

THE MODERATING ROLE OF EDUCATION LEVEL ON FACTORS INFLUENCING BUSINESS PERFORMANCE: EVIDENCE FROM MUSLIM WOMEN OWNED BUSINESS ENTITIES IN SRI LANKA

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Abstract

Entrepreneurship is part of Islamic business and economy which allows both men and women to be successful entrepreneurs. Islamic practices play an important role in women's lives, and Islam explicitly emphasizes trade and commerce including the involvement of women as traders as evidently stated in the Holy Quran. Therefore, women's entrepreneurship in Islam has been an interesting topic for researchers around the world in recent decades as they have faced unique challenges and there are some specific factors contribute for their business success. This study aims to examine the moderating effect of education level on the relationship between the factors influencing business performance of Muslim women entrepreneurs in Sri Lanka. Structural Equation Modeling (SEM) with AMOS as the data analysis technique while employing SPSS 23.0 collecting data from Muslim women owned business entities. In most of the conservative Islamic families, women are not often allowed go out of their homes and mix with their counter parts independently and even do not allow their female children for further studies and get them married in their early ages. Based on the results reported, the level of education did not significantly reduce the relationship between psychological characteristics, industrial factor, cultural factor, and business performance in which the level of education moderates human capital and social capital. This study applied awareness to existing literature on the entrepreneurship of Muslim women, as well as suggested steps for government, policymakers and other related agencies on how to authorize Muslim women through entrepreneurship to improve the country's socio-economic conditions and the well-being of their families by means of enhancing their education level..

Key words: Educational Level, Business Performance, Muslim Women Entrepreneurs.

Introduction

Entrepreneurship offers women great possibilities by promoting self-sufficiency, self-esteem, education, and development, not only for women themselves, but also for their families and employees as well (Sarker & Palit, 2014). According to Jiang, Monica and Chun (2012), women are gradually turning to entrepreneurship in the West as a way to cope with the 'glass ceiling' that seems to prevent them from achieving top organizational management positions. Moreover, Rashid, Haslina, Zuraida and Mansoor (2015) found that entrepreneurship also made them more fulfilled and more versatile, and most importantly, it has been recognized that women

entrepreneurs have a bigger part to play in any country's development (Ilhaamie, Arni, Rosmawani & Al-Banna, 2014). Women's contribution to entrepreneurial activity is inevitable in any area and creates job opportunities in different business cycles, focusing on both of womens' affairs in society and their contributions in overall business success (Abiodun & Amos, 2018). Economic empowerment of women has an influence that goes beyond the individual level. Women are more likely to spend much of their household income in their children's education, health, food, and well-being, compared to men. Women are expected to re-establish 90% of their earnings in their families and

communities in emerging markets, in comparison to 30%-40% for men (VandeBrug, 2013). Women entrepreneurs, with their accumulated wealth and increased economic security, not only contribute to increasing industrial capabilities and instigating the economic development by generating new jobs, but also promote the expansion of the country's human resources and talent pool. For example, female entrepreneurs account for 46% of jobs in the United States, while female entrepreneurs account for 48.7% in Kenya, 38.9% in Indonesia, 30.6% in Bangladesh (World Bank-IBRD, 2018) and 34% in Sri Lanka (Census and Statistics Department, 2017).

In many Asia-Pacific countries, it is a norm and a tradition in which the man is the head of the family and the woman has to be their servant (Ilhaamie, 2017). This is also expressed in women's participation in entrepreneurship. In particular, Muslim women show a lack of involvement in the business sector (only 15.9%), which is far behind what the Malaysian government has targeted as they face unique challenges in Malaysia, where Islam is the main and official religion (Ilhaamie et al., 2014). Entrepreneurship theorists have proposed that tenacity and pro-activity policies are necessary for a successful business enterprise to be developed and run (Baum, Locke, & Smith, 2001). It relates to the importance of individual characteristics such as entrepreneurs' experience, skills and abilities including education.

Hence, the objective was to investigate how educational level moderate the relationships between the independent variables and business performance of Muslim women owned business entities in Sri Lanka.

Literature Review

The studies suggest that female-owned enterprises with greater education are more inclined to venture into more businesses. And higher educated females are more predisposed to work outside of the home whilst their knowledge, skills and experience in business enhance their chances for entrepreneurial success. Kor, Mahoney and Michael (2007) found that educational level reflects the cognitive ability and skills of an individual and that versatile and subjective business

knowledge facilitate the understanding of organizational heterogeneity persistence in undertaking entrepreneurial activities. Accordingly, individual knowledge and perception influence entrepreneurial endeavours as well as business growth and direction (Kor et al., 2007; Zahra, Sapienza & Davidson, 2006).

Studies have indicated that formal education is correlated to the future performance of a business (Jiang et al., 2012; Kor et al., 2007; McIntosh & Islam, 2010). Hence, education plays a key role in facilitating the business performance of female entrepreneurs (Schneider, 2017). Women entrepreneurs with higher graduate degrees are more self-assured of their capability to create a successful business, particularly in non-traditional enterprises (Gundry & Welsch, 2001; McElwee & Al-Riyami, 2003). Entrepreneur education for women entrepreneurs would be more effective in cultures characterized by promoting gender egalitarianism and minimizing uncertainty avoidance (Ballough, Abdul Zaher, & Heim, 2015). However, Dharmaratne (2012) and Lerner (2002) found no significant influence of education on business performance, indicating that the evidence available is mixed with no conclusive findings. Other researchers have also found that individual background have an impact on entrepreneurial development (Sarker & Palit, 2014; Startiene & Remeikiene, 2009) and competitiveness of SMEs (Ibiduni et al., 2018). Rashid et al. (2015) found that those with postgraduate qualifications seem to be more successful.

Business performance was studied by many researchers to focus the influencing factors. Salfiya Ummah, Choy and Sulaiha Beevi (2021) studied a survey among Muslim women entrepreneurs in Sri Lanka and found that, psychological characteristics, human capital, social capital, industrial factor, and cultural factor had a notable and positive relationship with business performance of the Muslim women entrepreneurs in Sri Lanka and suggested to research further about the moderation effect of educational level of Muslim women entrepreneurs on the determinants of their business performance. It is therefore expected that educational level of the female Muslim entrepreneurs in Sri Lanka

will moderate the factors influencing business performance.

Hence, the following hypothesis was developed to investigate the moderating effect of educational level on the relationship between the factors influencing business performance.

Educational level moderates the relationship between psychological characteristics, human capital, social capital, industrial factor, cultural factor and business performance

Research Methods and Materials

Data analysis technique was Structural Equation Modeling (SEM) with AMOS while employing SPSS 23.0 from the data collected from 286 Muslim women entrepreneurs. Multi group analysis was used to test the moderation effect of educational level on the determinants of business performance in accordance with the guidelines of Hair, Black, Barry, and Anderson (2010).

Discussion of the Findings:

The hypothesis on the moderation effect of educational level on the relationship between the independent and dependent variables amongst the Muslim women entrepreneurs in Sri Lanka was put forward to meet the research objective. In this study, educational level was categorised into four groups, namely below G.C.E. (O/L), G.C.E. (O/L), G.C.E. (A/L), as well as degree and above.

To test the presence of moderation effect on the overall model, Figure 1 illustrates the fit indices of the structural model. In this study, the relative chi-square was 0.1906, which is less than 5.0, CFI, IFI and TLI were closer to 0.90, whilst RMSEA was 0.056, which is less than 0.08. Thus, the structural model met more than four goodness-of-fit indices.

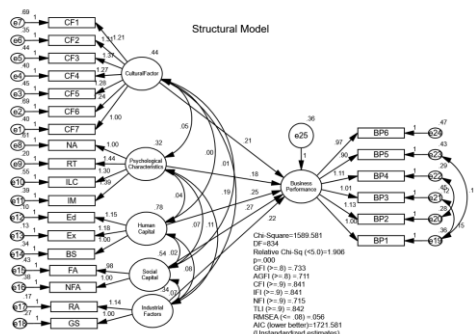


Figure 1: Educational Level Group as Moderator

Table 1 indicates that the measurement residuals X^2 is greater than unconstrained X^2 based on ΔX^2 (CIMIN)=171.896; $\Delta df=132$; $p=0.000$. Hence, the unconstrained model was found to be better than measurement residuals model because of the indices. Therefore, there was an existence of moderation effect of educational level on the determinants of business performance in the overall model. The indices of measurement residuals, as well as the unconstrained model are shown in Table 1 and Table 2, respectively.

Table 1: The Moderation Test Result using Educational Level Group Data

Model	NP AR	CMI N	DF	P	CMI N/DF
Unconstrained	198	1921.136	1002	.000	1.917
Measurement weights	162	1946.621	1038	.000	1.875
Structural weights	152	1962.765	1048	.000	1.873
Structural covariances	122	1978.984	1078	.000	1.836
Structural residuals	120	1981.605	1080	.000	1.835
Measurement residuals	66	2093.872	1134	.000	1.846
Saturated model	1200	.000	0		
Independence model	96	6071.087	1104	.000	5.499

Table 2: Moderation Effect of Educational Level on Overall Model

Model	DF	CMIN	P	Decision
Measurement weights	36	26.366	0.88	Significant
Structural weights	46	41.218	0.672	
Structural covariances	76	60.03	0.911	
Structural residuals	78	63.277	0.886	
Measurement residuals	132	171.896	0.011	

Table 2 shows that the measurement residual model showed a significant p-value at 0.05, which was less than the alpha value. Hence, there was a significant moderating effect of education level on the overall model. This led to the testing of the moderating effects of the individual paths. The results of the moderation effect of education level on the relationships

between the independent variables and business performance were presented in Tables 3,4, 5 and 6.

Table 3 shows the moderating effect of education level for entrepreneurs below the G.C.E. (O/L) group.

Table 3: Regression Weight Estimates for Below G.C.E.(O/L) Group

			Estimate	S.E.	C.R.	P
Business Performance	<---	Industrial Factor	0.199	0.114	1.75	0.08
Business Performance	<---	Social Capital	0.222	0.111	2	0.046
Business Performance	<---	Human Capital	0.304	0.069	4.408	***
Business Performance	<---	Psychological Characteristics	0.121	0.118	1.024	0.306
Business Performance	<---	Cultural Factor	0.159	0.105	1.514	0.13

Based on Table 3, it can be observed that the education level acted as a moderator between social capital and business performance with $\beta=0.222$ and p-value of 0.046, and between

human capital and business performance with $\beta=0.304$ and p-value of 0.000. Table 4 shows the moderating effect of education level for entrepreneurs under the G.C.E. (O/L) group.

Table 4: Regression Weight Estimates for G.C.E. (O/L) Group

			Estimate	S.E.	C.R.	P
BusinessPerformance	<---	IndustrialFactor	0.196	0.168	1.167	0.243
BusinessPerformance	<---	SocialCapital	0.527	0.191	2.759	0.006
BusinessPerformance	<---	HumanCapital	0.285	0.105	2.717	0.007
BusinessPerformance	<---	PsychologicalCharacteristics	0.037	0.238	0.154	0.877
BusinessPerformance	<---	CulturalFactor	0.041	0.166	0.244	0.807

Based on the results in Table 4, the education level of G.C.E. (O/L) only acted as a moderator between social capital and business performance with $\beta=0.527$ and p-value of 0.006, and between human capital and business

performance with $\beta=0.285$ and p-value of 0.007. Table 5 shows the moderating effect of education level for entrepreneurs under the G.C.E. (A/L) group.

Table 5: Regression Weight Estimates for G.C.E. (A/L) Group

			Estimate	S.E.	C.R.	P
BusinessPerformance	<--	IndustrialFactor	0.386	0.199	1.942	0.052
BusinessPerformance	<--	SocialCapital	0.346	0.127	2.726	0.006
BusinessPerformance	<--	HumanCapital	0.463	0.112	4.136	***
BusinessPerformance	<--	PsychologicalCharacteristics	0.177	0.136	1.302	0.193
BusinessPerformance	<--	CulturalFactor	0.097	0.085	1.142	0.253

From Table 5, it can be observed that this education level only acted as a moderator between human capital and business performance with $\beta=0.463$ and p-value of 0.000, and between social capital and business

performance with $\beta=0.346$ and p-value of 0.006. Table 6 shows the moderating effect of education level for those with degree and above.

Table 6: Regression Weight Estimates for Degree and Above Group

			Estimate	S.E.	C.R.	P
BusinessPerformance	<--	IndustrialFactor	0.199	0.114	1.75	0.08
BusinessPerformance	<--	SocialCapital	0.222	0.111	2	0.046
BusinessPerformance	<--	HumanCapital	0.304	0.069	4.408	***
BusinessPerformance	<--	PsychologicalCharacteristics	0.121	0.118	1.024	0.306
BusinessPerformance	<--	CulturalFactor	0.159	0.105	1.514	0.13

Based on Table 6, it can be observed that this education level only acted as a moderator between social capital and business performance with $\beta=0.222$ and p-value of 0.046, and between human capital and business performance with $\beta=0.304$ and p-value of 0.000.

To sum up, education level did not significantly moderate the relationship between psychological capital, industrial factor, cultural factor and business performance. However, for the relationship between human capital and business performance, those who possess qualifications of G.C.E. (A/L) ($\beta=0.463$, $p=0.000$), degree and above ($\beta=0.304$, $p=0.000$), below G.C.E. (O/L) ($\beta=0.304$, $p=0.000$) and G.C.E. (O/L) ($\beta=0.285$, $p=0.007$) showed a partial and significant

moderating effect at 0.05 level of significance based on the order of the standardised parameter estimates. In terms of the relationship between social capital and business performance, a partial and significant moderating effect was also found on those with G.C.E. (O/L) ($\beta=0.527$, $p=0.006$), G.C.E. (A/L) ($\beta=0.346$, $p=0.006$), below G.C.E. (O/L) ($\beta=0.222$, $p=0.046$) and degree and above ($\beta=0.222$, $p=0.046$) at 0.05 level of significance based on the order of the standardised parameter estimates.

Hence, the proposed hypothesis is partially accepted. The summary of the moderation effect of educational level on the relationship between predictors and business performance is shown in Table 7.

Table 7: Results of Moderation Effect of Educational Level on the Relationship between the Independent Variables and Business Performance

Path		Estimate	S.E.	C.R.	P	Decision
BusinessPerformance	<--- Psychological Characteristics					Not Significant
Below G.C.E. (O/L)		.121	0.118	1.024	0.306	
G.C.E. (O/L)		0.037	0.238	0.154	0.877	
G.C.E. (A/L)		0.177	0.136	1.302	0.193	
Degree and above		0.121	0.118	1.024	0.306	
BusinessPerformance	<--- HumanCapital					Significant
Below G.C.E. (O/L)		.304	0.069	4.408	***	
G.C.E. (O/L)		0.285	0.105	2.717	0.007	
G.C.E. (A/L)		0.463	0.112	4.136	***	
Degree and above		0.304	0.069	4.408	***	
BusinessPerformance	<--- SocialCapital					Significant
Below G.C.E. (O/L)		.222	0.111	2	0.046	
G.C.E. (O/L)		0.527	0.191	2.759	0.006	
G.C.E. (A/L)		0.346	0.127	2.726	0.006	
Degree and above		0.222	0.111	2	0.046	
BusinessPerformance	<--- Industrial Factor					Not Significant
Below G.C.E. (O/L)		.199	0.114	1.75	0.08	
G.C.E. (O/L)		0.196	0.168	1.167	0.243	
G.C.E. (A/L)		0.386	0.199	1.942	0.052	
Degree and above		0.199	0.114	1.75	0.08	
BusinessPerformance	<--- Cultural Factor					Not Significant
Below G.C.E. (O/L)		.159	0.105	1.514	0.13	
G.C.E. (O/L)		0.041	0.166	0.244	0.807	
G.C.E. (A/L)		0.097	0.085	1.142	0.253	
Degree and above		0.159	0.105	1.514	0.13	

To sum up, education level did not significantly moderate the relationship between psychological capital, industrial factor, cultural factor and business performance, whereas the relationships between human capital, social capital and business performance were moderated by educational level.

Conclusion

The systematic investigation of factors influencing business performance of Muslim women entrepreneurs in Sri Lanka examined the applicability of five empirical perspectives such as psychological characteristics, human capital, social Capital, industrial factor and cultural factor with the moderating effect of educational level. A significant finding is the educational level of the Muslim women entrepreneurs where most of them (48.6%) possess G.C.E. (O/L) as their highest qualifications. This corresponds with their age and the tradition of Muslim families as far as two or three decades back which did not prefer daughters to pursue higher studies and go for early marriage instead, noting that 88.8% of the overall respondents are or were once married.

Previous studies have also demonstrated that education level has a significant relationship with business performance (Ibidunni et al., 2018). However, the moderating effect of education level on the relationship between the antecedents and business performance has not been established, particularly in Sri Lanka as well as studies on Muslim women entrepreneurs in general. In the study, education level was divided into four groups, i.e. below G.C.E. (O/L), G.C.E. (O/L), G.C.E. (A/L) and degree and above.

Besides psychological characteristics, educational level also did not moderate the relationships between industrial factor and cultural factor on business performance. Whilst psychological characteristics are understood from the standpoint of family traditions and religion, it does convey a message that anyone could be a risk taker irrespective of age, marital status and educational level. Resource accessibility is also not determined by educational level as the focus is on the needs of the business. For cultural factor, cultural norms are transcended through family traditions and religion than by educational level.

However, education level has a significant effect on the relationship between human capital and business performance, particularly amongst the Muslim women entrepreneurs who possess G.C.E. (A/L) ($\beta = 0.346$, $p = 0.006$); below G.C.E. (O/L) ($\beta = 0.304$, $p = 0.000$); G.C.E. (O/L) ($\beta = 0.285$, $p = 0.007$) and degree and above ($\beta = 0.304$, $p = 0.000$) qualifications. This is not difficult to understand that human capital is determined primarily by business skills and experience in the study, and hence those with G.C.E. O/L and above tend to have better capacity to develop business skills and experience, compared to those who do not have G.C.E. (O/L) qualification.

Education level also showed a significant moderating effect on the relationship between social capital and business performance across all educational levels, i.e. G.C.E. (O/L) ($\beta = 0.527$, $p = 0.000$), G.C.E. (A/L) ($\beta = 0.463$, $p = 0.000$), below G.C.E. (O/L) ($\beta = 0.222$, $p = 0.046$) and degree and above ($\beta = 0.222$, $p = 0.046$), although those with G.C.E. O/L qualifications are more pronounced than the rest. This could be attributed to the age of the entrepreneurs who at their time did not have the opportunity to pursue education. It also shows that those with minimum qualification are those who actively seek out for developing and participating in business networks and associations.

The limited studies on Muslim women entrepreneurs and the non-existence of such a study in a developing country such as Sri Lanka enabled the findings obtained from advanced statistical analysis to be illuminated, enriched and documented, as well as to spur further research in this important area. Finally, the findings can better support the recommendations in terms of roles of family members and spouses, as well the social stigma posed by the community to design educational campaigns for both men and women and the society at large to enable the society to appreciate the contributions of Muslim women entrepreneurs.

References

- Abiodun, E.A. & Amos, D.D. (2018). The performance of women entrepreneurs: Human and financial capital. *Tripple A Research Journal of Social Science and Humanity*, 2(1), 30-37.
- Annual Report, Department of Census and Statistics (DCS), Sri Lanka (2017).
- Baum, J., Locke, E.A., & Smith, K. (2001). A multi -dimensional model of venture growth. *Academy of Management Journal*. 44(2), 292-303.
- Bullough, A.D.L., Abdul Zaher, M.S., & Heim, W. (2015). Developing women leaders through entrepreneurship education and training. *Academy of Management Perspectives*, 29(2), 250-270.
- Dharmaratne, K.L.B.G. (2012). Impact of individual factors on the business performance of women entrepreneurs in Sri Lanka. *Sabaragamuwa University Journal*, 11(1), 139-165.
- Gundry, L. & Welsch, H.P. (2001). The ambitious entrepreneur: High growth strategies of women owned enterprises. *Journal of Business Venturing*, 16(5), 453-470.
- Hair, J.F., Black, W.C., Barry, B.J. & Anderson, R.E. (2010). *Multivariate Data Analysis*, 7th ed., Prentice Hall, New Jersey.
- Ibidunni, A.S., Ibidunni, O.M., Olukundar, M.A., Oke, O.A., Ayeni, A.W., Falola, H.O., Salautio, S.O.P. & Borishade, T.T. (2018). Examining the moderating effect of entrepreneurs demographic characteristics on strategic entrepreneurial orientation and competitiveness of small and medium enterprises (SMEs), 21 (2). <https://www.abacademies.org/articles/7037.html>.
- Ilhaamie A.G.A. (2017). Muslim women entrepreneurs' motivation in SMEs: A quantitative study in Asia Pacific countries. *Asian Economic and Financial Review*, 7(1), 27-42.
- Ilhaamie. A.G.A., Arni, B.S., Rosmawani, C.H. & Al-Banna, M.H. (2014). Challenges of Muslim women entrepreneurship. *International Journal of Management and Technology*, 5(6), 428-433.
- Jiang, C.X., Monica, A. & Guo, C. (2012). Growth of women-owned businesses: The effect of intangible resource and social competence in women-owned businesses. *Journal of Business Diversity*, 12(1), 47-71.
- Kor, Y.Y., Mahoney, J.T. & Michael, S.C. (2007). Resources, capabilities and entrepreneurial perceptions. *Journal of Management Studies*, 44(7), 1187-1212.
- Lerner, M. & Almor, T. (2002). Relationships among strategic capabilities and the performance of women-owned small ventures. *Journal of Small Business Management*, 40(2), 90-125.
- McElwee, G. & Al-Riyami, R. (2003). Women entrepreneurs in Oman: Some barriers to success. *Career Development International*, 8(7), 339-346.
- McIntosh, J.C. & Islam S. (2010). Beyond the veil: The influence of female entrepreneurship in a conservative Muslim context. *International Management Review*, 6(1), 103-109.
- Rashid, K. M., Haslina C. N., Zuraida M. & Mansoo N. (2015). Success factors among women entrepreneurs in Malaysia. *International Academic Research Journal of Business and Technology*, 1(2), 28-36.
- Safiya Ummah, M.A.C., Choy, C.S. & Sulaha Beevi, A. (2020). Factors influencing business performance: A case study of Sri Lanka. *Journal of Asian Finance, Economics and Business*. 8 (4), 202-212.

- Sarker, S. & Palit, M. (2014). Determinants of success factors of women entrepreneurs in Bangladesh- A study based on Khulna region. *Business and Economic Research*,4(2), 237-250.
- Schneider, K. (2017). Entrepreneurial competencies of women entrepreneurs of micro and small enterprises. *Science Journal of Education*, 5(6),252-261.
- Startiene, G. & Remeikienė, R. (2009). The influence of demographic factors in the interaction between entrepreneurship and unemployment. *Engineering Economics*,4(64).[inzeko.ktu.lt/index.php/EE/article/view 11613](http://www.inzeko.ktu.lt/index.php/EE/article/view/11613)
- VandeBrug J. (2013). The global rise of female entrepreneurs. *Harvard Business Review*. September 2013. Retrieved from <http://hbr.org/2013/09/global-rise-of-female-entrepreneurs>.
- Zahra, S.A., Sapienza, H.J.&Davidsson, P. (2006). Entrepreneurship and dynamic capabilities: A review, model and research agenda. *Journal of Management Studies*, 43,917-955.