

Factors Affecting Entrepreneurial Performance by Differently Aabled: The Case of Western Province, Sri Lanka

*J.M.K. Balasuriya¹, P.J. Kumarasinghe²

¹ *University of Sri Jayewardenepura, Sri Lanka*

minidulabalasuriya@gmail.com

² *University of Sri Jayewardenepura, Sri Lanka*

pivithuru@sjp.ac.lk

INTRODUCTION

Disability has become a key area discussed widely all over the world due to the concerns of human rights. The 2030 Agenda for Sustainable Development clearly states that disability cannot be a reason or criteria for lack of access to development programming and the realisation of human rights (United Nations, 2015). According to the world statistics, they represent the world's largest minority group. There is 15% of the total world population experiencing some kind of disability and it is higher among developing countries. Persons with disabilities are more likely to experience adverse socioeconomic outcomes such as less education, poorer health outcomes, lower levels of employment, and higher poverty rates (World Bank Statistics, 2020). Most extended families have a disabled member, and many non-disabled people take responsibility for supporting and caring for their relatives and friends with disabilities (World Report on Disability, 2011). Within the Sri Lankan context, the Department of Census and Statistics (2012) data reveals, 1.6 per cent of the total population has a disability. The rate of disability remains as 87 per 1000 persons and about 90 per cent of them live in rural areas.

According to De Silva (2007) disability has increased rapidly among the elderly during the period of 1981 to 2001. The government estimates that there are around 2.0 million work-eligible differently abled people in Sri Lanka. National statistics published by the Department of Census and Statistics (2012) shows that around 85 per cent of the working-age population of differently abled people are not in the labour market. In the actual situation, majority of the differently abled are struggling with their lives from two main aspects; economically and socially. Sri Lankan government views entrepreneurship as a key engine for quicker economic progress and as a pathway for the inclusion of differently abled to the active labour market. The government has recognised and coordinates rehabilitation centres and relevant institutions which offer vocational training in different kinds of trades to enable them into entrepreneurial activities. Further, empowering them towards the attitudinal change and financial assistance are crucial in this process.

Statement of the Problem

Differently abled in Sri Lanka experience inequalities from various aspects such as, extreme poverty, limited access to basic needs like health, education, housing and employment opportunities. There are many studies which examined barriers to entrepreneurial performance, with special focus on women entrepreneurs and influence of entrepreneurial education and training. However, considered a minority group, there are no such studies about the performance of the differently abled as entrepreneurs. This creates a need to conduct a study on entrepreneurial performance, in order to create a clear understanding of some of the key factors affecting the entrepreneurial performance of the differently abled especially in the Sri Lankan context. With that prompt aim, this study examines the factors affecting entrepreneurial performance by the differently abled in the Western Province of Sri Lanka. The main objective of the paper is to examine the key factors affecting entrepreneurial performance by the differently abled in the Western Province, Sri Lanka and the moderating effect of gender on entrepreneurial performance by the differently abled in the Western Province, Sri Lanka.

The Concept of Entrepreneurship

The term "entrepreneur" is derived from the French term "entreprendre" which means accepting to do something (Edelman et al., 2016). An entrepreneur is someone who has the creativity and initiative to shape a business to create something new to society (Chowdhury, 2017). Entrepreneurs are people who can put their ideas into action. They are dreamers and thinkers (Phillian and Dolabella, 2007). According to Fadahunsi (2012), entrepreneurs are innovative economic agents. Boellstorff (2019) stated that, entrepreneurs initiate, organise, manage and control the operations of business units. Entrepreneurs say that they are the people who identify the gaps in the market environment and use them to fill them (Maziriri, 2017). Boellstorff (2019) states that entrepreneurship as the creation of value through the fusion of capital, risk, technology and human skills. Participation in revenue-generating projects and economic growth occur when certain economic conditions are most favourable (Fadahunsi, 2012). He also states that economic incentives are the main driver of entrepreneurial activity. A person's desire to live a better life and his inner urge are always associated with financial gain.

Disability and Entrepreneurship

The concept of entrepreneurship for differently abled arises from the low employment of men and women with disabilities. Entrepreneurship is usually a difficult process and is even more difficult for entrepreneurs with disabilities due to the specific challenges they face (Cooney, 2008; Renko et al., 2015). A study by Josephat and Nzaramba (2013) in Rwanda concludes that most of the businesses run by differently abled are light consumer goods related and often see the businesses such as food and beverage, used clothing, car repair, shoe shine and repair, carpentry. They can be grouped as

manufacturers, shop owners, or businesses. Through a study done by Mohamed and Jamil (2015) it was found that entrepreneurs with disabilities may face significant additional challenges compared to other entrepreneurs. In the United States, differently abled are almost twice as likely to be self-employed (ODEP, 2013). A European study also found that self-employment is high among differently abled (Pagan, 2009). Differently abled people often with lack of expertise in business management, corporate law and financial knowledge may find it disadvantageous to have limited training and employment (ODEP, 2013). Entrepreneurship education has been shown to be very important in developing entrepreneurs (Schoof, 2006). Experiments conducted by Charney and Libecap (2000) show that entrepreneurial school education creates self-sufficient entrepreneurs, successful entrepreneurs and industry leaders, and the ability of graduates to generate wealth.

According to a pest management study in Nicaragua, highly trained pesticides earns higher net income than untrained farmers in pest management (Hruska & Corriols, 2002). Using Euro Barometer Survey (2018), King and McGrath (2002) found that young people appear to be the most important contributors to the idea that the current lack of financial assistance is an obstacle to business establishment. The budget deficit was seen as an extreme barrier to an executive approach or an unfavourable economic situation. Credit access allows entrepreneurs to start their own business (Mwangi, 2013).

Education has historically been considered as future investment in many societies. There is ample evidence that getting an education improves an individual's future income and average performance (Angrist and Krueger, 1999). Therefore, another concern is whether this applies to self-selected groups such as the self-employed. There is much research on the many relationships between self-employment, school education, and the realisation of self-employment (Chandler and Hanks, 1994). Corporate success depends on the socio-economic aspects of the school, including education, skills and training (Thapa, 2008). Similarly, training, skills, reporting, and financial assistance are the most important factors contributing to business success (Rose Al., 2006; Gethenya, 2012).

Wambua and Munyithya (2015) found that gradual delegating of responsibility to young people have a different impact on creating male and female entrepreneurship. Anna Christina, Guilherme and Gary d. Button, (2010) found that technology investment is positively linked to firm's performance. The acceptance of new information technologies is a way for people to collect and distribute information, reduce production and labour costs, add value to products and services, and increase the competitive advantage of the company (Nguyen, 2009).

Entrepreneurial Performance

Institutional performance can be judged by different scholars through various interpretations of "successful performance". According to each of these perspectives, a company's performance is

unique. Also, every organisation has its own uniqueness with conditional group and performance measurements are innate localisations (Cameron et al. Wheaton, 1983). According to Van Woren (1997), entrepreneurial performance is the result of the set of entrepreneurial goals. In addition, Ladzani and Van Warren (2002) advocate entrepreneurship performance as taking advantage of existing opportunities to develop business ideas. However, entrepreneurial performance can be measured subjectively and objectively. Absolute performance is used to measure objective values using quantitative data while subjective values use qualitative data by asking perceptive views about performance.(Alhari et al. 2013).

Moderating Effect of Gender on Entrepreneurial Performance

Meanwhile, Zeffane (2012) provides statistical evidence that both men and women have the same average entrepreneurial potential. Nevertheless, several recent studies focusing on women entrepreneurship have found that women have a greater interest in entrepreneurship facilities in the Middle East and various developing countries (Madichie & Gallant, 2012). In South Korea, women entrepreneurs with disabilities are exposed to social stereotypes; the Confucian assumption that women work from home and serve their families brings a great deal to entrepreneurial goals (Hwang & Roulstone, 2015). Turetgen et al. (2008) argued that gender inequality exists in different forms among certain cultures. By Grilo and Thurik, 2005; Verheul et al (2004), from their studies revealed that older men were better connected to entrepreneurship than women.

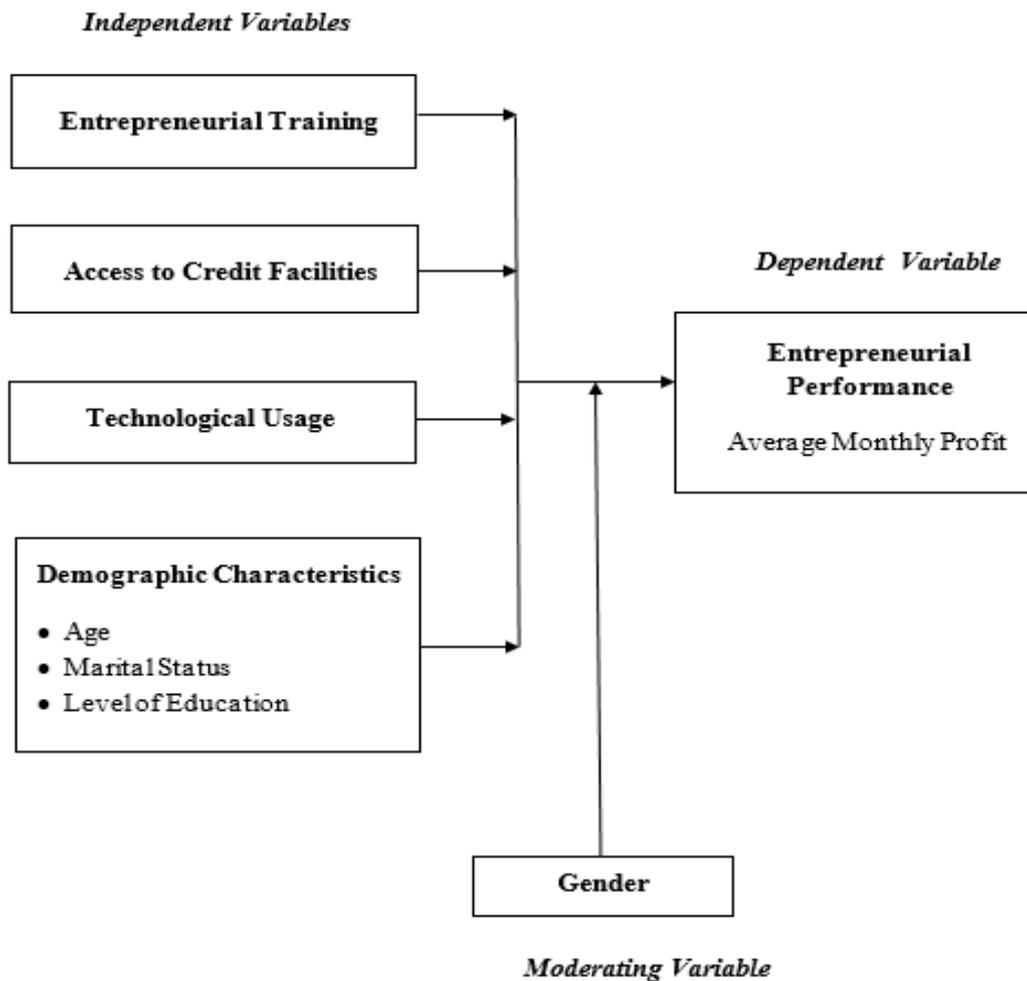
After considering literature found relevant to the study area, the researcher has summarised the context into a specific conceptual framework which directs to achieve research objectives. The study analyses the effect of the selected four main factors; entrepreneurial training, access to credit facilities, demographic characteristics (age, marital status and educational level) and technological usage on entrepreneurial performance. Gender has been taken as the moderating variable to examine the moderating effect on entrepreneurial performance.

METHODOLOGY

The study was carried out in the Western Province, Sri Lanka which includes three administrative districts; Colombo, Gampaha and Kalutara. There were 53,692 who are physically differently abled in the Western Province out of 5.4 million of the total population. This survey used a descriptive survey plan and collected primary data within the target group of people. Descriptive research is the technique for collecting facts by conducting interviews or questionnaires on individual samples. This method has provided a clear way to collect, summarise, provide, and decode information when collecting data. According to Robson (2005), the purpose of a descriptive research plan is to provide an accurate perspective on a person's situation and events. The conceptual framework is a brief

description of the relationships between the variables identified for the study as the statement of problem, objectives, research questions and hypotheses of the study. Figure **Error! No text of**

Figure **Error! No text of specified style in document..2**: Conceptual Framework



specified style in document..1 gives the conceptual framework of the study.

Adopted by Carolyn Ndunge Mutunga (2019)

The preliminary data were collected from differently abled, who are physically disabled and own a revenue-generating economic activity. This was done using a well-structured self-regulatory questionnaire aimed at retrieving the various variables under investigation.

DATA ANALYSIS AND FINDINGS

Reliability is very important in research and it is defined in theories as the proportion of the variance in the measurement scores caused by the differences in the genuine scores owing to the random error

to a great extent (Wuensch 2012). Internal consistency was measured with Cronbach's alpha (α). A low value of alpha could be due to a low number of questions, poor inter-relatedness between items or heterogeneous constructs (Hair et al., 2014). There are different reports about the acceptable values of alpha. According to Hair et al. (2014) acceptable values of Cronbach's alpha is greater than 0.7.

Table Error! No text of specified style in document..1: Reliability

Variable	No of items	Cronbach's Alpha
Training	5	0.770
Access to credit facilities	5	0.792
Technological usage	5	0.827

Table Error! No text of specified style in document..1: Reliability

Source: Author Compiled, 2021

According to the Table 4.1 all Cronbach's Alpha values are greater than 0.7. Then the researcher could state that all variables are reliable. Convergent validity is tested using the Kaiser–Meyer–Olkin (KMO) measure, the Bartlett's test of sphericity, the Composite reliability (CR) and the Average Variance Extracted (AVE). It is given in the Table 4.2.

Table Error! No text of specified style in document..2: Convergent Validity

Variable	No of Items	KMO	Bartlett's Test		CR	AVE
			Chi Square Value	Sig		
Training	5	0.723	135.490	0.000	0.848	0.528
Access to credit facilities	5	0.650	174.970	0.000	0.861	0.555
Technological usage	5	0.812	172.402	0.000	0.881	0.597

Source: Author Compiled, 2021

KMO value of all variables are greater than 0.5, Bartlett's test is significant (P value < 0.05), AVE values are above 0.5 and Composite reliability (CR) is greater than 0.7. Hence, the convergent validity of the variables is satisfied.

The existing level of Entrepreneurial Performance and its related factors

This section provides the existing level of entrepreneurial performance and its related factors. According to the conceptual framework the existing level of entrepreneurial performance and its related factors are explain by using four variables such as entrepreneurial performance, training, access to credit facilities and technological usage. To identify the relationship between entrepreneurial performance and its related factors researcher use correlation analysis and mean comparisons tests.

Table Error! No text of specified style in document..3: Correlation Analysis

		Entrepreneurial Performance
Training	Pearson Correlation	.568**
	Sig. (2-tailed)	.000
Access to credit facilities	Pearson Correlation	.378**
	Sig. (2-tailed)	.000
Technological usage	Pearson Correlation	.411**
	Sig. (2-tailed)	.000

Source: Author Compiled, 2021

As shown in the above table, there is a significant relationship between entrepreneurial performance and training ($p < 0.05$) and there is a significant moderate positive relationship between entrepreneurial performance and training. This indicates that when training increases, entrepreneurial performance will increase. As shown in the table, there is a significant relationship between entrepreneurial performance and access to credit: the value is 0.378. Further, the study reveals that there is a positive relationship between entrepreneurial performance and access to credit facilities. This indicated that when access to credit facilities increases, entrepreneurial performance will increase. As shown in the above table, there is significant relationship between entrepreneurial performance and technological usage. This indicated that when technological usage increases, entrepreneurial performance will increase.

Identifying Factors Affecting Entrepreneurial Performance by Differently Abled in the Western Province, Sri Lanka

The Correlation analysis found that training, access to credit facilities and technological usage have a relationship with entrepreneurial performance. This section presents the effect of these variables on entrepreneurial performance using regression analysis and identification of factors that affect the entrepreneurial performance. The following table present multiple regression analysis output that explains all independent variables impact on the dependent variable.

Table Error! No text of specified style in document..4: Regression Coefficients of All

Coefficients^a						
Model		Unstandardised Coefficients		Standardised Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-674.573	7240.222		-.093	.926
	Training	6157.724	1134.269	.459	5.429	.000
	Access to credit facilities	3517.852	786.409	.346	4.473	.000
	Technological usage	2343.170	1006.097	.198	2.329	.022
	Never married	-2467.433	5009.822	-.127	-.493	.624
	Married	-1770.521	4958.015	-.095	-.357	.722
	Widowed	-3140.620	5947.186	-.075	-.528	.599
a. Dependent Variable: Entrepreneurial Performance						

Source: Author Compiled, 2021

As shown in the above table, training has an effect on entrepreneurial performance ($p < 0.05$). Regression beta coefficient value is 6157.724. Then researcher can claim that Training has a significant positive effect on entrepreneurial performance. Access to credit facilities has significant positive affect on entrepreneurial performance. This indicated that when access to credit facilities increase, entrepreneurial performance will increase. As shown in the above table, technological usage

has an effect on entrepreneurial performance. As shown in the above table, marital status have no effect on entrepreneurial performance ($p > 0.05$). At 95% confidence level researcher does not have enough evidence to say that marital status have an effect on entrepreneurial performance.

Table Error! No text of specified style in document..5: Overall Model Significance

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	4034228355.567	3	1344742785.189	29.823	.000 ^b
	Residual	4328761644.433	96	45091267.130		
	Total	8362990000.000	99			
a. Dependent Variable: Entrepreneurial Performance						
b. Predictors: (Constant), Technological usage, Access to credit facilities, Training						

Source: Author Compiled, 2021

As shown in the Table 4.5, researchers can say that overall model significance is at 95% confidence. Overall model significance means that training, access to credit facilities and technological usage, jointly affect entrepreneurial performance.

Examining the Moderating Effect of Gender on Entrepreneurial Performance by Differently Abled in the Western Province, Sri Lanka

The moderation model tests whether the prediction of a dependent variable differs across a moderate variable which can be an independent variable. Moderator variables affect the strength and/or direction of the relation between a predictor and it affects to enhance, reduce, or change the influence of the predictor. Moderation effect is generally defined as an interaction between factors or variables, where the effect of one variable depends on the existing level of the other variable in a particular analysis. In the literature, the detailed descriptions of moderator effects and a framework have been presented by Aiken and West (1991) for their estimation and interpretation.

Many authors recommended that, in the case of a naturally given categorical moderator variable it is better to use the moderated regression analysis than the subgroup analysis (Aguinis 2004; Chaplin

1991; Stone 1988). Based on that, the researcher needs to check whether the independent variable has an impact on the dependent variable by spiting the moderate variable. If the independent variable of the male group has an impact on the dependent variable but the independent variable of the female group has no impact on the dependent variable, then gender is a moderate variable.

Table Error! No text of specified style in document..1: The Moderating Effect of Gender on Entrepreneurial Performance

	Male Group		Female Group		Moderation
	<i>Sig</i>	<i>Decision</i>	<i>Sig</i>	<i>Decision</i>	
Training have an affect on entrepreneurial performance	.000	Support	.000	Support	Compare beta coefficients
Access to credit facilities have an affect on entrepreneurial performance	.000	Support	.018	Support	Compare beta coefficients
Technological usage have an affect on entrepreneurial performance	.019	Support	.277	Not Support	Moderation

Source: (Author Compiled, 2021)

As shown in the above table, technological usage of the male group has a significant impact on the entrepreneurial performance but technological usage of the female group has no significant impact on entrepreneurial performance. It indicates that technological usage has an impact on entrepreneurial performance moderated by gender.

Training has significant impact on entrepreneurial performance of both gender groups and access to credit facilities has a significant impact on entrepreneurial performance of both gender groups. Therefore, the researcher should examine whether the beta coefficient of each group is significantly different or not.

CONCLUSION

According to the results, researcher can conclude that there were number of factors that affect entrepreneurial performance by differently abled. In this study researcher has selected most significant

factors with a high literature base to examine the factors affecting entrepreneurial performance and the moderating effect of gender on entrepreneurial performance by gender. As described previously, the study found that a positive moderating relationship between entrepreneurial training and performance of differently abled in the Western Province, Sri Lanka. Hence, training in relevant field of business will increase the entrepreneurial performance of differently abled.

REFERENCES

- Aguinis, H., 2004. Regression analysis for categorical moderators. Guilford Press, New York.
- Ahmad, N. H. (2007). *A cross cultural study of entrepreneurial competencies and entrepreneurial success in SMEs in Australia and Malaysia*. (Doctorial theses. University of Adelaide, Adelaide School of Business, Australia.)
- Aiken, L.S. and West, S.G., 1991. Multiple regression: Testing and interpreting interactions. Newbury Park, CA: Sage.
- Akanji, O. O. (2006). Microfinance as a strategy for poverty reduction. Central Bank of Nigeria
- Akhalwaya, A., & Havenga, W. (2012). The Barriers that Hinder the Success of Women Entrepreneurs in Gauteng, South Africa). *OIDA International Journal of Sustainable Development*, Vol. 3, No. 5, pp. 11-28, 2012. Available at SSRN: <https://ssrn.com/abstract=2000686>
- Akinyemi, E. O. (2016). Entrepreneurial empowerment of people with special needs in Ondo and Osun States, Nigeria. *Journal of Arts and Humanities*, 5(11)
- Angrist, J., & Krueger, A. (1999). Empirical Strategies in Labour Economics, *Handbook of Labour Economics*. Elsevier Publishers.
- Armendariz, B., & Labie, M. (2011). "The Handbook of Microfinance", World Scientific Publishing Co. Pte.Ltd, page 6
- Boellstorff, T. (2019). The opportunity to contribute: disability and the digital entrepreneur, *Information, Communication & Society*, 22:4, 474-490,
- Boylan, A., & Burchardt, T. (2003). Barriers to Self-Employment for Disabled People. Small Business Service, London

- Caldwell, K., Parker, S., & Renko, M. (2016). Social Entrepreneurs with Disabilities: Exploring Motivational and Attitudinal Factors. *Canadian Journal of Disability Studies*. 211-214
- Callahan, M., Shumpert, N., & Mast, M. (2002). Self-employment, choice and self-determination. *Journal of Vocational Rehabilitation*, 17, 75–85
- Cant, M. C., & Ligthelm, A. (2002). Small business problems in the South African context: A proactive entrepreneurial approach. Paper delivered at the 7th Asia-Pacific Decision Sciences Institute Conference. Bangkok, July 2002
- Carolyne Ndunge Mutunga. (2019). Factors Influencing Performance of Income Generating Enterprises Owned by Youth Living with Disabilities in Chuka/Igambang'ombe Sub-County, Tharaka Nithi County, Kenya.
- Carroll, A. (2012). World report on disability. *Irish Medical Journal*, 105(5).
- Chandler, G. & Hanks, S.H. (1994). Market Attractiveness, Resource-Based Capabilities, Venture Strategies and Venture Performance. *Journal of Business Venturing*, 9, 331-349
- Chaplin, W.F., 1991. The next generation in moderation research in personality psychology. *J Pers* 59:143–178.
- Charney, A., & Libecap, G.D. (2000). Impact of entrepreneurship education: Kauffman Centre for Entrepreneurial Leadership.
- Cheston, S., & Kuhn, L. (2002). Empowering Women through Microfinance. Draft Publication Sponsored By UNIFEM.
- Chigunta, F. (2002). Youth Entrepreneurship: Meeting the Key Challenges. England: Wolfson College, Oxford University.
- Chowdhury, F. N. (2017). A study of Entrepreneurship Development in Bangladesh: pros and cons. *Journal of Asian Scientific Research*, 7(1), 1-11.
- Connelly, B.L., Ireland, R., Reutzell, C.R., & Coombs, J.E. (2010). The power and effects of entrepreneurship research. *Entrepreneurship Theory and Practice*
- Cooney, T. (2008). Entrepreneurs with disabilities: Profile of a forgotten minority.
- Cupido, C. (2002). Barriers to entrepreneurship in the Western Cape. Master of Business Administration thesis. Cape Town. Cape Technikon.

- De Silva, W. I., & Amarabandu, W. P. (2008). Disability amongst the elderly in Sri Lanka: comparison of disability rates in the censuses of 1981 and 2001. In Research studies series (Issue 1).
- Department of Census and Statistics. (2010). Sri Lanka labour force survey. In Annual Report - 2010 (with Provincial and District Level Data), Ministry of Finance and Planning. (Vol. 2010).
- Dhar, S., & Farzana, T. (2017). Entrepreneurs with Disabilities in Bangladesh: An Exploratory Study on Their Entrepreneurial Motivation and Challenges European Journal of Business and Management www.iiste.org ISSN 2222- 1905 (Paper) ISSN 2222-2839 (Online) Vol.9, No.36,
- Díaz-García, M. C., & Jiménez-Moreno, J. (2010). Entrepreneurial intention: the role of gender. *International Entrepreneurship and Management Journal*, 6(3), 261-283.
- Doyel, A. (2002). A realistic perspective of risk in self-employment for people with disabilities. *Journal of Vocational Rehabilitation*, 17, 115-24.
- Etzkowitz, H. (2002). Incubation of incubators: innovation as a triple helix of university *Economic and Financial Review*, 39(4), 1-11. *Economics*, 5(4), 93-
- Fadahunsi, A. (2012). The growth of small businesses: Towards a research agenda *American Journal of Economics and Business Administration*, 4(1), 105-114. doi: 10.3844/ajebas p.2012.105.115
- Falissard, B., 1999. The unidimensionality of a psychiatric scale: A statistical point of view. *International Journal of Methods in Psychiatric Research*, 8(3), pp.162–167.
- Ferket, M., Quien, M., & Posavec, Z. (2013). Female vs. Male Entrepreneurship-is there a difference? *Studies of Organisational Management & Sustainability*, 1(1), 67-77.
- Field, 2005. Factor analysis using SPSS. Research method II.
- Filion, J.L. & Dolabela, F. (2007). The making of a revolution in Brazil: The Introduction of entrepreneurship pedagogy in the early stages of education. In Fayolle, A. (Ed.), *Handbook of Research in Entrepreneurship Education, Volume 2: Contextual Perspectives* (pp. 13-39). Cheltenham, UK: Edward Elgar Publishing Limited
- Rex D. (2010). Resistance, justice, and commitment to change, *Human Resouse Development Quarterly*, Volume21, Issue1 (pp 3-39).

- Garson, G.D., 2016. Partial least square regression and structural equation models. ISBN-13: 978-1-62638-039-4.
- Gathenya, J. W. (2012). Entrepreneurial strategic planning practices and firm performance among women led small and medium enterprises in Kenya. (Unpublished PhD thesis). Jomo Kenyatta University of Agriculture and Technology, Nairobi.
- GEM. (2007). Gender Entrepreneurship Markets International Finance Corporation (IFC) GEM Country Brief. 1–13.
- Godley, A. (2005). *The Emergence of Ethnic Entrepreneurship*. Princeton, NJ: Princeton University Press.
- GOSL. (2019). *Vistas of Prosperity and Splendour*. 1, 88.
- Government of Kenya (GOK). (2004). *Draft Sessional Paper on Development of Micro and small enterprises for wealth and Employment Creation for Poverty Reduction*. Nairobi: Government Printers.
- Greve, B. (2009). *The Labour Market Situation of Disabled People in European Countries and Implementation of Employment Policies: A Summary of Evidence from Country Report and Research Studies*. Academic Network of European Disability Experts
- Grilo, I., & Thurik, A. R. (2005). Entrepreneurial engagement levels in the European Union (No. 2905). *Papers on entrepreneurship, growth and public policy*
- Hair, J.F., Black, W.C., Babin, B.J. and Anderson, R.E., 2009. *Multivariate data analysis*. 7th ed.
- Hair, J.F., Hult, G.T.M., Ringle, C.M. and Sarstedt, M., 2014. *A primer on Partial least squares Structural equation modeling (PLS-SEM)*. Sage. ISBN 978-1-4522-1744-4 (pbk.)
- Hall, D.B. and Wang, L., 2005. Two-component mixtures of generalized linear mixed effects models for cluster correlated data. *Statistical Modelling*, 5(1), pp.21–37.
- Henseler, J., Ringle, C.M. and Sarstedt, M., 2012. Using partial least squares path modeling in advertising research: basic concepts and recent issues. *Handbook of research on international advertising*.
- Hruska A. J., & Corriols, M. (2002). Integrated Pest Management - The Impact of Training in Integrated Pest Management among Nicaraguan Maize Farmers: Increased Net Returns and Reduced Health Risk, *Int. J. Occup. Environ. Health* 8 (3): 191-200.

- Hwang, S. K., & Roulstone, A. (2015). Enterprising? disabled? the status and potential for disabled people's microenterprise in South Korea. *Disability & Society*, 30(1), 114–129.
- International Labor Organization (ILO). (2009). Inclusion of People with Disabilities in Kenya. http://www.ilo.org/skills/pubs/WCMS_115097/lang--en/index.htm
- Irish Business Journal*, 4(1), 119-129.
- Jones, M., & Latreille, P. (2011). Disability and self-employment: evidence for the UK. *Applied Economics*, 43(27), 4161-4178.
- Josephat, B., & Nzaramba K. (2013). Entrepreneurship Skills Development And Growth Of Small And Medium Enterprises In Rwanda (Case Study: "Caplaki") 2007-2011 1 Kerosi Issn2304-0777
- Kinyua, A. N. (2014). Factors Affecting the Performance of Small and Medium Enterprises in the Jua Kali Sector In Nakuru Town, Kenya Egerton University Nakuru.
- Kitching, J. (2014). Entrepreneurship and self-employment by people with disabilities. Background Paper for OECD Project on Inclusive Entrepreneurship
- Kolabi, A. M., Hosseini, H. K., & Mehrabi, R. (2011). Developing Entrepreneurial Marketing Mix: Case Study of Entrepreneurial Food Enterprises in Iran. *Journal of Knowledge Management, Economics and Information Technology*, 5.
- Lahiff, E. (2007). Business model in Land Reform in South. Africa Research. Report no. 27, August, 2007 PLAAS, University of the Western Cape
- Lewis, C. (2004). „Microfinance from the point of view of women with disabilities: Lessons from Zambia and Zimbabwe“, *Gender and Development* 12: 1, p.28- 39.
- Madichie, N.O., & Gallant, M. (2012). “Broken silence: a commentary on women's entrepreneurship in the United Arab Emirates”, *International Journal of Entrepreneurship and Innovation*, Vol. 13 No. 2, pp. 81-92.
- Maritz, A., & Laferriere, R. (2016). Entrepreneurship and self-employment for people with disabilities. *Australian Journal of Career Development*, 25(2), 45–54.
- Maritz, P.A., Koch, A., & Schmidt, M. (2016). The role of entrepreneurship education programs in national systems of entrepreneurship and entrepreneurship ecosystems. *The International Journal of Organizational Innovation*. Vol. 8(4), pp. 1-7.

- Maziriri, E. (2018). Entrepreneurial Barriers that are confronted by Entrepreneurs Living with Physical Disabilities: A Thematic Analysis. *Journal of Economics and Behavioral Studies*, [S.I.], v. 9, n. 1, p. 27-45, mar. 2017. ISSN 2220-6140.
- Maziriri, E. T., & Madinga, N. W. (2016). A qualitative study on the challenges faced by entrepreneurs living with physical disabilities within the Sebokeng Township of South Africa. *International Journal of Research in Business Studies and Management*, 3(5), 1-13.
- Maziriri, E.T., Madinga, W., & Lose, T. (2017). Entrepreneurial barriers that are confronted by entrepreneurs living with physical disabilities: a thematic analysis. *Journal of Economics and Behavioral Studies*, 9(1), 22-45.
- Mbugua, S. K., Njeru, A., & Tirimba O. I. (2014). Factors Affecting the Performance of Small and Micro Enterprises in Limuru Town Market of Kiambu County, Kenya" *International Journal of Scientific and Research Publications (IJSRP)*, Volume 4, Issue 12".
- McGill, M.T., 2009. An Investigation of Unidimensional Testing Procedures under Latent Trait Theory using Principal Component Analysis.
- Mersland, R. (2005). *Microcredit for self-employed disabled persons in developing countries*. Oslo, Atlas Alliance, Norway.
- Mitchelmore, S., & Rowley, J. (2013). Entrepreneurial competencies of women entrepreneurs pursuing business growth. *Journal of Small Business and Enterprise Development*, 20, 125-142.
- Mladenov, T. (2016). "Governing Through Personal Assistance: A Bulgarian Case." *Scandinavian Journal of Disability Research*. doi:10.1080/15017419.2016.1178168.
- Mladenov, T., (2016). Disability and social justice. *Disability and Society*, 31 (9), 1226-1241.
- Moore, W.C., Petty, W.J., Palich, E.L., & Longenecker, G.J. (2008). *Managing Small Business: An Entrepreneurial Emphasis* (14th Ed.). Mason, OH: South Western Cengage Learning.
- Mugenda, M.O., & Mugenda, G.A. (1999). *Research Methods: Qualitative and Quantitative Approaches*: Nairobi

- Muhammad, T. M., & Nurazzura, M. N. (2017). The prospects of people with disabilities (pwds) participation in entrepreneurship: The perspective of university students with physical and sensory disabilities *International Journal for Studies on Children, Women, Elderly and Disabled People* 2. pp. 79-85
- Mwangi, M. W. (2013). Factors that affect the success of physically challenged entrepreneurs in their business activities: a survey of Thika Municipality - Kiambu County, Kenya. *International Journal of Academic Research in Business and Social Sciences*, 3(1), 280-289.
- Newsom, 2010. *Practical Approaches to Dealing with Nonnormal and Categorical Variables*. Information Age, USP 655 SE(Winter 2015), pp.1-3.
- Nicol, T. H. (2002). Financing SMEs in Canada: Barriers Faced by Women, Youth, Aboriginal and Minority Entrepreneurs in Accessing Capital Publishing and Depository Services, Public Works and Government Services Canada Ottawa ON K1A 0S5.
- Norhasyikin, R. S., SitiIntan, D.I., Alia, A.I., & Nurul, H. (2017). Challenges faced By People with Disability for Getting Jobs: Entrepreneurship Solution for Unemployment. *International Journal of Academic Research in Business and Social Sciences*, 7(3), 333-339.
- Okpara, J. O., & Pamela, W. (2007). "Determinants of Small Business Growth Constraints in a Sub-Saharan African Economy" *SAM Advanced Management Journal*, spring, Vol. 72 Issue 2, 24-35
- Olwande, J. & Mathenge, M. (2012). Market Participation among Poor Rural Households in Kenya. The International Association of Agricultural Economists (IAAE) Triennial Conference, Foz do Iguacu, 18-24 August 2012
- Oni, E.O., & Daniya, A. (2012). Development of small and medium scale enterprises: The role of government and other financial institutions. *Arabian Journal of Business and Management Review*, 1(7), 16-29
- Orser, B., & Dyke, L. (2009). The influence of gender and occupational-role on entrepreneurs' and corporate managers' success criteria. *Journal of Small Business & Entrepreneurship*, 22(3), 327-353.
- Pagán, R. (2009). Self-employment among people with disabilities: Evidence for Europe. *Disability & Society* 24(2): 217-229.

- Parliament of Sri Lanka. (1976). *The Constitution of Democratic*. 49(3), 506–515.
- Raman, R. (2004). *Motivating factor of educated self-employed in Kerala: A case study of, Mulanthuruthy Block Ernakulum*. Discussion Paper No. 90. Kerala Research Programme on Local Development Center for Development Studies.
- Renko, M., Parker H. S., & Caldwell, K. (2015). *Entrepreneurial entry by people with disabilities*. *International Small Business Journal*, 34(5), 555-578.
- Report, D. (2018). *United nation report on Disability and Development*. In United Nation.
- Ronge, E., Ndirangu, L., & Nyangito, H. (2002). *Review of Government Policies for the Promotion of Micro and Small Scale Enterprises*. Kenya Institute for Public Policy, Research and Analysis KIPPRA Discussion Paper No. 20, November 2002
- Rose, R.C., Beh, L., Uli, J., & Idris, K. (2006). *Quality of Work Life: Implications of Career Dimensions*. *Journal of Social Sciences*, 2 (2), 61-67.
- Salem, M. I. (2014). *The Role Of Business Incubators In The Economic Development Of Saudi Arabia*. *International Business & Economics Research Journal (IBER)*, 13(4), 853.
- Schoof, U. (2006). *Stimulating Youth Entrepreneurship: Barriers and incentives to enterprise start-ups by young people*. Geneva: ILO.
- Schoof, U., & Semlali, A. (2008). *Youth Entrepreneurship Measures to overcome the barriers facing youth*, *Youth and Children*, II (6), 1-6.
- Shinnar, R. S., Giacomin, O., & Janssen, F. (2012). *Entrepreneurial perceptions and intentions: the role of gender and culture*. *Entrepreneurship Theory and Practice*, 36(3), 465-493.
- Steenekamp, A.G., Vandermerwe, S.P., & Athayde, R. (2011). *An investigation into youth entrepreneurship in selected South African secondary schools: An exploratory study*. *Southern African Business Review*, 15(3), 46-75
- Stone, E.F., 1988. *Moderator variables in research: a review and analysis of conceptual and methodological issues*. In: Ferris GR, Rowland KM (eds) *Research in personnel and human resources management*, 6, pp 191–229.
- Tahira, J., & Sumera, J. (2018). *Ideals of human rights and socioeconomic realities: The larger context of Pakistan's child-protection policy*, *Journal of Human Rights*, 17:1, 44-57, doi: 10.1080/14754835.2016.1233807

- Thapa, A. (2008). Micro-Enterprises and Household Income. *Journal of Nepalese Business Studies*, 4(1), 110-118. <https://doi.org/10.3126/jnbs.v4i1.1036>
- Tim, M., & Brinkerhoff, R.O. (2008). *Courageous training: Bold actions for business results*. Colorado: Berrett-Koehler Publishers.
- Tkachev, A., & Kolvereid, L. (1999). Self-employment intentions among Russian students. *Entrepreneurship & Regional Development*, 11(3), 269-280.
- Turetgen, I. Ö. Unsal, P., & Erdem, I. (2008). The Effects of Sex, Gender Role, and Personality Traits on Leader Emergence: Does Culture Make a Difference? *Small Group Research*. 32(1), 44-89.
- Verheul, I., & Van der Kuip, I. (2004). Early development of entrepreneurial qualities: the role of initial education. *International Journal of Entrepreneurship Education* 2 (2), 203- 226
- Viriri, P., & Makurumidze, S. (2014). Engagement of disabled people in entrepreneurship programmes in Zimbabwe, *Journal of Small Business and Entrepreneurship Development*, 2(1), 1–30.
- Wambua, P. P., & Munyithya, H. M. (2015.) The gender factor influence on entrepreneurial success in Kitui County, Kenya *International Journal of Education and Research* Vol. 3 No. 7 July
- Wanjohi, A. & Mugure, A. (2008). Factors affecting the growth of MSEs in rural areas of Kenya: A case of ICT firms in Kiserian Township, Kajiado District of Kenya. Unpublished thesis.
- Wanjohi, A.M. (2009). Challenges facing SMEs in Kenya. Retrieved on 10th January, 2018 from <http://www.buzzle.com/articles/challenges-facing-smes-in-kenya.html>
- Wilson, F., Kickul, J., & Marlino, D. (2007). Gender, entrepreneurial Self Efficacy, and entrepreneurial career intentions: Implications for entrepreneurship Education. *Journal of Developmental Entrepreneurship*, 9(3), 177-198.
- Wuensch, K.L., 2012. *A Brief Introduction to Reliability, Validity, and Scaling*.
- Yamamoto, S., Unruh, D. & Bullis, M. (2011). The viability of self-employment for individuals with disabilities in the United States: a synthesis of the empirical- research literature. *Journal of Vocational Rehabilitation*, 35(2), 117–127
- Zait, A. and Berteau, P.E., 2009. Methods for Testing Discriminant Validity. *Management & Marketing*, 9(2), pp.217–224.

Zeffane, R. (2012). Gender and Youth Entrepreneurial Potential: Evidence from the United Arab Emirates. *International Journal of Business and Management*, 8(1), 60.