.623				
FNL3	.717	-.702				
		<i>(Dropped)</i>				
FNL4	.579	<i>Dropped</i>				
FNL5	.573	.603				
FNL6	.528	.848				
FNL7	.537	.824				
FNL8	.583	.713				
Technopreneurship Behaviour	.828		.843	649.857	21	.000
TEB1	.891	.841				
TEB2	.723	.796				
TEB3	.617	.781				
TEB4	.752	.775				
TEB5	.757	.779				
TEB6	.767	.808				
TEB7	.646	.840				

3. Research Methodology

The study was conducted in five stages. First was extensive literature review to determine the underlying constructs and dimensions of the study. Second was followed by development of measurement scales which were adopted and modified. Third, the factor loading, reliability, and test of normality were carried out to determine whether the model was fit for further analysis. Fourthly, hypothesis were

tested using multiple regression and independent t-tests based on SPSS 20. Lastly, the results are discussed, concluded and implications provided. The first stage of the data analysis involved the assessment of normality test, determination of reliability using Cronbach alpha, and exploratory factor analysis which assess the sampling adequacy and factor loading of the survey. Results of the test of normality is shown on table one while reliability and exploratory factor analysis

is in table 2. Table 1 shows that the test distribution is non-normal. Based on the outcome of the normality test, a non-parametric sample two test for independent sample was appropriate and therefore, Mann-Whitney U test was used to test hypotheses two and three. Results of the test is provided in table 3 and 4.

The table above shows that all items under financial literacy and technopreneurship behaviour have acceptable Cronbach's alpha of above 0.5. The overall composite reliability (CR) of financial literacy is .636 and technopreneurship behaviour is .828. Six items under financial literacy have factor loading of .603 - .848 while the factor loading of technopreneurship behaviour ranges between .775 - .841. However, two items under financial literacy were dropped from further analysis because of poor factor loading. Financial literacy has the following information: Kaiser-Meyer-Olkin Measure of Sampling Adequacy value of (.746), Bartlett's Test of Sphericity (28), and approximate chi-square (404.635) at 0.00 significant level. On the other hand, technopreneurship behaviour has the following results: Kaiser-Meyer-Olkin Measure of Sampling Adequacy value of .746, Bartlett's Test of Sphericity (BTS) (28), approximate chi-square (404.635). Overall, the Kaiser-Meyer-Olkin Measure of Sampling Adequacy (.843), approximate

chi-square (649.857), and Bartlett's Test of Sphericity (21) at 0.00 significant level. Overall, the Kaiser-Meyer-Olkin Measure of Sampling Adequacy, approximate chi-square, and Bartlett's Test of Sphericity (BTS) are significant at 0.00. Thus, it was concluded that the output of EFA with KMO-MSA values are fit for further analysis (Williams & Brown, 2012).

Table 3 showed that the mean rank of financial literacy for unemployed graduate was 132.93 and for employed graduate was 85.35. Furthermore, the sum of ranks of financial literacy for unemployed graduate was 16218.00 and for employed graduate was 8535.00. It is clear that the mean rank and sum of ranks are not equal. Therefore, the null hypothesis was rejected and it is concluded that there is significant difference between the financial literacy of unemployed and employed graduates. With regard to technopreneurship behaviour, the test showed that there is a significant difference between the technopreneurship behaviour of unemployed and employed graduates. The statistic showed differences in the mean rank of unemployed and employed graduates with respective values of 121.12 and 99.76. By observing the mean rank it is clear that unemployed graduate have greater predisposition of financial literacy and technopreneurship behaviour than employed graduate.

Table 3: Ranks

	Unemployed graduates or Employed graduates	N	Mean Rank	Sum of Ranks
Financial literacy	Unemployed graduates	122	132.93	16218.00
	Employed graduates	100	85.35	8535.00
	Total	222		
Technopreneurship behaviour	Unemployed graduates	122	121.12	14777.00
	Employed graduates	100	99.76	9976.00
	Total	222		

Table 4: Test Statistics^a

	Financial literacy	Technopreneurship behaviour
Mann-Whitney U	3485.000	4926.000
Wilcoxon W	8535.000	9976.000
Z	-5.501	-2.470
Asymp. Sig. (2- tailed)	.000	.013

a. Grouping Variable: Unemployed graduates or Employed graduates

In order to conclude whether the difference is statistically significant, the test statistics in table 4 was observed. Because the hypotheses were one-tailed, the probability value in table two was divided by two. The two hypotheses were supported. Based on table 4, the following two conclusion are made:

- a. There is a significant difference between the financial literacy of unemployed graduates and employed graduates ($U = 3485$, $P = 0.000$, therefore, $P < 0.001$).
- b. There is a significant difference between the technopreneurship

behaviour of unemployed graduates and employed graduates

($U = 4926$, $P = 0.013$, therefore, $P < 0.005$).

Testing hypothesis 3:

To examine the relationship between financial literacy and technopreneurship behaviour, a simple linear regression was performed. Based on the output in table 5, it was concluded that there is a significant relationship between financial literacy and technopreneurship behaviour ($\beta = .466$, $P < 0.001$). Therefore, technopreneurial behaviour was explained by 21.7% by financial literacy.

Table 5: Regression weight financial capabilities and technopreneurship behaviour

R	R ²	β	t	F	Sig
.466	.217	.466	7.719	59.258	.000

a. Dependent Variable: Technopreneurship behaviour

b. Predictors: (Constant), Financial capabilities

4. Discussion

The paper used a blended theory of financial literacy and the theory of planned behaviour to compare the financial literacy and technopreneurship behaviour of unemployed and employed graduates. It also tested the relationship between financial literacy and technopreneurship behaviour. Null hypothesis 1 which states that there is no significant difference between the financial literacy of unemployed and employed graduates was rejected. Based on the findings, a significant difference was found between the two groups of graduates ($U = 3485$, $P < 0.001$). This findings is similar to Pickernell, Parkham, Jones, Miller, & Thomas (2011) who

suggested that young graduates are more proactive at sourcing resources for entrepreneurial ventures. Hypothesis 2 which stated that there is a difference between technopreneurship behaviour of unemployed and employed graduates was also supported ($U = 4926$, $P < 0.005$). This finding was similar to Capaldo & Fontes (2010) who found that with proper supports young graduates are willing to start new technology-based firms. However, it is contrary to McCarty, R. (2005) who found that graduates were not usually prepared to established new ventures. Hypothesis 3 which states a relationship between financial literacy and technopreneurship behaviour was also supported. This finding is similar with

Tremblay, Daou, & Brie (2014) who found that financial literacy is essential for the success of new businesses.

5. Conclusion and implication

Overall, there are three major findings of the study (a) there is a statistical significant difference between the financial literacy of unemployed graduates and employed graduates; (b) there is statistical significant difference between the technopreneurship behaviour of unemployed graduates and employed graduates; (c) there is a relationship between financial literacy and technopreneurship behaviour of unemployed and employed graduates. To the best of my knowledge this study is the first of its kind where the financial literacy and technopreneurship behaviour of two group of graduates is compared. Previously studies have investigated access to both formal and informal sources of finance of men and women (Atherton, 2010). immigrants and natives in Sweden

(Ram, Smallbone, Deakins, and Jones, 2003), immigrants and natives in Australia (Abbasian & Yazdanfar, 2013), South African youth (Bosma & Harding, 2006; Oseifuah, 2010). While Hilgert et al., (2003) examine the causal link between financial capabilities and entrepreneurial behaviour. An original contribution of this study was the underpinning of entrepreneurial financial cycle theory and the theory of planned behaviour “explain” to compare and explain the financial literacy and technopreneurship behaviour of unemployed graduates and employed graduate. It is essential for policy makers, bankers, and researchers to recognize how financial literacy affects the technopreneurship behaviour. Outcome of this type of study is beneficial to policy makers who are interested in developing graduates entrepreneurship. Being the first in this stream of research, the study is expected to propel further studies by other researchers using different research settings and variables.

6. References

- Abbasian, S., & Yazdanfar, D. (2013). Exploring the financing gap between native born women- and immigrant women-owned firms at the start-up stage. *International Journal of Gender and Entrepreneurship*, 5(2), 157–173. doi:10.1108/17566261311328837.
- Abreu M. & Mendes V. (2010) Financial Literacy and Portfolio Diversification. *Quant. Finance* 10(5): 515-528.
- Armitage, C. J., & Conner, M. (2001). Efficacy of the Theory of Planned Behavior: A meta-analytic review. *British Journal of Social Psychology*, 40(4), 471–499.
- Adawo, M. A. (2013). Graduate Unemployment in Nigeria : Entrepreneurship and Venture Capital Nexus, 4(9), 75–82.
- Adeniyi, B. A., Foluke, M., Omotoso, A. B., & A, S. I. (2014). Micro-credit Facility for Graduates of Vocational and Technical Institutions as a Panacea to Unemployment in Nigeria. *Journal of Economics and Sustainable Development*, 5(2), 80–84.
- Ajzen, I. (1988). *Attitudes, Personality, and Behaviour*. Buckingham., UK: Open University Press.
- ASIC (2003), “Financial literacy in schools: ASIC discussion paper”, Australian Securities and Investments Commission, Melbourne, available at: www.fido.asic.gov.au/fido/fido.nsf/byheadline/Financialpliteracy?openDocument.
- Atherton, A. (2010). Cases of start-up financing An analysis of new venture capitalisation structures and patterns. *International Journal of Entrepreneurial Behaviour*, 18(1), 28–47. doi:10.1108/13552551211201367

- Atkinson, A., McKay, S., Collard, S., & Kempson, E. (2007). Levels of Financial Capability in the UK. *Public Money and Management*, 27(1), 29-36.
- Atkinson, A. M., & Kempson, S. E. & Collard, S.(2006). *Levels of financial capability in the UK. Results of a baseline survey.*
- Atkinson, A., & Messy, F (2010). Assessing financial literacy in 12 countries: An OECD Pilot exercise, Center for research on pensions and welfare policies, Working paper 115/11
- Basu, S. (2005), Financial Literacy and the Life Cycle, Financial Planning Association, Washington, DC.
- Bosma, N. and Harding, R. (2006), Global Entrepreneurship Monitor (GEM) 2006 Report, Babson College and London Business School, London.
- Bygrave, W. and Quill, M. (2007). Global Entrepreneurship Monitor. *2006 Financial Report, Babson College and London Business School, London.*
- Capaldo, G., & Fontes, M. (2001). Support for graduate entrepreneurs in new technology-based firms: An exploratory study from Southern Europe. *Enterprise and Innovation Management Studies*, 2(1), 65-78.
- Chen, Y. (2011). The impact of strong ties on entrepreneurial intention An empirical study based on the mediating role of self-efficacy. *Journal of Chinese Entrepreneurship*, 3(2), 147–158. doi:10.1108/17561391111144573
- Chinyere, T., & Faith, C. (2012). Entrepreneurship and Employability Among Nigerian Graduates. *Mediterranean Journal of Social Sciences*, 3(December), 68–74. doi:10.5901/mjss.2012.v3n16p68
- Currie, B. (2005), “Financial sector involvement in financial capability”, paper presented at “Canadians and their Money: A National Symposium on Financial Capability”, Deloitte & Touche, Ottawa, June 9-10.
- Donald, I. J., Cooper, S. R., & Conchie, S. M. (2014). An extended theory of planned behaviour model of the psychological factors affecting commuters ’ transport mode use. *Journal of Environmental Psychology*, 40, 39–48. doi:10.1016/j.jenvp.2014.03.003
- Fishbein, M., & Ajzen, I. (2010). *Predicting and changing behavior: The reasoned action approach*. New York: Psychology Press
- Glaser, M. & Torsten W. (2013) Run, Walk, or Buy? Financial Literacy, Dual-Process Theory, and Investment Behavior, www.telegraph.co.uk/finance/markets/questor/8904859/Equity-investors-Dont-panic.html *JEL-Classification Code: G11, D81* pp.1-65
- Gudov, A. (2013). Combining formal and informal financial sources. *Journal of Chinese Entrepreneurship*, 5(1), 39–60. doi:10.1108/17561391311297879
- Hilgert, M.A., Hogarth, J.M. and Beverly, S.G. (2003), “Household financial management: the connection between knowledge and behaviour”, Federal Reserve Bulletin, Vol. 89, pp. 309-22.
- Hoelzl, E. & Kapteyn, A. (2011). Financial capability. *Journal of Economic Psychology*, 32, 543–545. doi:10.1016/j.joep.2011.04.005
- Iakovleva, T., Kolvereid, L., & Stephan, U. (2011). Entrepreneurial intentions in developing and developed countries Entrepreneurial intentions in developing and developed countries. *Education + Training*, 53(5), 353–370. doi:10.1108/00400911111147686
- Iakovleva, T., Solesvik, M., & Trifilova, A. (2013). Financial availability and government support for women entrepreneurs in transitional economies Cases of Russia and Ukraine. *Journal of Small Business and Enterprise Development*, 20(2), 314–340. doi:10.1108/14626001311326752

- Karimi, S., Biemans, H. J. A., Lans, T., & Chizari, M. (2013). Understanding role models and gender influences on entrepreneurial intentions among college students. *Procedia - Social and Behavioral Sciences*, 93, 204–214. doi:10.1016/j.sbspro.2013.09.179
- Kerr, W. & Nanda, R. (2009). Financing Constraints and Entrepreneurship. <http://www.nber.org/papers/w15498>.
- Liñán, F., & Chen, Y. (2009). Development and Cross-Cultural Application of a Specific Instrument to Measure Entrepreneurial Intentions. *Entrepreneurship Theory and Practice*, May (1-41-2587), 593–617.
- Maes, J., Leroy, H., & Sels, L. (2014). Gender differences in entrepreneurial intentions : A TPB multi-group analysis at factor and indicator level. *European Management Journal*, 32(5), 784–794. doi:10.1016/j.emj.2014.01.001
- McLarty, R. (2005). Entrepreneurship among graduates: Towards a measured response. *Journal of Management Development*, 24(3), 223-238.
- NBS. (2014). Selected Tables from Job Creation and Employment Survey 2nd - 4th Quarter 2013. *Bureau National Statistics*, (May).
- Odia, J. O., & Odia, A. A. M. (2013). Developing Entrepreneurial Skills and Transforming Challenges into Opportunities in Nigeria. *Journal of Educational and Social Research*, 3(3), 289–298. doi:10.5901/jesr.2013.v4n3p289
- Oseifuah, E. K., & Oseifuah, E. K. (2011). Financial literacy and youth entrepreneurship in South Africa. *African Journal of Economic and Management Studies*, 1(2), 164–182. doi:10.1108/20400701011073473
- Ovat, O. O. (2013). Liquidity Constraints and Entrepreneurial Financing in Nigeria: The Fate of Fresh Graduate Entrepreneurs. *Global Journals Inc. (USA)*, 13(9), 34–40.
- Polycarp, I., & Dangana, A. Y. (2012). The Role of Central Bank Of Nigeria in Enterprise Promotion. In *Workshop* (pp. 1–1).
- Pickernell, D., Packham, G., Jones, P., Miller, C., & Thomas, B. (2011). Graduate entrepreneurs are different: they access more resources?. *International Journal of Entrepreneurial Behavior & Research*, 17(2), 183-202.
- Ram, M., Smallbone, D., Deakins, D. and Jones, T. (2003). Banking on “break-out”: finance and the development of ethnic minority businesses. *Journal of Ethnic and Migration Studies*, 29(4), 663–681.
- Singhry, H. B. (2012). Precursor of technology entrepreneurship: A structured literature review. *Nigerian Journal of Management Technology & Development*, 3(2), 89–98.
- Stone D. (2012) Cultivating Financial Mindfulness: A Dual-Process Theory in Lamdin D.J. (ed.), *Consumer Knowledge and Financial Decisions: Lifespan Perspectives*, International Series on Consumer Science, pp. 15 – 27 DOI 10.1007/978-1-4614-0475-0_2,
- Todd, J. & Mullan, B. (2011). Using the theory of planned behaviour and prototype willingness model to target binge drinking in female undergraduate university students. *Addictive Behaviors* 36 980–986
- Tremblay, M., Daou, A., & Brie, S. (2014). Entrepreneurship in South Africa : looking beyond funding. *Development and Learning in Organizations*, 28(2), 11–17. doi:10.1108/DLO-08-2013-0052
- van Rooij MCJ, Lusardi A, Alessie RJM (2011a) Financial Literacy and Stock Market Participation. *Journal of Financial Economics* 101(2): 449-472
- Williams, B., & Brown, T. (2012). Exploratory factor analysis : A five-step guide for novices. *Australasian Journal of Paramedicine*, 8(3), 1–14.
- Wonglimpiyarat, J. (2013a). Innovation financing policies for entrepreneurial development — Cases of Singapore and Taiwan as newly industrializing economies

- in Asia. *Journal of High Technology Management Research*, 24(2), 109–117.
doi:10.1016/j.hitech.2013.09.003
- Wonglimpiyarat, J. (2013b). The role of equity financing to support entrepreneurship in Asia — The experience of Singapore and Thailand. *Technovation*, 33(4-5), 163–171. doi:10.1016/j.technovation.2012.12.004