THE INFLUENCE OF MUDARABAH & MUSHARAKAH MICROEQUITY FINANCING PRINCIPLES ON POOR WOMEN ENTREPRENEURS IN SELANGOR

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THE INFLUENCE OF *MUDARABAH* & *MUSHARAKAH* MICRO-EQUITY FINANCING PRINCIPLES ON POOR WOMEN ENTREPRENEURS IN SELANGOR

ABSTRACT

So far, *Mudarabah* and *musharakah* (M&M) financial instruments have not been offered by any microfinance institution in Malaysia. This study aims to explore whether these instruments can be introduced to the entrepreneurial poor women in Selangor. For this purpose, the levels of the clients' product-knowledge, religiosity, and entrepreneurship were assessed while determining their willingness of accepting the Shariah principles of M&M. This study also statistically scrutinizes the influence of the Shariah principles of M&M financing on the entrepreneurship of the poor clients. It further examines the impacts of clients' knowledge of M&M, religiosity and specific socio-demographic characteristics (education, income, savings, and business experiences). Quantitative and qualitative research methods were adopted to achieve the aim. A survey was carried out in Selangor by using a self-generated structured questionnaire by the end of 2014 and early 2015. A total of 330 (n) questionnaires were retrieved from the equal number of disadvantaged entrepreneurial Muslim women who were the members of Amanah Ikhtiar Malaysia (AIM). The data were analysed by means of exploratory factor analysis (EFA), confirmatory factor analysis (CFA), and structural equation modelling (SEM). To enhance the validity and reliability of the findings of the quantitative study, the methodological triangulation technique was employed. Two academic scholars and one industrial expert were interviewed with an open-ended questionnaire. Findings of the quantitative study suggest that poor women entrepreneurs in Selangor possess the basic knowledge of M&M financing. They lead an intrinsic religious-life performing ‘general worshipping’. Their entrepreneurial skills lay at the moderate level that can be categorised as aspiring entrepreneurship. They are willing to accept those Shariah principles that are commonly used in the general partnership business. The results of the inferential statistical suggest that Shariah principles of M&M have a partial positive impact on the entrepreneurship. The mediating effect of religiosity is higher than that of knowledge. Besides, the variations of *mudaribs*’ academic-qualification, income, savings and business experience have trivial moderating effects. But the output of the qualitative study is somewhat different. All the experts were univocal on knowledge, religiosity, and entrepreneurship as the selection criteria of the clients. They opined that clients could perform better under the business rules of Shariah. According to their views, academic qualification and business experience are necessary to enhance clients’ business performance. They affirmatively stated that income and savings have important roles in shifting the *mudarib* from *mudarabah* contract to *musharakah* contract. They further asserted that the inclusion of *musharakah mutanaqisah* in microfinance would be an appropriate approach to alleviate poverty in a sustainable manner. Hence, the overall findings of this study suggest that *mudarabah* and *musharakah* (M&M) financial instruments can be offered to the disadvantaged Muslim women in Selangor. But the further improvement of their knowledge, religiosity and entrepreneurship might bring greater viability to these financing. The findings of this study would be helpful to the Malaysian microfinance institutions to introduce M&M based micro-equity finance. Since this study was confined to Selangor it might not represent the whole scenario of Malaysia. Therefore, further research is needed.

Keywords: *Mudarabah*, *Musharakah*, *Musharakah Mutanaqisah*, Islamic Microfinance, Poverty

ABSTRAK

Setakat ini, instrumen kewangan *mudarabah* dan *musharakah* (M&M) tidak ditawarkan oleh mana-mana institusi kewangan mikro di Malaysia. Kajian ini bertujuan untuk mengkaji kemungkinan memperkenalkan instrumen kewangan M&M kepada wanita miskin keusahawanan di Selangor. Dalam hal ini, ia menilai tahap pengetahuan produk, keagamaan, dan keusahawanan mereka sambil memastikan penerimaan mereka terhadap prinsip Syariah M&M. Seterusnya, ia mengkaji secara statistik pengaruh prinsip pembiayaan *mudarabah* dan *musharakah* (M&M) ke atas keusahawanan. Kajian ini juga meneliti impak pengetahuan pelanggan tentang M&M, keagamaan dan ciri-ciri sosio-demografi (pendidikan, pendapatan, simpanan, dan pengalaman perniagaan) terhadap hubungan antara prinsip Syariah dan keusahawanan. Kaedah penyelidikan kuantitatif dan kualitatif (kaedah campuran) telah digunakan untuk mencapai matlamat penyelidikan. Satu kajian telah dijalankan di Selangor dengan mentadbir soal selidik berstruktur pada akhir tahun 2014 dan awal tahun 2015. Sebanyak 330 data telah dikumpulkan daripada wanita Islam keusahawanan yang kurang bernasib baik, yang merupakan anggota institut kewangan mikro iaitu Amanah Ikhtiar Malaysia (AIM). Data telah dianalisis dengan menggunakan, analisis faktor penerokaan (exploratory factor analysis EFA) dan analisis faktor pengesahan (confirmatory factor analysis CFA) serta teknik model persamaan struktur (structural equation modelling SEM). Untuk meningkatkan kesahan dan kebolehpercayaan penemuan daripada kajian kuantitatif, teknik triangulasi metodologi telah digunakan. Oleh itu, dua cendekiawan syariah akademik dan seorang pakar industri telah ditemuramah dengan soal selidik terbuka. Hasil kajian kuantitatif menunjukkan bahawa wanita Islam di Selangor mempunyai pengetahuan asas tentang pembiayaan mudarabah dan musyarakah. Mereka mengamalkan kehidupan keugamaan yang baik dengan cara 'ibadat umum'. Kemahiran keusahawanan mereka terletak pada tahap sederhana yang boleh dikategorikan sebagai keusahawanan beraspirasi. Mereka sanggup menerima prinsip Syariah yang biasa digunakan dalam perniagaan perkongsian am. Keputusan statistik inferens menunjukkan bahawa prinsip Syariah M&M mempunyai kesan separa positif terhadap keusahawanan. Kesan mediasi keagamaan lebih tinggi daripada pengetahuan. Di samping itu, tahap kelayakan akademik, pendapatan, simpanan dan pengalaman perniagaan peminjam yang berbeza mempunyai kesan menyederhanakan yang kecil atau tidak penting. Tetapi hasil kajian kualitatif agak berbeza. Semua pakar bersetuju bahawa pengetahuan, keagamaan, dan keusahawanan adalah kriteria pemilihan pelanggan. Mereka berpendapat bahawa pelanggan boleh mengatasi prestasi di bawah peraturan perniagaan Syariah. Menurut mereka, kelayakan akademik dan pengalaman perniagaan dapat meningkatkan prestasi perniagaan klien. Mereka juga tegas berpendapat bahawa pendapatan dan simpanan mempunyai peranan yang penting dalam proses pemindahan kontrak mudarib daripada mudarabah kepada musharakah. Mereka seterusnya menegaskan bahawa penambahan *musharakah mutanaqisah* dalam pembiayaan mikro adalah menjadi pendekatan yang sesuai untuk mengurangkan kemiskinan dengan cara yang mampan. Kesimpulan keseluruhan kajian ini adalah bahawa instrumen kewangan *mudarabah* dan *musharakah* (M&M) boleh ditawarkan kepada wanita Islam yang kurang bernasib baik di Selangor. Tetapi, peningkatan pengetahuan, keagamaan dan keusahawanan mereka boleh meningkatkan daya maju skim ini. Hasil kajian ini boleh membantu institut kewangan mikro Malaysia untuk memperkenalkan pembiayaan mikro ekuiti berasaskan mudarabah dan musyarakah (M&M). Oleh kerana kajian ini terhad kepada kawasan Selangor, ia mungkin tidak mewakili keseluruhan senario Malaysia. Oleh itu, kajian lanjut diperlukan.

Keywords: *Mudarabah*, *Musharakah*, *Musharakah Mutanaqisah,* Pembiayaan Mikro Islam, Kemiskinan

One day, my academic supervisor, Hajah Dr Rubi binti Ahmad texted me, "MUST NOT GIVE UP". I was hopeless, frustrated, and emotionally vulnerable; submerged in the deep pit of grief and agony. That spellbinding message pursued me to complete this thesis while adding significant meaning to my life. I am earnestly forwarding her precious words to my son.

To My Loving Son

Aahil Ahmed bin Islam

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May Allah (SWT) reward them with love, peace, prosperity, and happiness.

TABLE OF CONTENTS

LIST OF FIGURES

LIST OF TABLES

LIST ABBREVIATIONS AND NOTES

AIM : Amanah Ikhtiar Malaysia

AGFI : Adjusted Goodness-of-Fit Statistic

ADB : Asian Development Bank

CFI : Comparative Fit Index

CBN : Cost of Basic Needs

CBTT : Central Bank of Trinidad & Tobago

CGAP : Consultative Group to Assist the Poor

CIBAFI: General Council for Islamic Bank and Financial Institutions

EPU : Economic Planning Unit

FEI : Food Energy Intake

GFI : Goodness-of-Fit Statistic

GB : Grameen Bank

IDB : Islamic Development Bank

IRTI : Islamic Research and Training Institution

IsMF : Islamic Microfinance

IsMFI : Islamic Microfinance Institution

IMFN : Islamic Microfinance News

ILO : International Labour Organization

IBM : International Business Machine

KFH : Kuwait Finance House

MF : Microfinance

MFI : Microfinance Institution

M&M : Mudarabah and Musharakah

PFI : Parsimony Fit Indices

PLI : Poverty Line Index

REO : Research Centre's Forum on Religion & Public Life

RMR : Root Mean Square Residual

RMSEA: Root Mean Square Error of Approximation

SEM : Structural Equation Modelling

TLI : Tucker Lewis Index

Important Notes

Note 1: The common nouns '*mudarib*, client, and respondent' are synonymously used across this thesis to indicate the client of *mudarabah* and *musharakah* (M&M) financing.

Note 2: The pronoun 'she' is used across this thesis to indicate a client of *mudarabah* and *musharakah* financing.

Note 3: The compound nouns, ‘Shariah rules, Shariah principle, Shariah parameter, and Shariah regulation’ are synonymously used across this thesis to denote the Shariah financial rules of *mudarabah* and *musharakah* (M&M) instruments.

Note 4: The acronyms IsMF and IsMFI are used to denote Islamic microfinance and Islamic microfinance institution accordingly. These acronyms were chosen from the book, “Introduction to Islamic Microfinance” by Dr Muhammed Obaidullah (2008).

Note 4: The spellings “*Mudarabah”* and “*Musharakah”* were taken from the Shariah guideline published by Bank Negara Malaysia (BNM, 2008) and “*Musharakah Mutanaqisah”* was taken from the “Draft of Shariah Parameter: Musharakah Contract” published by Bank Negara Malaysia (BNM, 2010).

LIST OF APPENDICES

CHAPTER 1: INTRODUCTION

1.1 Research Background

Over the last forty years[1], microfinance (MF) has been recognised as one of the most viable development programmes for poverty alleviation (Yunus, 2017). This system is ostensibly contributing to the social transformation providing micro-loans to the economically disadvantaged people (Barry, 2012; Dehejia, Montgomery, & Morduch, 2011; Hassan, 2010). As an effective banking system for the poor, microfinance is being practised across the globe. According to Microfinance Information Exchange (MIX), by the year of 2013 to 2015 the regional distribution of MF was: South Asia 16%, Middle East and North Africa 3%, Latin America and the Caribbean 30%, Eastern Europe and Central Asia 15%, East Asia and the Pacific 11% and Africa 25% (MIX, 2018).

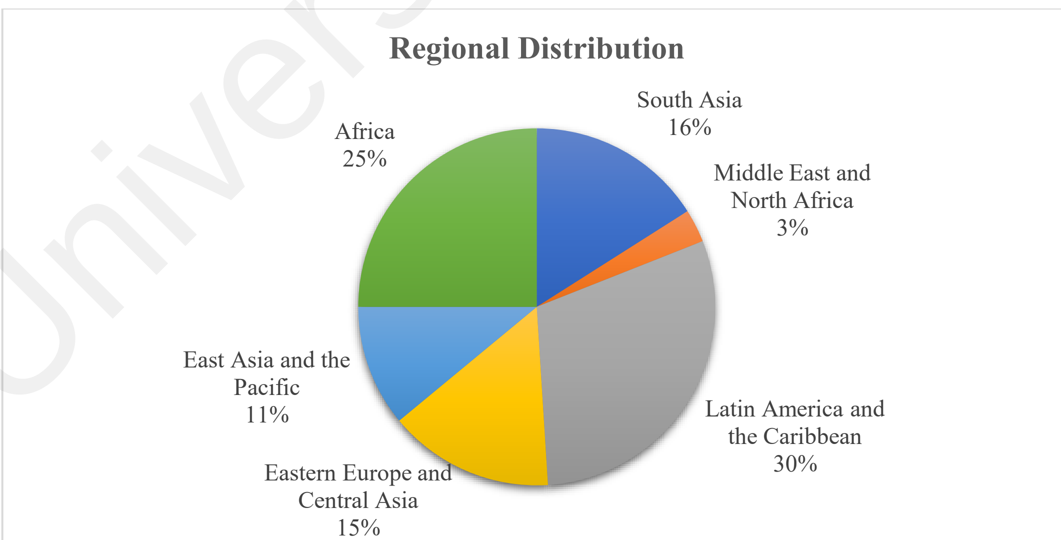

Figure 1.1: Regional Distribution of Microfinance

[1] Grameen Bank (GB) was launched in Bangladesh in 1976 (Yunus, 2017) but it was incorporated as an independent bank in 1983 (Grameen Bank, 2018).

However, the microfinance institution democratises small-size loan to the poor people who because of having no tangible collateral are ineligible for the conventional banks (Barinaga, 2014; Blanco, Irimia, & Reguera, 2016). Most of the microfinance institutions (MFIs) offer a number of identical financial products and services such as microloans, micro-savings, micro-insurance, micro-pension etc. (Yunus, 2007). The clients of MFIs are largely the self-employed poor who manage their livelihoods by conducting microenterprises or other informal income generating activities (Gonzalez, 2008). Microfinance positively impacts on the local economies building assets and creating demands for the goods and services (IRTI-IDB, 2007)[2]. Outwardly, the performance of this system seems outstanding. The loan repayment rate in this industry is more than 98% (Yunus, 2007). From 2013 to 2015 the average asset of this industry was about USD110.6 billion, gross loan portfolio (GPL) USD 86.3 billion, GPL to the female borrowers USD 25.5 billion, and deposits USD 54.7 billion (MIX, 2018). These statistics apparently show the voluminous size and tremendous growth of microfinance.

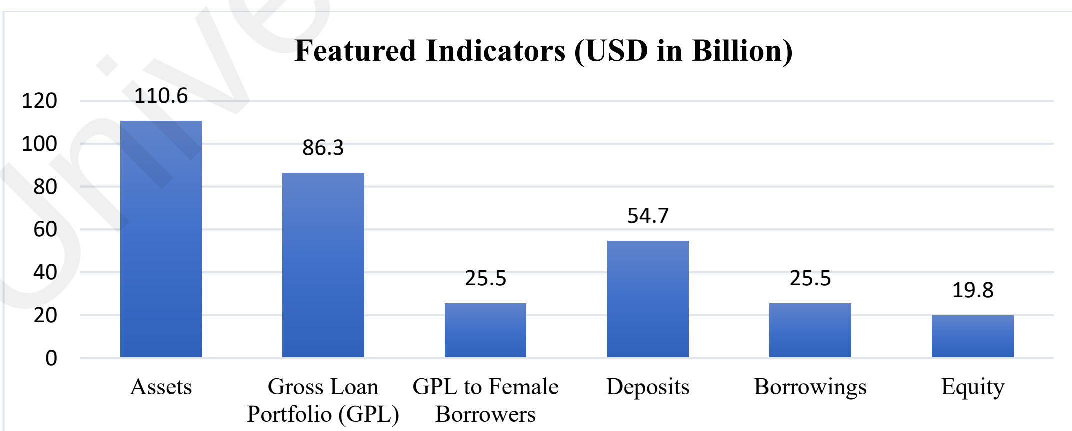

Figure 1.2: Featured Indicators of Microfinance

[2] IRT-IDB: Islamic Research and Training Institute – Islamic Development Bank

But prominent microfinance experts opined that the social and economic impacts of this developmental vehicle deem far below than the expectation. Microfinance is showing the modest outcome in term of achieving its prime goal which is poverty alleviation (Cull, Demirgüç, & Morduch, 2018; Cull & Morduch, 2017). Furthermore, some negative externalities such as loan trap, peer pressure repayment pressure, and alleged application of certain inappropriate method (such as auctioning the defaulted borrowers' tangible assets to claim repayment) (Churchill, 1999; Diop, Hillenkamp, & Servet, 2007; Dulal, Gingrich, & Stough, 2008; Gokhale, 2009; Jain & Mansuri, 2003; Siwale & Ritchie, 2012; Velasco & Marconi, 2004) are assumingly, backpaddling its progress while degrading efficiency. The recent statistics suggest that the performance of microfinance in term of poverty outreach is gradually declining. According to MIX (2018), since 2015 the number of clients and the gross loan portfolio of MFIs are experiencing downturns.

Table 1.1:Microfinance Outreach (2013-2016)

Outreach				
	2013	2014	2015	2016
GPL (bn)	78.4	87.8	92.6	73.2
Clients (m)	98.4	114.5	116.9	81

Source: MIX (2018)

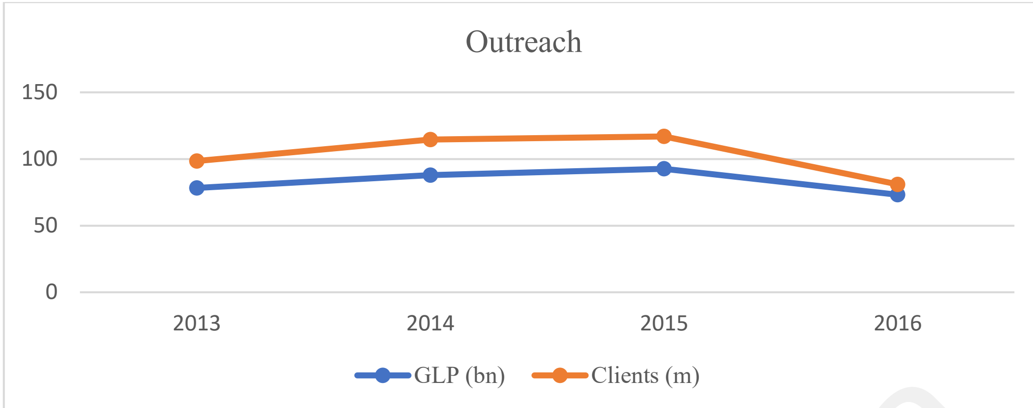

Figure 1.3: Microfinance Outreach

Presumably, the superfluous rates of interest and inadequate attention to the clients' well-being are the main causes of microfinance being less effective in poverty alleviation (Chowdhury & Mukhopadhaya, 2012; Goodwin-Groen, 2002; Hermes & Lensink, 2011). Several empirical studies identified that the excessively rated interest which is considered burdensome and exploitative to the poor debtors is the major issue of hindering borrowers to overcome poverty (Khazanov, Moav, Neeman, & Zoabi, 2018; Nanayakkara & Stewart, 2015; Roberts, 2013). Notably, the usual interest rate of Grameen Bank, Bangladesh is 20%; Banco Sol, Bolivia 47.5 - 50.5%; Bank Rakyat Indonesia Unit Desa 32 - 43%; Badan Kredit Desa, Indonesia 55%; and FINCA Village banks 36 - 48% (Jarrow & Protter, 2018; Morduch, 1999). These interest rates are obviously much higher than the interest rates of the commercial banks.

In the light of Islamic legal principal (*shariah*[3] law), the excessively rated interest is classified as usury (*riba*) (El-Gamal, 2001). Islam like many other religions[4] prohibits paying or receiving *riba*. Because of the entanglement with interest (*riba*), conventional

[3] *Shariah*: "The corpus of Islamic law based on Divine guidance, as given by the Qur'an and the sunnah, and embodies all aspects of the Islamic faith, including beliefs and practices"

[4] The teaching of Judaism and Christianity also prohibit lending money and charging interest/usury. Furthermore, charging interest is prohibited in Buddhism, Hinduism and many other faith and philosophies (Rahman, 2010).

microfinance system is not accepted by Muslims (Ali, 2012; Azhar, 2005; Berg & Kim, 2014; Iqbal & Mirakhore, 2011; Kamla & Alsoufi, 2015). Muslim people even face hard social restrictions to accept interest-based financial products (Clark, 2002; El-Komi & Croson, 2013; Segrado, 2005). The governments of some Islamic countries such as Kingdom of Saudi Arabia, Sudan, Iran, Algeria, Pakistan etc. discourage their citizens to deal with the interest-based financial system (Obaidullah, 2008). For these reasons, microfinance has not yet been flourished in the major Muslim countries. The spread of microfinance in the Middle East and North Africa is only 3% (MIX, 2018).

About one-third of the poor people in this planet are Muslim (El-Komi & Croson, 2013). Several studies unveiled that at least 40% of them rejected conventional microfinance due to their religious faith. Thus, they are mostly deprived of the benefits of microfinance (CGAP, 2009; El-Komi & Croson, 2013).

Islamic microfinance (IsMF) which is an interest-free financial system combining a set of financial products has recently started serving the disadvantaged Muslim community. So far, this system has proved itself as an effective mechanism to fight against poverty (Mohieldin, Iqbal, Rostom, & Fu, 2012). Islamic microfinance institutions (IsMFIs) offer a range of Shariah-based and Shariah-compliant products, namely *mudarabah, musharakah, murabaha* with *bai bithaman ajil, ijara, bai salam* etc. (Obaidullah, 2008). Besides, some redistributive instruments, such as *zakh, sadaqat*, *waqf,* and *qardul hasan* are incorporated with its product's portfolio as the risk-leveraging and risk-mitigating instruments (Mohieldin et al., 2012). The main characteristics of IsMF are almost similar to the main stream Islamic finance and banking, those are: 1) interest/ *riba* free, 2) risk-sharing approach, 3) loan only for the productive purposes, and 4) profit and loss sharing (Tamkin, 1997). Above all, Islamic microfinance gives priority to increasing the income level of the poor people by taking numerous antipoverty measures while emphasising on the equitable distribution of the income and opportunities (Hassan, 2010).

Mudarabah and *musharakah* (M&M) are the main profit and loss sharing (PLS) financial instruments used for the partnership business (Alchian & Demsetz, 1972; Chong & Liu, 2009; Khan, 1987). These instruments are coherent to the fundamental principles of Islamic finance and the value system of the Islamic economy (Warde, 2000). *Mudarabah*, a trust-based financing product is characterised by the profit sharing and loss bearing features (Hassan & Saleem, 2017). In this partnership, one party entitled as the *rab-al-mal* provides the entire capital (either financial capital or sellable goods) and another party who is called the *mudarib* contributes the managerial efforts to run a commercial venture. Both parties share the profit based on the predefined agreement but the loss is borne solely by the capital provider (Obaidullah, 2008). According to Iqbal & Mirakhore (2011), Kabir & Salim (2016), Obaidullah (2008), and Tamkin (1997, 2004) the *mudarabah* financial contact is beneficial for the poor entrepreneur who does not have any capital to start a business. Simultaneously, it also offers an opportunity to the capital owner (*rab-al-mal*) who lacks skills to conduct any business. Thus, this financing constructs creates a union or bondage between two parties, *mudarib* and *rab-al-mal*. This business agreement yields a lot of positive outcomes. For instance, by capitalising the assetless *mudarib* it creates a business as well as a job opportunity and thus, contributes to poverty alleviation. On the other side, it opens a scope of using the idle money of *rab-al-mal.* Thus, money earns its time-value by being invested. There are some other provocative socioeconomic implications of *mudarabah* financing. This financing tool deals with the trust-based investment that requires *mudarib*'s honesty and business skills. Hence, *mudarabah* enhances entrepreneurial exercises while inspiring honesty, integrity, and trust. Simultaneously, this financing agreement seeks for reciprocity.

The involving parties mutually formulate a business plan integrating their thoughts and ideas. This mutual contribution might orchestrate a better and more viable business design that presumably, gains higher benefits. Furthermore, *mudarib* preserves enormous freedom to exercise her entrepreneurial skills. Furthermore, the most significant feature of *mudarabah* instrument is that the business loss is solely carried by the *rab-al-mal.* So, the *mudarib* does not need to endure any unbearable financial shock. Form the institutional perspective, there is a sound risk management mechanism for the *mudarabah* investment (such as the uses of *zakat, waqf, sadakah* and *qardul hasan*). Under this system, a destitute *mudarib* can re-emerge in the business practice or a loss project can be revived. Thus, the unique attributes of *mudarabah* financing such as trust, mutuality, freedom, profit-sharing and risk-bearing give it an ideal and unique shape that can be well fitted to the poverty alleviation programme. On the other side, in *musharakah* financing agreement, involved parties become the partners in a business by contributing both the capital and managerial efforts. At the end, they share the business outcome either it is profit or loss. Alike *mudarabah* agreement, the share of profit in *musharakah* is distributed based on the pre-agreed ratio but the loss is allocated according to the ratio of the capital participation. Besides, *rab-al-mal's* involvement in the management is not a mandatory condition. The management can be solely administered by the *mudarib* or the employed third-party (Arshad & Ismail, 2010; BNM, 2010). In this contract, the main features are, profit and loss sharing, joint contribution in capital and management. These attributes might bring some specific benefits such as risk minimisation, higher profitability, more responsibility, mutuality, and social bondage. Since the client contributes capital and shares the risk financial risk is ultimately minimised. Both parties' participation in business management can help make a better decision as well as take the risky venture. So, better outcomes from the business are expected. The financing institution and the clients work together with a common goal; thus, a vibrant social bondage is created. Besides, there are some instruments such as *qardul hasan, zakat, waqf* can be utilized to address the potential risks (Askari, Iqbal, Krichne, & Mirakhor, 2012; Usman & Tasmin, 2016). Therefore, *musharakah* seems to be an ideal instrument to address the disadvantaged entrepreneurs.

There is a unique type of *musharakah,* which is called *Musharakah mutanaqisah*. Under this contract, clients can gain ownership of the asset through the lease-based asset acquisition process (Hasan, 2016). This partnership is comprised of three contracts, such as 1) *musharakah*, 2) *ijarah* and 3) *bai*. At first, the customer enters into a partnership under the contract of *shirkat-al-milk* (joint ownership) with the financing institution and they co-own the asset. In the second stage, the microfinance institution leases its share to the customer under the contract of *ijarah*. The customer gradually buys the share of the financing institution and at the end becomes the owner of the total asset (Meera, Mydin, & Abdul Razak, 2009). The above discussion suggests that *musharakah mutanaqisah* is an effective tool for facilitating ownership of the tangible asset. This instrument seems to be affordable for the underprivileged people. There are some remarkable characteristics of this instrument such as transferring ownership in an affordable and viable manner, the risk is taken by the financing institution during the lease-period and flexible repayment system (Meera et al., 2009). The ownership of the asset helps poor better resist the poverty shock. So, the integration of *musharakah mutanaqisah* in Islamic microfinance can be regarded as the sustainable livelihoods approach to poverty alleviation.

Most importantly, *mudarabah* and *musharakah* (M&M) instruments do not demand any tangible collateral from the clients. The client has to possess entrepreneurial qualities and good morals in order to be engaged in these financial products (ElGindi, Said, & Salevurakis, 2009). Presumably, M&M can raise the economic status of the underprivileged entrepreneurial Muslim (El-Komi & Croson, 2013). So, M&M can be offered to the disadvantaged Muslims who possess good morals and entrepreneurial qualities. M&M can be used for poverty alleviation if these instruments are incorporated within the context of Islamic microfinance (IsMF). But most of the Islamic financial institutions are reluctant to offer M&M due to the possibility of credit risk, moral hazard, and agency problem (Khan & Ahmed, 2001; Mili & Abid, 2017). Besides, managing these risks in a sustainable manner is difficult too (Adnan, 2013). Hence, only a comprehensive financing model with the effective risk management mechanism can encourage Islamic microfinance institutions to offer *mudarabah* and *musharakah* based profit and loss sharing (PLS) finance to the poor entrepreneur.

1.2 Problem Statement

Ideally, the basic principle of Islamic finance is profit and loss sharing (PLS) (Aysan, Disli, Duygun, & Ozturk, 2018). PLS approach characterises Islamic finance as unique while differing it from the interest-based conventional banking system (Mallin, Farag, & Ow-Yong, 2014). But in the reality, Islamic finance is indistinguishable from the conventional banking practice. Most of the commercial Islamic bank is not broadly offering PLS instruments (F. Khan, 2010). Several studies suggest that the Islamic financial institutions are reluctant to offer *mudarabah* and *musharakah* (M&M) instruments due to the high possibilities of credit risk, moral hazard[5] and agency problems (Chong & Liu, 2009; Dar & Presley, 2001; Mili & Abid, 2017). Based on the previous empirical studies and the existing theories, this study

[5] Moral hazard refers to the situations when the lender cannot observe the activities of the borrowers and remains unclear about the returns from the projects (Armendáriz & Morduch, 2005).

defines the problems of M&M financing as 1) identifying the appropriate client (*mudarib*); 2) measuring the required amount of capital and the allocation of profit and loss; 3) monitoring the business performance of the *mudarib*; and 4) controlling the business risks [6]. These four issues can be briefed as identification, measurement, monitoring and controlling. These issues are elaborately discussed below:

1.2.1 Identification

In *mudarabah* contract, one party (*rab-al-mal*) provides capital (financial capital or sellable goods) and another party (*mudarib*) contributes managerial efforts to run a commercial enterprise. *Mudarib's* entrepreneurial qualities and good morals are the basic requirements of this business agreement (ElGindi et al., 2009). *Shariah law*[7] prohibits *rab-al-mal* to interfere the business management and take any legal action against *mudarib* even, in case of business loss (Ismath, 1997). Due to these supple rules, an opportunistic *mudarib* might become reluctant or immoral and could dilapidate the investment. On the other hand, in both *mudarabah* and *musharakah* financing, if the *mudarib* lacks entrepreneurial quality or if the risk of moral hazard becomes high due to the adverse selection and discretionary power (of *mudarib*), the investment might encounter credit risk (BNM, 2010; Khalil, Rickwood, & Muride, 2000). Therefore, it is important to identify the righteous *mudarib*, who possesses substantial entrepreneurial qualities and good morals.

[6] Bank Nigara Malaysia (BNM) and Central Bank of Tninidad & Tobago (CBTT) used the terms, 'identification', 'measurement', 'monitoring' and 'controlling' in case of risk management. This study used this uses these terms in order to classify the research problems as suggested by (Iqbal & Mirakhore, 2011).

[7] Islamic regulatory system is based on the Qur'an, *Hadith* and *Fatwa* (decision of the Islamic jurisprudence)

1.2.2 Measurement

Measurement refers to accounting the real amount of capital required for the business, the percentage of capital participation (in *musharakah* contract only), expected return on the investment and profit and loss sharing ratio in M&M financing. To define the required amount of capital is a critical factor in *mudarabah* and *musharakah* based business. The allocated capital by the financial institution can be incompatible with the actual need for the business (Ahmed, 2002; Feroz & Goud, 2008). In *mudarabah* contract, if the business encounters any loss, it is solely carried by the *rab-al-mal* (Ismath, 1997). But if it occurs due to the negligence of a *mudarib,* a part or the entire loss can be imposed on the *mudarib* (Azhar, 2005; Usmani, 1999). In such cases, *mudarib* and *rab-al-mal* need to define the proportion of the loss sharing. On the other hand, in *musharakah* contract, the loss is shared according to the ratio of the invested capital (Arshad & Ismail, 2010; BNM, 2010). That implies, in both financing contracts, it is imperative to measure the real needs of the capital for the stipulated business, amount of capital participation by each party and the ratio of profit and loss sharing. Therefore, proper measurement is necessary in the M&M contract.

1.2.3 Monitoring

Monitoring is a process through which the microfinance institution (*rab-al-mal*) observes the business performances of the *mudarib*. For instance, M&M financing must be used for the commercial or productive purposes without any financial speculation (Khan, 2008). This fund cannot be utilized for *haram* business, such as gambling, prostituting, pork raising and selling alcohol etc. (Kamla & Alsoufi, 2015). Besides, a *mudarib* may hide the business-related information to the *rab-al-mal* as well as conceal the real profit in order to grasp a higher share than the agreed ratio (Rashidah & Dean, 2013). Furthermore, overconsumption, under-reporting profit, risk avoidance and risk shirking by the *mudarib* can create agency problem (Khalil et al., 2000). Consequently, *rab-al-mal* can be deprived of the actual profit of business (Iqbal & LIewellyn, 2002). In this situation, proper 'monitoring' can expectedly resolve the *ex-post* hazards of M&M schemes.

1.2.4 Controlling

Controlling is a critical issue in *mudarabah* and *musharakah* (M&M) based financial schemes. In *mudarabah* contract *rab-al-mal* is unauthorised to manage the business as well as disallowed to utilise the legal enforcement even if the business encounters loss (BNM, 2012; Khan, 2008). Notably, in open or unrestricted *mudarabah* (*mudarabah mutlaqah*) contract *rab-al-mal* cannot interfere with the business but, in closed *mudarabah* (*mudarabah muqayyadah*) *rab-al-mal* can impose terms and conditions for managing the business (Adnan, 2013). In *musharakah* contract, both parties can contribute business capital and managerial efforts. In both contracts, *rab-al-mal* and *mudarib* need to follow some specific *shariah* rules in order to helm the operational risks or terminate the business (Azhar, 2005; BNM, 2010). Thus, the issue of 'controlling' comes into importance.

In a nutshell, Islamic microfinance institutions are reluctant to offer *mudarabah* and *musharakah* (M&M) financial tools because of certain *ex-ante* and *ex-post* issues that generally occur due to moral hazard and agency problems. Presumably, these issues might lead the business to credit risk. So, M&M financing can only be offered if there is an effective mechanism to resolve the aforesaid problem. Since, Islamic finance is a Shariah-driven system (Gheeraert, 2014), these issues must be addressed by the underlying Shariah principles.

From the organizational point of view, this study also conceptualises that the clients for M&M contracts should be primarily selected based on the certain criteria such as product-knowledge (knowledge of M&M), religiosity, entrepreneurial skills, and willingness to accept the Shariah principles of M&M. Besides, their education, income, savings habit and business experiences need to be considered too. The reasons choosing these criteria are briefly discussed below for further clarification.

1.2.5 Product-Knowledge

Islam encourages to acquire knowledge. In Qur'an, Allah (SWT) says:

أَمن هُوَ قَانِت آَنَاءَ اللَّيلِ سَاجِدًا وَقَائِمًا يَحذَرُ ا خِرَةَ وَيَرجُو رَحمَةَ رَبِهِ قُل هَل يَستَوِي

الذِينَ يَعلَمُونَ وَالذِينَ لَا يَعلَمُونَ إِنمَا يَتَذَكرُ أُولُو ا لبَابِ

"Are those who know equal to those who do not? Only those with insight can keep it in mind" (*Surah az-Zumar*: 9)

These divine verses narrate that knowledge makes people different helping them realize the facts. The first verse indicates the differentiation in mankind between the knowledgeable and the ignorant. This verse also indicates people with knowledge deserve the high stature. The second verse points out the wisdom and realization, saying 'insight' and 'keep in mind'. These two verses could combinedly be interpreted as: knowledgeable people position higher than the ignorant since they (knowledgeable) can realise the circumstances by using their cognition and insights.

The product-knowledge influences the client's willingness to choose the product. The clients who are aware of the financial products; who know how to deal with; and how to resolve the related risks; are more interested to accept that products (Ahmad & Haron, 2002). They make this decision depending on their ‘insights’. In this regard, a study outlined that clients’ knowledge of the Shariah-based financial instruments encourages them to accept Islamic financial products (Bley & Kuehn, 2004). Besides, the distinguished features of the Islamic financial instruments (such as interest-free and profit and risk sharing) seem to be lucrative to the clients. Besides, Islamic finance incentivises the clients in many other ways. For instance, this system includes risk-mitigating and risk-leveraging tools such as *zakat, waqf, sadakah* and *qardul hasan* (Askari et al., 2012; Usman & Tasmin, 2016). Thus, clients’ preferences to be engaged with the Islamic financial instruments when they ‘keep in mind’ or realise the benefits of them. Therefore, it can be concluded that knowledge of M&M presumably attracts the clients to be involved with these instruments.

1.2.6 Religiosity

As mentioned earlier, *mudarabah* and *musharakah* (M&M) financing seeks for *mudarib*s’ honesty, integrity, and transparency (BNM, 2012). Understandably, it would be more viable if these financial schemes are offered to the religious Muslim. Because, religiosity leads individuals towards the life of honesty (Perrin, 2000). Islamic religiosity enforces Muslim to be abiding by the Islamic laws (Khraim, 2010). Islam is *ad-din*. It provides the complete guidance to the human being to lead a harmonious life on the earth (Al-Lahem, 1995; El-Gamal, 2006). The teaching of Islam directs Muslim to lead a life of piety, honesty, integrity and mutual wellbeing (Aghababaei, 2012). The Holy *Qur’an* suggests Muslim to be trustworthy especially who are responsible to deal with the goods or currencies or the agreement that they made (Cerimagic, 2010).

Allah (SWT) says:

وَالَّذِينَ هُمْ لِأَمَانَاتِهِمْ وَعَهْدِهِمْ رَاعُونَ

"And those who [they] of their trusts and their promise(s) (are) observers"

(Surah al-Mu'minun:8)

Another verse in the *Qur'an* states that the observant Muslim are compelled to fulfil their obligations.

يَا أَيُّهَا الَّذِينَ آمَنُوا أَوْفُوا بِالْعُقُودِ ۚ أُحِلَّتْ لَكُم بَهِيمَةُ الْأَنْعَامِ إِلَّا مَا يُتْلَىٰ عَلَيْكُمْ غَيْرَ مُحِلِّي

الصَّيْدِ وَأَنتُمْ حُرُمٌ ۗ إِنَّ اللَّهَ يَحْكُمُ مَا يُرِيدُ

"O you who have believed, fulfil [all] contracts. Lawful for you are the animals of grazing livestock except for that which is recited to you [in this Qur'an] - hunting not being permitted while you are in the state of ihram. Indeed, Allah ordains what He intends." (Surah al-Ma'idah, 5:1)

To emphasize the importance of honesty, Prophet Muhammad (PBUH) stated:

"*An honest and sincere businessman will be placed with the prophets, siddiqin and al-syuhada*"[8].(*al-Tirmidhi*)

Thus, the Holy *Qur'an* and *Hadith* emphasise trust, fulfilling the commitment, lawfulness, honesty, sincerity, and legal action. Besides, previous studies found that religiosity inspires Muslim to be engaged with the Islamic financial system (Ahamad, Bakar, & Lubis, 2016; Bley & Kuehn, 2004; Gait & Worthington, 2008). Two empirical studies (one on *Tabung*

[8] *Hadith Hasan (Al-Tirmidhi)* 1987, no. 1209, p. 515 [cited in (S. A. Hamid & Sa'ari, 2011; Mahmud & Hoque, 2016)]

Haji and another on the Islamic Banks) in Malaysia also showed that religiosity encourages Muslim to be involved with the Islamic finance (Amin, 2010; Amin, Rahman, Sondoh, & Hwa, 2011). Another study which was carried out on the Halal Industry showed that religiosity influences Muslim people to prefer Halal product (Said, Hassan, Musa, & Rahman, 2014). One study carried out in the Islamic microfinance paradigm on *Baitul Maal wat-Tamwil* (BMT) in Jambi, Sumatra. The findings showed that spiritual practice, spiritual training and spiritual education of the clients positively impacts on the Islamic microfinance practice (Wediawati & Setiawati, 2016). Based on the theories as well as the empirical studies as discussed above, this study considers that religious Muslim would be the most suitable clients for M&M micro-equity finance since, religiosity motivates Muslim to be involved with the Islamic financial system while suggesting them to lead a righteous life.

1.2.7 Entrepreneurship

Allah (SWT) Says:

وَأَحَلَّ اللهُ البَيعَ

"*Allah has made business lawful for you*" (*Surah al-Bakarah* :275).

In this regard, the Messenger of Allah (SWT) said:

"*Nine out of 10 sources of income are coming from business activities*"[9] (*al-Tirmidhi)*.

This *Hadith* highlights the implications of the practices of entrepreneurship. Islam defines business as the best method of earning. In the early-Islamic era, Muslim entrepreneurs

[99] Cited in (Ramadani, Dana, Ratten, & Tahiri, 2015; Salwa, Shahbudin, & Jusoff, 2013; Ullah, Mahmud, & Yousuf, 2013)

proved that any business in the Islamic way could be more beneficial and successful (Mahmud & Hoque, 2016). However, the entrepreneurial skill of the clients is the precondition for M&M finance. The client must possess appropriate entrepreneurial skills in the business that she is interested to conduct under M&M financing (Rahim, 2010). Therefore, to recruit the clients for M&M financing Islamic microfinance institutions (IsMFIs) need to pay keen attention to clients' entrepreneurial qualities.

1.2.8 Shariah Principles

Islamic finance is a Shariah-driven financial system (Gheeraert, 2014). In this regard, Shariah principles refer to the Islamic financial rules that every Muslim must follow in any type of financial transaction. Shariah law protects the welfare of all parties (involved in the partnership business) by offering justice and fairness (Cerimagic, 2010). These rules are designed to regulate the benefits (*manfaah*) and disbenefits (*mudarah*) that can be resulted from human actions. In principle, *mudarah* is prohibited (*haram*) while *manfaah* is encouraged considering its ethical values (Azhar & Afandi, 2003). However, based on the *Qur'an*, *Hadith*, and *Ijtihad* Islamic finance developed a guideline for dealing with the involving parties, financial instruments, business contract, and management (Alam & Rajjaque, 2016). Amin, Chong, Dahlan, & Supinah (2007), Hamid, Rahman, & Halim (2014), and Ismail & Sanusi (2005) conducted three separate empirical studies on *ar-Rahnu* (Islamic pawn-shop) in Malaysia. Their findings suggested that Shariah rules have a positive impact on the acceptance of Islamic pawn-shop. In this light, it can be deduced that the Shariah rules of M&M must be accepted by the clients prior to being engaged with the M&M contracts and clients will accept the Shariah rules of M&M if these rules positively impact on their entrepreneurship (further discussion in Section 1.4.3).

1.2.9 Education, Income, Savings and Business Experience

Education has a significant impact on the clients' performance with the microfinance (Ahamad et al., 2016; Atmadja, Su, & Sharma, 2016). An empirical study which was carried out in Indonesia *Baitul Maal Tamwil* Khalifa (BMT Khalifa) and *Syariah Berbasis Masyarakat* (MISykat) determined that clients' education has a positive impact on the poverty alleviation as well as better performance with the microfinancing programme (Hadi, Wahyudin, Ardiwinata, & Abdu, 2015).

Income and savings are the important determinants of clients' borrowing behaviour (Rokhim, Sikatan, Wibisono, & Setyawan, 2016). But, most of the poor find it difficult to make savings due to their narrow income stream (Atkinson, De Janvry, McIntosh, & Sadoulet, 2013). It is worth mentioning, according to the conceptual financial model of this study (Section.3.3), the financial contract of a client can be shifted from *mudarabah* to *musharakah* (as well as to *Musharakah mutanaqisah*) based on her ability of capital participation. Hence, the most secure source of the client's capital would be her own savings.

On the other hand, business experience works as a catalyst in term of clients' borrowing decision (Levie & Autio, 2013). Clients' business ability, working capacity, and knowledge are the most important determiners of the financing institutions to finance micro-enterprises (Harif, Hoe, & Zali, 2011). Based on the above discussion, it can be concluded that clients' education, income, savings and business experience should be considered prior to offering them M&M instruments.

1.3 The Aim

The aim is the statement that broadly presents the general purpose of a research project (Thomas & Hodges, 2010). The aim of this study is stated hereunder:

Aim: *This study aims to explore the possibility of introducing mudarabah and musharakah (M&M) as micro-equity finance to poor women entrepreneurs who are already involved with the microfinance programme in Selangor, Malaysia*.

1.4 Research Objectives (ROs)

The research objective refers to the key issues that need to be focused in a research project. Usually a research project deals with the multiple research objectives in order to achieve the aim (Thomas & Hodges, 2010). The objectives of this study are as below:

1.4.1 Research Objective 1

The discussion in the section (1.2.5), (1.2.6), and (1.2.7) suggests that Islamic microfinance institutions need to consider *mudarib*s' knowledge of M&M, religiosity, and entrepreneurial qualities prior to offering *mudarabah* and *musharakah* instrument. So, the first objectives can be formulated as:

RO 1: *To investigate the extents of poor women entrepreneurs' knowledge of mudarabah and musharakah (M&M) financing, religiosity and entrepreneurial qualities.*

1.4.2 Research Objective 2

The discussion in the section (1.2.8) suggests that it is important to assess clients' willingness to accept of the Shariah rules prior to being engaged with the M&M financing. Because the rules of M&M give direction to the *mudarib* and the financing institution to reciprocate each other as well as to operate the business. Based on this notion, another objective can be formulated:

RO 2: *To investigate poor women entrepreneurs' willingness to accept the Shariah principles of mudarabah and musharakah (M&M) financing defined for Islamic microfinance.*

The discussion in the previous sections asserts that there is a causal relationship between Shariah principles and entrepreneurship. Besides, religiosity, knowledge, education, income, savings, and business experiences influence this relationship. In this regard, another four research objectives can be formulated as below:

1.4.3 Research Objective 3

Previous studies suggest that Shariah rules of Islamic finance have a positive impact on clients' entrepreneurship (Cerimagic, 2010; Fleuter, 2016). Because, the common attributes of Islamic finance are profit and risk sharing, mutual business development and management. This system embodies risk-leveraging, and risk-mitigating approaches that help *mudarib* better perform and take risky ventures to gain higher income (Cerimagic, 2010). Furthermore, this system is instrumentalized with some other financing tools (*zakat, waqf, sadakah*, and *qardul hasan*) that rejuvenate the sick business as well as leverage the financial risk (Mohieldin et al., 2012). As a result, the default clients get another chance to restart the ventures. Based on the above statement, this study conceptualizes that if the Shariah principles of *mudarabah* and *musharakah* (M&M) financing positively impact on *mudarib*'s entrepreneurship these instruments will be accepted by them. So, a research objective can be formulated as below:

RO 3: *To analyse the impact of Shariah principles of mudarabah and musharakah (M&M) financing on the entrepreneurship of poor women who are involved with the microfinance programme.*

1.4.4 Research Objective 4

Islam encourages the entrepreneurial exercises. In the same vein, Shariah principles of *mudarabah* and *musharakah* (M&M) are the specific rules to deal with the business-related transactions and mutual partnership. These business contracts are comingled with trust, honesty, and freedom (Cerimagic, 2010). Besides, Islamic religiosity promotes morals and ethical standard. It also encourages entrepreneurship. That implies religiosity is intertwined with the Shariah principles and entrepreneurial exercise. It has an intermediating relationship in between Shariah principles and entrepreneurship. Therefore, religiosity can be recognized as a mediator that influences the relationship between M&M financing principles and *mudaribs*' entrepreneurship.

It is noteworthy, a mediating variable affects the dependent variable (DV) while transmitting the effects of an independent variable (IV) (Eugene, Stone-Romero, & Rosopa, 2007; Kenny, 2018). In the sequential relationship, the IV at first effects the mediating variable which then effects the DV. Thus, it intermediates in the causal relationship between the IV and DV (MacKinnon, 2012). The causal variable is correlated with the outcome variable as well as the mediator (Kenny, 2018).

In this light, *mudarabah* and *musharakah* (M&M) instruments seek for honesty and transparency of the *mudarib.* While Islamic religiosity can lead a *mudarib* to honesty. Besides, Islam encourages business. So, it can be deduced that M&M principles influences on *mudaribs'* religiosity and religiosity influences entrepreneurship. Therefore, religiosity plays the intermediating roles between Shariah principles of M&M and entrepreneurship of the *mudarib.* So, religiosity can be regarded as a mediating variable.

Based on this analogy an objective can be set as below:

RO 4: *To analyse the mediating effect of religiosity on the relationship between Shariah principles of mudarabah and musharakah (M&M) financing and the entrepreneurship of poor women who are involved with the microfinance programme.*

1.4.5 Research Objective 5

Product-knowledge influences clients' willingness of accepting a particular product (Ahmad & Haron, 2002). Several studies suggested that clients' who possess enough knowledge on Islamic finance become more interested to be involved with the Islamic financing scheme (Ahmad & Haron, 2002; Bley & Kuehn, 2004). Besides, knowledge of *mudarabah* and *musharakah* (M&M) intensely influences entrepreneurship. Because, M&M financial instruments are used only to conduct business. These two instruments highly prioritize on the entrepreneurial skills. In the same vein, Shariah rules of M&M teach how to deal with the market, revenue, profit and loss sharing while interacting with the involving parties etc. (see Section 3.4.6). That implies knowledge has an intermediating causal relationship between the Shariah principles of M&M and entrepreneurship. Therefore, knowledge can be considered as a mediating variable.

Based on the above discussion a research objective can be formed as:

RO 5: *To analyse the mediating effect of knowledge on the relationship between Shariah principles of mudarabah and musharakah (M&M) financing and the entrepreneurship of poor women who are involved with the microfinance programme.*

1.4.6 Research Objective 6

As discussed earlier (Section: 1.2.9), education has a significant impact on *mudarib*s' performance with the microfinance (Atmadja et al., 2016). Income and savings are the important determinants of clients' borrowing behaviour (Rokhim et al., 2016). Besides, business experience works as a catalyst in term of making borrowing decision (Levie & Autio, 2013). So, the variations (different levels) of these variables presumably have different effects on the relationship between Shariah principles (of M&M) and entrepreneurship.

It is noteworthy, a moderating variable is an independent variable that interacts with another independent variable in order to predict scores on and accounting for the variance on the dependent variable (Salkind, 2007). It functions as a third variable that partitions a focal independent variable into subgroups in order to examine the maximum effect on the dependent variable (Baron & Kenny, 1986). A moderator could be either a qualitative (class, race, sex etc.) or quantitative variable (income, savings, year of experiences etc.) which is able to affect the direction or strength of the relation between the dependent and independent variable (Baron & Kenny, 1986). Based on the above discussion the variation of clients' education, income, savings and business experiences presumably, can affect the relationship between Shariah principles of M&M and the entrepreneurship of the poor women.

So, a research objective can be formulated as below:

RO 6: *To analyse the moderating effects of education, income, savings and business experience on the relationship between Shariah principles of mudarabah and musharakah (M&M) financing and the entrepreneurship of poor women who are involved with the microfinance programme.*

1.5 Research Questions (RQs)

Research questions are considered as the alternative to research objectives, where the main issues are stated in the form of questions (Thomas & Hodges, 2010). The research questions of this study are stated below:

1.5.1 Research Question 1

RQ 1: *What are the extents of poor women entrepreneurs' knowledge, religiosity, and entrepreneurship?*

1.5.2 Research Question 2

RQ 2: *To what extent do poor women entrepreneur accept Shariah principles of mudarabah and musharakah (M&M) financing?*

1.5.3 Research Question 3

RQ 3: *How do Shariah principles of mudarabah and musharakah (M&M) impact on poor women's entrepreneurship?*

1.5.4 Research Question 4

RQ 4: *How does religiosity mediate the relationship between Shariah principles of mudarabah and musharakah (M&M) and entrepreneurship of poor women?*

1.5.5 Research Question 5

RQ 5: *How does knowledge mediate the relationship between Shariah principles of mudarabah and musharakah (M&M) and entrepreneurship of poor women?*

1.5.6 Research Question 6

RQ 6: *How do education, income, savings, and business experience moderate the relationship between Shariah principles of mudarabah and musharakah (M&M) and entrepreneurship of poor women?*

1.6 Research Hypotheses (RHs)

The hypothesis is the prediction of a causal relationship between two or more variables those predict the effect of an independent variable on a dependent variable (Thomas & Hodges, 2010). For the research questions RQ (3), RQ (4), RQ (5) and RQ (6) this research anticipates specific answers. Hence, based on the supports of theories as well as empirical studies four hypotheses are developed as stated below:

1.6.1 Research Hypothesis 1

Shariah rules have a significant positive impact on Islamic banking (Grassa & Gazdar, 2014). A recent study outlined that the Shariah regulation of Islamic finance positively impacts on the clients' entrepreneurship (Fleuter, 2016). Because, Islamic financial institutions not only practice the profit and loss sharing approach but also uses some instruments, such as *qardul hasan, zakat* and *waqf* for the purposes of financial risk management (Mallin et al., 2014; Mohieldin et al., 2012). For these reasons, the failure cost in Islamic finance is substantially low. Low failure cost increases the incentive for the new entrepreneur to start a business. It also encourages the unsuccessful entrepreneur to resume her business (Fleuter, 2016). An entrepreneur might be more willing to start a business if she knows that in case of failure of her business she does not have to pay back the debt until she is financially able (Fleuter, 2016). So, in the cases of M&M financing it can also be hypothesised that-

***H_a*:** *Shariah principles of mudarabah and musharakah (M&M) financing have a significant positive impact on poor women's entrepreneurship.*

1.6.2 Research Hypothesis 2

The impact of Shariah principles on entrepreneurship is influenced with the religiosity of the *mudarib*. Several studies affirmed that religiosity has positive influence on the *mudarib*s' willingness to involve with the Islamic finance (Adhikari & Agrawal, 2016; Amaliah, Aspiranti, & Purnamasari, 2015; Amin, 2010; Rulindo & Mardhatillah, 2011; Tepe, Piyale, Sirin, & Sirin, 2016). Islamic religiosity on the other hand, influences *mudarib*s to be involved with the Shariah-based financing (Adhikari & Agrawal, 2016). It also encourages the practice of entrepreneurship (discussed in Section 1.2.6). In this light, a hypothesis can be formed:

H_a: *Religiosity has a significant mediating impact on the relationship between Shariah principles of mudarabah and musharakah (M&M) financing and poor women's entrepreneurship.*

1.6.3 Research Hypothesis 3

Previous studies suggest that clients' knowledge of the financing instruments (product-knowledge) positively impact on their interest of receiving the financial services (Ahmad & Haron, 2002). Since the knowledge of M&M derives clients to entrepreneurial practices and knowledge on M&M enhance their interest to accept these products; so, knowledge plays an intermediary role on the relationship between Shariah principles of M&M and entrepreneurship of the poor clients. So, a hypothesis can be developed as:

H_a: *Knowledge has a significant mediating impact on the relationship between Shariah principles of mudarabah and musharakah (M&M) financing and poor women's entrepreneurship.*

1.6.4 Research Hypothesis 4

Education has a significant impact on the *mudarib*s' performance with the microfinance (Atmadja et al., 2016) while, income and savings are the important determinants of clients' borrowing intention (Rokhim et al., 2016). Besides, business experience is a determinant in term of making borrowing decision (Levie & Autio, 2013). Therefore, education, income, savings and business experience presumably have moderating effects on the relationship between Shariah regulatory and entrepreneurship. So, a hypothesis can be constructed as:

***Ha*:** *Education, income, savings, and business experience have significant moderating effects on the relationship between the Shariah principles of mudarabah and musharakah (M&M) financing and poor women's entrepreneurship.*

1.7 Poverty Scenario in Malaysia

Malaysia is a country of the upper-middle income economy (World Bank, 2016a). Malaysia gained independence from the British Empire on 31 August 1957 almost peacefully avoiding any conflict and violence. But it faced challenges to maintain the social harmony and peace among the three ethnic origins (Malay, Chinese, and Indian) due to the differences of culture, religion, and identity. This country has also experienced difficulties in pursuing economic development and prosperity (Menon, 2009). Nevertheless, since the independence from the colonial rule, Malaysia has made a great achievement in poverty alleviation. To enhance the social and economic development, the government introduced the New Economic Policy (NEP) during 1970-1990. One of the most important objectives of NEP was to alleviate poverty. The government took initiatives to minimize the economic distance between the races (Menon, 2009). In this regard, NEP also attempted to "restructure society to eliminate the identification of race with economic function" (Jomo & Sundaram, 2004) (pg.6). Several effective measures were taken, those are: providing education and training, enhancing skills, increasing wage and facilitating employment opportunities etc. To materialise these policies, the government of Malaysia introduced three organizations: 1) Federal Land Development Authority (FELDA), 2) Rubber Industry Smallholders Development Authority (RISDA) and 3) Federal Land Consolidation and Rehabilitation Authority (FELCRA). Notably, FELDA and FELCRA were utilized for the resettlement of the rural poor and smallholders. On the other side, RISDA worked for the development of rubber plantation (Jomo & Sundaram, 2004).

The incidence of extreme poverty is almost absent in Malaysia. Only .4% of people in this country are absolute-poor (Department of Statistics, 2017). But poverty is somewhat prevalent among the rural *Bumiputera,* indigenous minorities, and *Orang Asli* specifically, in the poorest states of the Peninsular and East Malaysia (EPU, 2016). Sabah demonstrates the highest incidence of absolute poverty (2.9%) (Department of Statistics, 2017). However, 40% people in the bottom-line of the Malaysian social structure are poor and relative-poor. Among them, 72.2% are *Bumiputera* Muslim. The income inequalities and irrational distribution of wealth among the ethnic groups and social sectors are increasing the relative-poverty (Nair & Sagaran, 2015; Saladin & Arifin, 2012). Nair & Sagaran (2015) outlined that absolute poverty, as well as relative poverty, the pocket of persistent poverty, rural poverty and urban poverty, are rapidly rising in Malaysia. They indicated the irrational income distribution as the main cause of poverty. Even being almost free from the absolute poverty Malaysia is still largely inhabiting the poor and relative-poor people.

1.7.1 The Economic Profile of Selangor

Selangor is the most economically flourished as well as infrastructurally developed state in Malaysia. The presence of absolute poverty is almost untraceable in this state. But according to the new poverty line index (PLI) which is RM1,500 per month, about 30% of people in Selangor are poor (Panirchellvum & Fai, 2014; Shazwan, 2014). That means about five million residents in Selangor fall below the poverty line (The Edge, 2014). Notably, this PLI was reviewed in 2009 based on the purchasing power parity (PPP) (Menon, 2016). However, three main factors were identified influencing the poverty in Selangor, those are unemployment of the household heads, non-working household adults and inability to obtain a permanent job (Rasool & Amran, 2017). According to the Household Income and Basic Amenities Survey 2016, the overall absolute poverty rate in Selangor fell from 0.2% in 2014 to 0.0% in 2016. The governing authority of this state spent more than RM 2 billion on *Peduli Rakyat* initiative addressing the economically disadvantaged people and the smallholders. The ruling authority was pursued by the philosophy of "Returning the State's Wealth to the People". Significant impacts of this initiative are observed in the society. The median income of the rural household improved 12.3 % per year in the last two years while the income of urban household grew 6.9% and the average income growth is about 7.5%. The median household (average household size, 4.1 people) income in Selangor, according to the Department of Statistics Malaysia, is RM 7,225. Mean income of Gombak RM 9,908 and median income RM 7,903 (Department of Statistics, 2017). The household income (median) was increased from RM 6,214 in 2014 to RM 7,225 in 2016 [and mean RM 9,463 (Department of Statistics, 2017)]. The income gap between the rural and urban people was reduced to a greater extent (Loong, 2017). The government is planning to set a state's Income Poverty Line (PGK) at 60% of the current RM 3,300 household median income (Menon, 2016). So, the proposed poverty line index presumably, will increase the number of poor households in this state. On the other hand, since 2009 the household expenditure has been increasing annually by 11.1% while the increase in income is only 6.7%. The income growth in Selangor is below the national average which is 8.8% (Teoh, 2017). These statistics indicate the possible growth of poverty in Selangor.

In Malaysia, the number of small and medium enterprise (SME) is significantly high and the number of microenterprises is even higher. The size of medium enterprises is 20,612, small enterprises 192,783 and the microenterprises 693,670 [microenterprise: Less than

RM300,000.00 yearly turnover or less than 5 employees (SME Corp. Malaysia, 2018a)]. More attractively, 20.6% of the SMEs are women-owned. Besides, 19.8% of people in Selangor are living on SMEs (SME Corp. Malaysia, 2018b).

1.7.2 Micro Finance in Malaysia

For the period of 1991 to 2000 the government of Malaysia outlined a new development framework which is called, National Development Policy (NDP). NDP was built on the basic policy of NEP based on the experiences obtained from the past 20 years. The NDP was announced as a socioeconomic framework to regulate Malay society for next 20 years (1991-2010) (Mahmoud & Mitkees, 2017). However, by taking various initiatives such as promoting entrepreneurship, enhancing managerial skills and expertise within the Malay community NDP focused on decreasing the gap and racial imbalance existing in the various economic sectors (Menon, 2009). NDP impregnated the goal of "Vision 2020" when Malaysia aspires to be fully developed Vision 2020 added a new dimension to cope with globalization as well as to attract foreign direct investment (FDI) while enhancing technology transfer, focusing sophisticated manufacturing items (Mahmoud & Mitkees, 2017).

Malaysia has its own aspects of developing economic plans emphasising "growth with equity". This country has not adopted the classical neo-liberal approach but it has its own version of capitalism (Mahmoud & Mitkees, 2017). Malaysia has been building its financial architecture since the 1970s and so far, significant progress has achieved (Anwar & Sun, 2011). This nation ensured a steady growth since 1967-2005. [Though there were hard hits of the 'commodity shock' in the mid of 1980's, the Asian financial crisis in 1997-8, and the impact of the global financial crisis 2008 (Athukorala, 2010)] It sustained high economic growth rate at 7% for more than 25 years maintaining the microeconomic stability, isolating from the exploitation of world economy, applying market response for resource allocation, and establishing a capable, committed and credible government (Mahmoud & Mitkees, 2017). In the way of development, a great deal of emphasising was given to building a sustainable infrastructure of the financial industry.

Under the new economic policy (NEP), Amanah Ikhtiar Malaysia, a microfinance institution took birth in 1987 with the vision of scaling up the income level of the rural poor especially, the Bumiputra community. It offered small loans to the economically disadvantaged people to excel their income (Roslan, Noor, Majid, & Abidin, 2006). To fight against poverty, five microfinance institutions (MFIs) are working across the country. The MFIs are: 1) *Tabung Ekonomi Kumpulan Usahawan National* (National Entrepreneurs Economic Group Fund, TEKUN), 2) Agrobank, 3) *Lembaga Kemajuan Ikan* Malaysia (Malaysian Fisheries Development Board, LKIM), 4) *Yayasan Basmi Kemiskinan* (Poverty Eradication Foundation, YBK) and 5) *Amanah Ikhtiar Malaysia* (AIM) (Abdullah Al Mamun, Adaikalam, & Sazali, 2012). Among these MFIs, AIM is the largest microfinance institution. It has recently offered some resale-based Shariah-compliant financial products and *qardul hasan* to a small number of borrowers (Saad, 2012a).

1.8 Sustainable Livelihoods Approach to Poverty Alleviation

Sustainable livelihoods (SL) approach has taken place in the context of development literature since the 1980s. This approach links between micro and macroeconomic paradigms rather than remains embedding in the community level. It changes the perspectives on poverty, the construct of poor's lives, and the importance of institutional efforts to alleviate poverty (Ashley & Carney, 1999). In this regard, a comprehensive framework was introduced by Department for International Development (DFID) for the rural livelihoods. This framework includes three livelihood strategies: 1) natural, financial, physical, human and social capital; 2) public, private and non-governmental organizations (NGOs); and 3) shocks, trend, and seasonality (DFID, 1999; Sati & Vangchhia, 2016). SL includes well-being aspects of poverty alleviation, such as access to clean water, financial services, education, land, vulnerability to natural calamity, physical safety, gender issue, social relationship and economic security. Thus, it differs from the conventional poverty eradication approach that merely deals with income, consumption, and nutrition of the poor people (Naraya, Patel, Schafft, Rademacher, & Koch-Schulte, 2000). SL recognises people's capabilities as the main resources that can pursuit them to win their livelihood goals (Adato & Meinzen, 2002). The sustainable livelihoods approach to poverty alleviation envisions to enhance income and wellbeing while reducing vulnerability. This approach improves food security as well as ensures the sustainable use of natural resources. For these purposes, SL emphasises the usages of human capital, natural capital, financial capital, physical capital, and social capital (DFID, 2001; Harvard Humanitarian Initiative, 2014).

On the other side, (as discussed in Section 1.1) *mudarabah* and *musharakah* based poverty alleviation programme at first create business opportunities for the assetless poor and thus, enhances the income and wellbeing while reducing vulnerability. These financing instruments deal with the partnership business. Therefore, mutuality, cooperation, social relationship, and trust get prioritised. In the same vein, *musharakah mutanaqisah* offers the opportunity to acquire tangible asset. Asset ownership helps poor to resist further financial shock and vulnerability. This financing mechanism also usages human capital (entrepreneurial skills), financial capital, physical capital (managerial activities), and social capital (relationship). Therefore, M&M based poverty alleviation programme can be regarded as the sustainable livelihood approach to poverty alleviation as well.

1.9 Research Gap

This section attempts to find out the research gap in *mudarabah* and *musharakah* based microfinancing. For this purpose, an extensive library work was conducted to search for the relevant scholarly works published in last 12 years. In this regard, a few keywords such as Islamic microfinance, Islamic equity instruments (*mudarabah, musharakah,* and *musharakah mutanaqisah*) religiosity, knowledge, Shariah principles and poverty were used to look for the published literary works. By using "Google Scholar", almost all the topical scholarly works published in 2007 to August 2018 were collected and rigorously studied. Thus, the untapped research area was determined. The crux of he published works are cited below.

1.9.1 Year 2007 to 2011

Norhaziah & Sharif (2007) carried out an empirical study on Amanah Ikhtiar Malaysia (AIM). They explored the positive impacts of microloans on the disadvantaged people of Terengganu. Amin (2010) attempted to determine the factors that affect *Tabung Haji's* customer in using the automated teller machine (ATM) in the eastern Malaysia. He used 'religiosity' as one of the predicting variables. He explored that religiosity encourages Muslim to be involved with the Islamic finance. Hanudin Amin et al. (2011) conducted a study on the Islamic Bank to determine the factors influencing customers' intention to involve with the personal financing. In this regard, they identified religiosity as one of the influencing factors. Halik & Webley (2011) carried out a research on the Malaysian adolescents' perspective towards poverty. According to the views of the respondents, they categorised poverty as the structural, individualistic, fatalistic phenomena. Hashim, Razak, & Amir (2011) investigated the impact of ITC on women empowerment. They confined their study to “1nita” project in Malaysia. Saad (2011) conducted a survey on AIM’s members to look into the nature of their economic activities and the performance of the loans. Saladin, Fauzi, Ariffin, & Aini (2011) theoretically defined the characteristics of poverty. They pointed out various features of poverty based on *had al-kifaya* and thus, conceptualised poverty as vulnerability and social exclusion along with income deprivation. They indicated that the poverty measurement technique by the *zakat* institutions in Malaysia was more comprehensive. In that light, they formulated a multidimensional Islamic poverty index (IPI) that comprises monetary and non-monetary approaches.

1.9.2 Year 2012 to 2013

Abdullah Al Mamun, Adaikalam, & Wahab (2012) empirically scrutinized AIM’s performance. They discovered the microfinance practices by this institution positively impacted the quality of life of the Malaysian poor women. They employed a stratified random sampling technique and collected the large number of data surveying seven branches of AIM those are in Kedah, Kelantan, Perlis, Perak and Terengganu. Similarly, Saad (2012b) conducted a robust research focusing on the Islamic microfinance practice of Amanah Ikhtiar Malaysia. She discovered that there is a lack of product diversification in Islamic microfinance system. She also outlined that Islamic microfinance is at infancy in Malaysia offering only *qardul hasan* in a limited scale. While, she envisioned Amanah Ikhtiar Malaysia (AIM) could offer *murabaha, musharakah, mudarabah, muzara,* and *ijarah* to its clients. Saladin & Arifin (2012) conducted a study by using metadata. The focal point of their study was to develop an Islamic poverty line index. They highlighted the Shariah-compliant technique which is called *Had al Kifaya* based on the principle of *Maqashid al-Shariah*. These authors indicated that Malaysia might have eradicated absolute poverty but the relative poverty and subjective poverty are rapidly growing, mostly in the financially flourished states like Selangor. They suggested Malaysia could implement Islamic poverty index (IPI) in order to rationally address the people with different economic status. Samer, Majid, Rashid, & Rizal (2013) made a comparative discussion arguing the status of microfinance in Malaysia and Yemen. They concluded with a comprehensive conceptual model of microfinancing which was claimed could be a better alternative to poverty outreach. Ahmad et al. (2013) conducted a research on the challenges and constraints that the Islamic financial institutions are facing to implement M&M financing in Malaysia. They identified the high amount of risks, inadequate demand by the customers, complexities in the application, stringent regulation and lack of expert people with proper skills and experiences.

1.9.3 Year 2014-2016

Abdullah & Ismail (2014) developed a concept of microfinance based on *al-Tawhid* principles. They suggested *cash-waqf* as the source of capital. Adam & Bakar (2014) underscored the Shariah screening process for the Shariah-compliant business and Financial services. They argued the roles of Shariah scholars highlighting the Shariah-compliant specific process flow. In this regard, they adopted the codes of *Suruhanjaya Syarikat* Malaysia classification. Jamak, Ali, & Ghazali (2014) developed a breakout model to facilitate business ownership to the poor micro-entrepreneurs in Malaysia. They emphasised several skills such as technical skills, sales and management skills, financial literacy, management practice and networking. Kazemian, Rahman, & Ibrahim (2014) carried out a study on Amanah Ikhtiar Malaysia (AIM) to investigate its market orientation. In this regard, they empirically studied three basic elements such as 1) customer orientation, 2) competitor orientation, and 3) inter-function coordination. Said et al. (2014) conducted a study on the impacts of consumers' knowledge and religiosity on the *halal* products. They confined their study to the *Halal* food industry in Malaysia. Saladin & Ariffin (2014) developed an Islamic Poverty Index (IPI). IPI was built on the prescription of the *Zakat* institute of Malaysia. IPI incorporates five dimensions such as religion, physical self, knowledge, offspring and wealth. They undertook *Maqasid al-Shariah* as the base for developing IPI. Alam, Hassan, & Said (2015) assessed the impacts of Islamic microfinance practice by AIM on the disadvantaged people in Sabah. Their study focused on the five basic principles of *Al-daruriyyat* of *Maqasid Al-Shariah*. Gopal & Malek (2015) conducted a cross-country research where Malaysia was taken as a case. They exemplified how Malaysian poor could get rid of poverty with a success.

Ismail, Rahim, Kamal, Mat, & Husin (2015) did an extensive research on the inspirational and motivational dimension of the successful single mother entrepreneurs in Malaysia. Manan & Shafiai (2015) conducted a research on the risks in Islamic microfinance and the risk management strategies by the commercial Islamic banks in Malaysia. They identified adverse selection and moral hazards are the main risk in financing to the poor. In term of risk management, they suggested several points, such as loan loss reserve, risk identification process, peer lending, character assessment, savings requirement, the small size of the loan, various loan terms, limits to the loan size. Nair & Sagaran (2015) authored a paper that highlighted the current poverty scenario in Malaysia. They outlined that absolute poverty, as well as relative poverty, the pocket of persistent poverty, rural poverty and urban poverty, are rapidly rising in Malaysia. They further pointed at the irrational income distribution as the main cause of poverty. Othman (2015) did an impact study on the Islamic Microfinance in Malaysia focusing on the poor women. He uncovered that Islamic microfinance positively impacts on poverty alleviation by promoting inclusive growth while reducing inequality. It also enhances women's entrepreneurship as well as empowerment. Samer et al. (2015) conducted an empirical study on Amanah Ikhtiar Malaysia (AIM) to explore the Impacts of microfinance on the household income of the rural people in Selangor and Melaka. The findings demonstrated that borrowers who had more experiences with the financing schemes were more benefitted from it. Zairani, Jalil, Zafarullah, Dahlan, & Hilal (2015) did an exploratory research on the profit and loss sharing financing that was practised by the Islamic banks in Malaysia. They precisely investigated the factors affecting the application of *mudarabah* and *musharakah* financing. They unveiled the high level of risk exposures, the reluctance of banks and fund providers, complexity in policy implementation, stringent regulation and lack of skilled people. Kabir & Salim (2016) developed a two-stage operational structure for Islamic microfinance (IsMF) that can theoretically resolve the operational constraints and barriers for achieving sustainability. At the initial stage, they proposed *zakat* and *waqf* as the capital and expected a voluntary repayment by the clients. In the second stage, they proposed dotation and other financings as the source of capital and suggested a compulsory repayment. Fersi & Boujelbéne (2016) explored that in the case of sustainability, Islamic microfinance is sensitive to social performance. On the other sides, conventional microfinance is more successful in financial performance and the return on asset. Mahmood, Abbas, Fatima, & Asghar (2016) examined self, family and community employability under the influence of Islamic microfinance. Their results showed that Islamic microfinance enhanced micro-entrepreneurship, starting and extending business as well as self-employment. Effendi & Utami (2016) examined the effects of social capital towards the repayment rate of Islamic microfinance's customer. They found the relationship between the clients and financing institutions and Islamic recitation had positive impacts on the repayment performance. Ahamad et al. (2016) did a study based on the existing literary works published from 1995 to 2015. They determined the factors influencing borrowers' performance and wellbeing were: loan-size, time with the microfinance (experience with the microfinance), training, morality and religiosity, age, and education. Ibrahim, Kamaruddin, & Daud (2016) conducted a research on the Islamic microfinance offered by the commercial banks. They assessed the performance based on the return on asset analysing the impact of cost efficiency, capital ratio, fuel price, GNI per capita and GDP. Rozzani, Mohamed, & Syed Yusuf (2016) conducted an empirical study to explore the risks that restricted borrowers of Islamic microfinance to use technology for repayment. They discovered lack of easiness of the method, the complex process, additional cost to manage and lack of confidence and trust (on IT) resist them to accept IT based repayment system. Wediawati & Setiawati (2016) conceptualised that Islamic microfinance was under the influence of spiritual intermediation. They emphasised on the spiritual practice, spiritual training and spiritual education to obtain spiritual mission. They carried out this study on *Baitul Maal wat-Tamwil* (BMT) in Jambi, Sumatra. Wulandari & Kassim (2016) explored several issues of microfinancing linked with BMT, Indonesia. Risk management was one of the main issues. BMT used *zakat, infaq* and *sadaqah* for risk mitigation. Besides, the religious capacity building was also considered to reduce the risks.

1.9.4 Year 2017 to 2018

Al-shami, Razali, & Rashid (2017) identified that microloan provided by AIM had positive impacts on women empowerment in Malaysia. The financial services of AIM enhanced their income while empowering in household decision making, daily expenditure, health expenditure, child care, and loan-based decision making (investment decision). Tammili, Mohamed, & Terano (2017) found that microfinance positively impacts the micro-enterprise in Malaysia. They found AIM's programmes were effective in poverty alleviation. (Fiantoa, Gana, Huc, & Roudakia (2017) examined the impact of equity-based and debt-based Islamic microfinance on the rural development in Indonesia. They found equity-based finance has the better impact than the debt-based Islamic financial product on the livelihoods of the rural people. Abdullah & Oseni (2017) developed a Shariah-compliant equity-based financial platform comprehensive crowd-funding model based on *mudarabah, musharakah* and *musharakah mutanaqisah*. They addressed the *halal* market segment in Malaysia. Hartomi, Dzuljastri, & Adewale (2018) explored the factor determined clients' behaviour to participate in Islamic microfinance. They identified behavioural control had the positive and significant impact on clients' participation in BMT, Indonesia. But compatibility, complexity, uncertainty, and facilitating condition were found not significant. Maheran, Shaharir, & Abdul (2017) developed a mathematical model of *musharakah mutanaqisah* in order to facilitate asset ownership to the poor. Dariah, Sundaya, & Nurhasanah (2018) showed that company age, total employees, level of mandate and changes in the organization increase the profit share of *mudarabah* financing. Sarah, Fareeda, & Long (2017) developed a framework for poverty alleviation by using *mudarabah* instrument. They conceptualized zakat, sadakah and waqf based *mudarabah* fund. However, they confined their study to the theory level. Widiarto & Emrouznejad (2018) measured the performance of the Islamic microfinance institutions. They focused on the social and financial efficiency of the Islamic microfinance.

Based on the above discussion, it can be concluded that numerous studies have been carried out on Islamic microfinance as well as *mudarabah, musharakah,* and *musharakah mutanaqisah* financing. Vast attention was paid to the associated risks in M&M instruments, organizational impact assessment and the influences of the sociodemographic parameters. But there was no research conducted to explore the applicability of M&M as micro-equity finance addressing the entrepreneurial poor women. So far, no study has been documented that assessed all the variables such as religiosity, knowledge, education, income, savings and business experiences specifically in the Malaysian context. So, a comprehensive study is necessary to understand the applicability of M&M as micro-equity finance for the disadvantaged Muslim in Malaysia. This concern has inspired this researcher to conduct an empirical study. This study focused on the underprivileged entrepreneurial Muslim women in Selangor, Malaysia.

1.10 Methodology

This study mainly adopted the quantitative approach to achieve higher validity and generalizability. With the view to ensuring the reliability of the quantitative findings the methodological triangulation technique was employed. In this regard, qualitative method was followed. Hence, this study embraced the mixed methods.

1.10.1 Quantitative Method

The survey method was preferred to collect the cross-sectional primary data. This technique seemingly contributed to high external validity. Besides, it allowed generalising the findings based on the statistical output. Thus, the outcomes thus became acceptable as well as representative (Wolf, 2016). The survey was carried out in Selangor, Malaysia by the end of 2014 to early of 2015 by administering a self-generated structured questionnaire. A total of 330 (n) completed structured questionnaires were retrieved from the equal number of respondents. The stratified convenient sampling technique was applied for collecting the data from the female Muslim borrowers of a microfinance institution namely, *Amanah Ikhtiar*

Malaysia (AIM). Descriptive and inferential statistics were utilised to analyse the data. Exploratory factor analysis (EFA), and confirmatory factor analysis (CFA) were carried out followed by structural equation modelling (SEM).

1.10.2 Qualitative Method

The methodical triangulation approach was employed to justify the quantitative findings. In this regard, the qualitative research method was adopted. This technique enhances the viability and reliability of the findings while helping make a decisive conclusion (Duffy, 1987; Flick, 2007). Two Islamic finance scholars and one industrial expert were interviewed with an open-ended questionnaire. The questionnaire was designed according to the research objectives. The responded was selected based on their scholarly excellence as well as practical experiences.

1.11 Significance of this Study

Any kind of *riba* (interest) is *haram* (prohibited) in Islam. For this reason, Muslim cannot interact with the usurious conventional microfinance. So, Islamic microfinance system is the better alternative to the interest-based system. This study presents a framework (see Section 3.3 and Section 3.4) of Islamic microfinance which is totally interest-free. The proposed framework incorporates *mudarabah*, *musharaka*h and *musharakah mutanaqisah* financial instruments that deal with profit and loss sharing (PLS) approaches. These types of micro-equity financing are mostly non-existent in the current practice of Islamic microfinance (IsMF). Especially, the inclusion of *musharakah mutanaqisah* in this financing model can be considered as a new approach to alleviating poverty in a sustainable manner.

Findings of this study can provide insights to the Islamic microfinance institutions (IsMFIs) to formulate policy to introduce M&M based micro-equity products. This study generates useful insights and information from various dimensions. At first, it shows the levels of *mudaribs'* religiosity, knowledge and entrepreneurship while defining the extent the *mudarib* can accept the *shariah* rules of the partnership business. These findings can help the financial institutions to decide whether M&M can be offered to this group of people. It also helps determine to what extent clients' religiosity, knowledge, and entrepreneurial quality need to be improved. Hence, these outputs can assist IsMFIs to take further operational initiatives.

On the other hand, by showing the causal relationship between the variables this study provides a deeper understanding. The statistical results might instigate provocative thought as well as help decide if M&M can be applied in the current circumstances. The psychometric model (discussed in Chapter 4) determines the influences of *mudarabah* and *musharakah* financial principles on the entrepreneurship of the poor clients while assessing the mediating effects of religiosity and knowledge and the moderating effects of education, income, savings and business experiences. Besides, the outcomes of the descriptive statistics can help understand the demographic characteristics of the clients. Overall, this study comprehensively shows the possibility of application of M&M based profit and loss sharing Islamic microfinance system. Besides, the proposed financing model incorporates an asset acquisition basis poverty alleviation technique which is synonymously the sustainable livelihood approach to poverty. Thus, the findings of this study pave a new road of poverty alleviation. This approach understandably is more effective, stable, sustaining and efficient.

1.12 Scopes of this Study

Islamic finance industry is growing very fast across the globe due to the rising demand for the Shariah-compliant financial products and services. But Islamic microfinance is still at an early stage (Mohieldin et al., 2012). Expectedly, by practising the profit and loss sharing principle Islamic microfinance institutions can better contribute to the household economic development. Because, the practice of PLS seemingly fosters equity in income distribution as well as sustainable economic growth and social justice. It also enhances the efficiency of capital allocation by stressing on productivity (Kassim, 2016). So, the inclusion of *mudarabah* and *musharakah* (M&M) can enrich the product portfolio of the Islamic microfinance institutions (IsMFI). M&M are compatible with the microfinance system since they do not require any tangible collatarel. The entrepreneurial poor Muslims can access to these schemes by dint of their entrepreneurial qualities and good morals. They do not need to offer any tangible collateral. So, these additional products would enable the IsMFIs to address new market segments. Specifically, M&M financing can better address self-employed entrepreneurial poor. A recent empirical study in Indonesia explored that Islamic equity financing has the better impact than the debt financing on the livelihoods of the rural people (Fiantoa et al., 2017). So, M&M financing would be an alternative approach to the debt-based microfinance practices. At present, most of the IsMFIs are using the 'bottom-up policy' intending to qualify the absolute poor to entrepreneurial poor (KFH, 2011). By utilizing M&M financing, IsMFIs can direct address the entrepreneurial poor and scale up their economic lives. So, M&M based microfinancing can be considered as an alternative approach to poverty alleviation.

Mudarabah and *musharakah* (M&M) schemes encourage the productive enterprise while creating jobs (World Bank, 2015). Literally, entrepreneurial poor are self-employed and able to create employment for others. It is expected that if their businesses are properly capitalized, they can excel their own economic lives and simultaneously uplift the financial condition of the vulnerable or labouring poor by creating job opportunities for them. So, there is a wider space in the social segment where *mudarabah* and *musharakah* (M&M) schemes can significantly contribute to alleviate poverty.

In Malaysia, no microfinance institution is offering *mudarabah* and *musharakah* (M&M) financing schemes to address poverty. Notably, the number of the lower income group and relative is significantly high and this number is rapidly increasing day by day (Nair & Sagaran, 2015; Saladin & Arifin, 2012). About 40% of the bottom-lined Malaysian have low and moderate income. A large number of this group of people is considered as relative-poor (Nair & Sagaran, 2015). M&M financing can address relative poverty in a more viable manner. Because, most of the people in this segment are Muslim who manage their livelihoods by means of small trading and farming. In this case, *musharakah* financing can be offered to these smallholders while *mudarabah* to the destitute entrepreneurial poor. Besides, the number of small and medium enterprise (SME) in Malaysia is significantly high and the number of microenterprises is even higher. The size of medium enterprises is 20,612, small enterprises 192,783 and the microenterprises 693,670 [microenterprise: Less than RM300,000.00 yearly turnover or less than 5 employees (SME Corp. Malaysia, 2018a)]. More attractively, 20.6% of the SMEs are women-owned. Besides, 19.8% of people in Selangor are living on SMEs (SME Corp. Malaysia, 2018b). These statics suggest that there is a big market for M&M in Selangor as well as in whole Malaysia.

The higher percentage of Muslim population and their level of income have positive effects on the development of the Islamic banking (Grassa & Gazdar, 2014). The need of Islamic finance in Malaysia seems increasing because of Muslim majority (which is 51%) as well as the enhanced values of the Islamic principles to the Malay society (R. Said, Daud, Radjeman, & Ismail, 2013). Therefore, *mudarabah* and *musharakah* (M&M) based microfinancing seems to be a viable and better financing approach in the Malaysian microfinance market as well as to the Muslim world.

1.13 Limitations of this Study

Mudarabah and *musharakah* (M&M) are not being used as the micro-equity finance by the microfinance institutions in Malaysia. No specific Shariah rules on M&M based microfinancing have been published. For this reason, specific Shariah parameters that were suggested by the prominent scholars and Bank Negara Malaysia (BNM) for the Islamic bank were adopted in this study. Is this regard, the existing microfinance setup has taken into consideration as a platform. So, if there any incomprehensiveness appears in term of selecting the Shariah parameters[10] can be counted as a limitation. This study has neither introduced any new Shariah law nor argued on the existing ones. It limits itself to the Quranic principles, authentic *Hadith* and established *fatwa.* Besides, this study has come into a conclusion based on the limited number of respondents (n=330) from Selangor, Malaysia. Therefore, the findings of this study may not reflect the entire scenario of this country. This study precisely chose the entrepreneurial poor segment but, according to the poverty pyramid (stated in Chapter 3, Section 3.2), 'self-employed' poor could be eligible for M&M financing schemes. Because this type of poor people create self-employment and probably possess entrepreneurial qualities. So, narrowly segmentation of the population is another limitation of this research.

[10] In selecting *shariah* parameter this author depended on the previous literatures and authentic *shariah* scholars

Considering the operational ease and viability, this study confined to the restricted or closed *mudarabah* (*mudarabah muqayyadah*) and omitted unrestricted *mudarabah* (*mudarabah mutlaqah*). In open *mudarabah* financing *rab-al-mal* cannot interfere the business but, in closed *mudarabah rab-al-mal* can impose terms and conditions for business operation. From the organization viewpoint, open *mudarabah* is difficult to maintain (Adnan, 2013).

Muzara'ah, another type of *mudarabah* financing was deliberately ignored because, this financial tool is suitable for the agriculture sector while this study is focused on business. In term of *musharakah* financing scheme, this study focused on *shrikat-ul-milk* and *shirkat-ul-amwal* and avoided *shirkat-ul-wujooh* and *shirkat-ul-a'mal*. Notably, *shirkat-ul-milk* is a kind of joint ownership of two or more people in a property. This *shirkah* is practised when more than two individuals purchase an equipment or asset and own it jointly. In *shirkat-ul-amwal*, the involved parties invest some capital in the commercial enterprise. These two types of partnership seem are suitable for the organizational practice. On the other sides, in *shirkat-ul-a'mal* all the partners participate in rendering services on the fee basis. *Shirkat-ul-wujooh* does not require any financial investment. Partners only purchase the commodities on a deferred price and sell them at the spot. These types of partnership seem less viable in microfinance. Further, this study excluded *musaqa*, which is another type of *musharakah* deals with the orchard financing.

1.14 Organization of this Study

This thesis comprises seven (7) chapters. Chapter (1) presents the background of the study with a brief discussion on the conventional microfinance (MF) while highlighting the importance of profit and loss share (PLS) basis Islamic Microfinance (IsMF) to address entrepreneurial poor. Besides, the research objectives, research questions, and research hypotheses are formulated based on the existing theories. It also narrates the main contributions, significance and limitations of this study. Chapter (2) reviews the existing literature while shading light on the relevant theories. Thus, it supports the research objectives and hypotheses. Chapter (3) presents a conceptual framework of poverty alleviation by using *mudarabah*, *musharakah* and *musharakah mutanaqisah* with the support of the current literature and theories. Chapter (4) designs the research methodology and explains in an elaborate manner. Chapter (5) analyses the data by using the descriptive and inferential statistics. Chapter (6) explains the findings to a further detail and at the end, Chapter (7) delivers the epistemological and ontological values of this study while providing suggestions to the Islamic microfinance practitioners and the future researchers.

CHAPTER 2: LITERATURE REVIEW

2.1 Introduction

This chapter presents the evolving theories on poverty and different approaches of microfinance (MF) and Islamic microfinance (IsMF). It also compiles the main features of *mudarabah*, *musharakah* and *musharakah mutanaqisah* as well as the underlying Shariah principles. By explaining the causes of poverty, the evolution of microfinance, and its limitations and drawbacks in poverty reduction, this chapter signifies the essence of Islamic microfinance as an alternative system. Besides, it criticises the market-based approaches of the conventional microfinance while unveiling the side-effects and ills of *riba*/interest. Simultaneously, the profit and loss sharing (PLS) Islamic microfinance system and the Shariah principals come into the discussion along with the contemporary economic theories, such as alternative development theory, microfinance theory, capability theory, agency theory, religiosity and entrepreneurship theory. It also included the sustainable livelihoods approach to poverty alleviation. At the end, a comprehensive theoretical framework is delineated to explain the theoretical basis for this research.

2.2 Poverty

Poverty is one of the most pervasive, serious, and persistent crucial problems in the current world (Farooq, 2009). This phenomenon is a causative agent of many other socioeconomic ills such as crime and violence, inequalities, diseases and so on (Makoge, Maat, Vaandrager, & Koelen, 2017; McKenzie, 2017; Walsh & Yun, 2017). However, an individual is considered poor if he/she does not have the minimum income or other economic resources to maintain a ‘decent’ quality of living. In a broader sense, poverty is the lack of well-being, social inclusion and capability (Wagle, 2009). Among these three issues capability is the most crucial factor. From the capability perspective, an individual is poor if she lacks the basic capabilities (Kakwani, 2006). Lack of capability leads individuals to experience the scarcities of food, education, health, safe water & sanitation, housing. It also resists market penetration and access to the social peace (Asselin, 2009). Nobel laureate Professor Amartya Sen (1999) envisaged the reasons for poverty is not only the lack of capability but also the absence of opportunity, security and empowerment (Sen, 1999). In this vein, Whitman (2008) highlighted the lack of resource distribution, climate change, degrading individual's character, degenerating culture, overpopulation, anarchic social structures, irrational capitalism, slavery and bad governance as the causes of poverty (Whitman, 2008). According to Sadeq (2001), poverty-related phenomena initially outbreak for four reasons: low income, poor health of the household members, lack of infrastructure and poor education (Sadeq, 2002).

Mainly, there are two kinds of poverty, such as absolute poverty and relative poverty. Absolute poverty is a state of severe deprivation of the basic human needs, including food, safe drinking water sanitation facilities, health, shelter, education and information. On the other hand, relative poverty is defined as lacking resources compared to other people or households within a certain region (Whitman, 2008).

Jensen (2009) pointed out other types of poverty such as situational poverty, generational poverty, urban poverty and rural poverty. Situational poverty is generally caused by unprecedented causes such as disasters, divorce or severe health problem. Generational poverty occurs in the families where people are poor generation to generation (at least two generations). Families living in this type of poverty are not properly addressed by the state or society or they do not (this type of families) possess appropriate tools to fight against poverty. Urban poverty occurs in the metropolitan areas. This type of poor deal with several stressors that are mostly complex aggregate, chronic and acute such as crowding, violence and noise. Rural poverty is observed in the nonmetropolitan areas where the households head have fewer access to services, lack of support for disabilities and lack of opportunities for quality education. There is another type of poverty which is called subjective poverty. There is a kind of people who consider themselves poorer due to having less than others in the same society or having not enough to get along (Saladin & Arifin, 2012).

2.2.1 Poverty from the Islamic Perspective

Poverty in Islam is defined as the scarcity of the basic needs of an individual such as 1) food, 2) clothing, 3) shelter, 4) treatment, 5) education, and 6) a spouse. Islam considers *urf (*the custom) to identify the basic needs that vary in the different societies. However, Islam marks poverty as a social and ideological evil. Because poverty degrades social harmony creating numerous problems. It can badly affect individuals' religious obligations leading to *kufr*. Islam's Prophet (PBUM) sought Allah's bounty in order to be safe from the grip of poverty (Sadeq, 1997).

"O Lord, I seek your refuge from infidelity (kufr), poverty and destitution (faqr), and I seek your refuge from paucity (qillah) and humiliation (dhillah)."[11]

In Islam, a person is designated as poor who have a surplus below the *zakat nisab*[12] even though all her basic needs are sufficiently satisfied. However, *nisab* differs in wealth and

[11] Sunan an-Nasa'i 5485 (Sadeq, 1997; Sunnah.com, 2018)
[12] *Zakat nisab* refers to the sufficient amount of wealth that makes obligatory for an individual to pay *zakat.*

asset. The payable amount of *zakat* is different for the wealth than the asset. Therefore, the definition of poverty is different for the different group of people possessing the different kind of wealth and asset. Besides, *nisab* is defined based on the surplus of income (savings) only (Sadeq, 1997; Saladin et al., 2011).

The economic development in Islamic viewpoint considers the material as well as spiritual needs. Hence, Muslim people are suggested to lead a life balancing the life on the earth and hereafter (Ibrahim, Asmak, & Basir, 2010). Under this light, *Zakat* Institute of Malaysia prescribed an Islamic Poverty Index (IPI) that incorporates five dimensions such as religion, physical self, knowledge, offspring and wealth (Saladin & Ariffin, 2014). According to this index, a household is poor not only for the income deficiency but also for lacking religiosity, physical strength, knowledge and offspring.

However, to alleviate poverty in a sustainable manner Islam suggests three broad measures, such as 1) positive measures that include income distribution and its growth, and equal opportunities for all. 2) Preventive measures that control ownership as well as malpractices in economics, trade and commerce. 3) Corrective measures deal with the transfer of payment and state responsibilities (Sadeq, 1997; Sadeq, 2002).

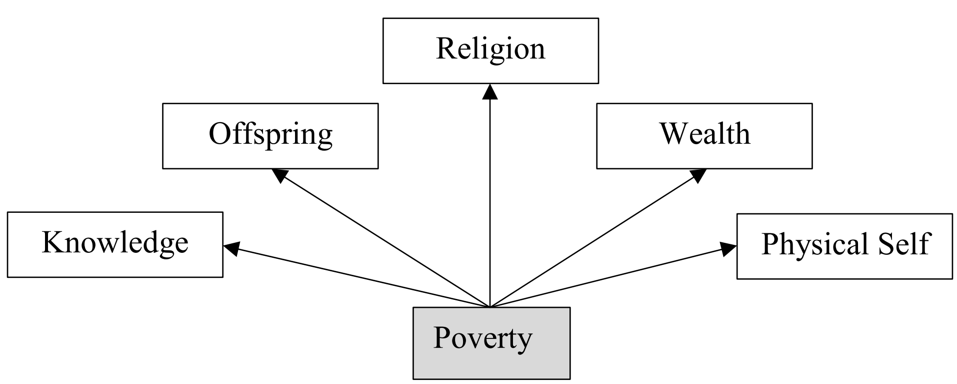

Figure 2.1: Islamic View on Poverty

In term of poverty alleviation, Islam pays attention to three specific issues such as 1) basic need fulfilment, 2) respective earning opportunities, and 3) equitable distribution of income and wealth. But from the holistic view, Islam emphasises on five principles such as Tawhid (unity), universal brotherhood, trusteeship resources, *Khilafa* (vicegerent), simple lifestyle, and *aadalah* (justice) (Akhtar & Arif, 2000).

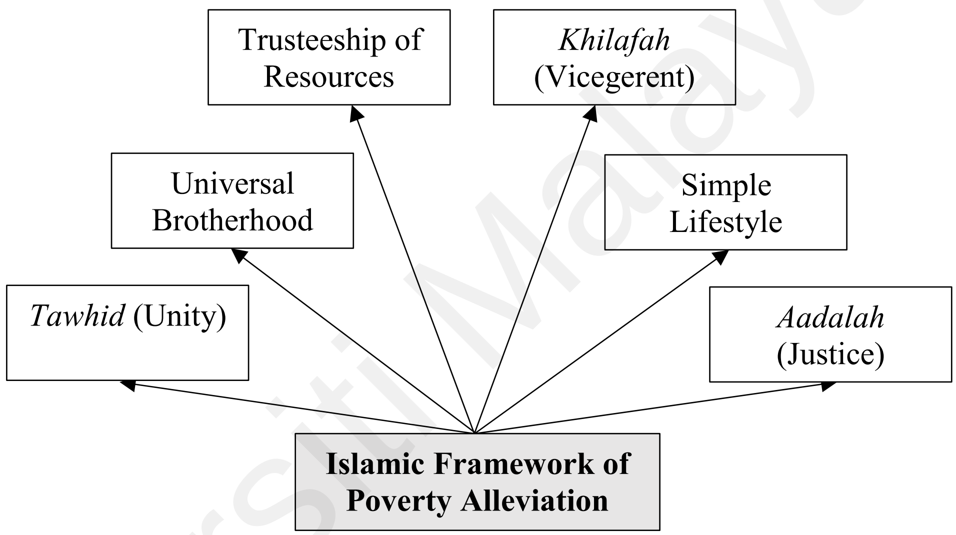

Figure 2.2: Islamic Framework of Poverty

1) *Tawhid* (unity)

Every Muslim must believe that Allah created everything. Tawhid teaches the bondage between Allah-man, man-man & man-universe, the universe is driven by the divine law. The moral and religious motivation pursue Muslim to protect the environment (Akhtar & Arif, 2000). So, if Muslim people stand on the ground of the *Tawhidic* belief there should not be any poverty incident in the Muslim society.

2) *Khilafah* (Vicegerent)

Allah has given man physical and mental faculties to change the individual and social life. Thus, man is the vicegerent of Allah (SWT) on earth. Allah has place necessary resources on earth enough for the mankind as well as His other creations. Allah (SWT) commands human being to distribute these resources in an efficient and equitable manner (Akhtar & Arif, 2000). So, if Muslim executes Allah's command by equitably distributing the wealth there must be no poverty.

3) Universal Brotherhood

The universal brotherhood is an important part of the framework of *Khilafah.* This concept ensures social harmony prioritizing equality among human beings. This ideology promotes mutual benefits, sharing resources and cooperation (Akhtar & Arif, 2000). So, sharing benefits and mutuality can eradicate poverty in the most effective way.

4) Trusteeship of Resources

The resources at the disposal of *Khalipha* are in the nature of trusteeship. Islam recognizes the concept of private ownership of the resources. But the resources must be beneficial for all not just for a few while the ownership of the resources must be gained in a rightful way (Akhtar & Arif, 2000). This concept of mutual benefit rightful ownership can help poverty alleviation.

5) Simple Life

Islam suggests to lead a simple life avoiding all sorts of extravagances. Simplicity in life can cut off spending and save resources (Akhtar & Arif, 2000). Thus, individuals as well as households can escape poverty.

6) *Adalah* (Justice)

Allah (SWT) sent His messengers time to time in order to establish justice as well as eliminate *Zulm* (injustice) (Akhtar & Arif, 2000). Once the justice is established in the society people will get their rights in every aspect in their walk of life. So, there must be no poverty.

2.2.2 Poverty Measurement

Poverty is measured based on the poverty line index (PLI). A poverty line index (PLI) is an indicator that can measure the level of households' economic condition. PLI is built based on the household income and expenditure that are sufficient for the minimum level of household 'welfare' (Chibuye, 2014). If the income of a household is insufficient in order to maintain the minimum welfare the household is marked as impoverished. Two common methods are generally employed to determine the poverty line: food PLI or food energy intake (FEI) and the non-food PLI or cost of basic needs (CBN). FEI method considers the extent of consumption and expenditure at which food-energy-intake is sufficient for a household to maintain its members' good health and nutrition. On the other hand, the CBN method counts the consumption bundle which is to be adequate for a household according to their basic needs for the basic consumption (Janvry' & Kanbur, 2006). However, PLI is chalked out separately for each household by conducting the Household Income Survey (HIS) by the government. HIS generally counts the household size, demographic composition and location (state and strata). Hence, each household scores a different PLI value due to the different location and family size. A household is considered poor if its monthly income is below the non-food PLI. That indicates, the household lacks resources to meet the basic needs of its all members. On the other side, a household is considered as hardcore poor if its monthly income is below the food PLI (EPU, 2010)[13].

2.2.3 Islamic Poverty Index (IPI)

The zakat institution in Malaysia has recently conceptualised an Islamic Poverty Indicator (IPI) which is called *had al kifaya* (HAK) (Saladin & Ariffin, 2014). The respective *zakat* institution of a certain location determines the *had al kifayah* for that specific territory. HAK also takes into account the size of the households, age, the health condition of the household members etc. (Saladin et al., 2011). The measurement criteria of *had al kifayah* vary in different locations since people in different places have different needs.

Table 2.1 below demonstrates the determinants of *had al kifaya* (necessity of a household) of a household in Selangor. Jabatan Wakaf, Zakat dan Haji (JAWHAR), Malaysia outlined the elements of *had-al-kifaya* of a household that includes all the five basic needs. Notably, the household includes both parents are working, an unemployed adult aged above 18, a child (7-17 years old) and another child 1-6 year of age. This table suggests the households' income below RM1650 are considered poor and eligible for *zakat* fund. But, in the case of other adverse situation such as household members with disabilities or chronic sickness *had al kifaya* would be different (Saladin et al., 2011).

[13] Economic Planning Unit

The poverty measures of Lembaga Zakat Selangor (LZS) based on *had al kifaya* is presented below:

Table 2.1: *Had al Kifaya* of Selangor

Quantity	Type of Household	Had al Kifaya (RM)
1	Head of household	680
1	Working adult	420
1	Unemployed adult (above 18 years of age)	240
1	Children (7-17 years of age)	180
1	Children (1-6 years of Age)	130
	Total	1650
	Special case	**Had al Kifaya (RM)**
1	Disabled	200
1	Child care	190
1	Household members with chronic illness	200
	Total	590

Source: Lembaga Zakat Selangor (LZS) cited in Saladin et al. (2011)

2.3 The Global Poverty Scenario

The number of poor people across the globe is declining day by day. Nobel Laureate Professor Muhammad Yunus cited that by 2007, a half of the world population (about 3.3 billion[14]) had been living on two dollars of income per day while almost one billion people were leading a vulnerable life with less than one dollar of income. According to the $1 and $2 poverty benchmark, of the World Bank (WB) 3.3 billion people were poor and the other one billion were abosolute poor (Sundaresan, 2008). However, this benchmark was revised

[14] In 2007 the world population was about 6.6 billion (PRB, 2007)

as \$1.25 and \$2.5 per day of household income for the hardcore poor and poor respectably based on the purchasing power parity (PPP) of 2008. According to that criteria, in 2008 about 926 million vulnerable poor were living across the globe. About 62% (578 million) of the absolute poor were living in Asia and Pacific, 26 % (239 million) in Africa and Sub-Sahara, 6% (53 million) in Latin America, 4% (37 million) in East and North Africa and 2% (19 million) in the developed countries (Hunger Notes, 2011). But according to the recent benchmark of poverty at \$1.9 household income per day, in 2013, 10.7% of people in the world were poor, which was a declined percentage of 12.4% in 2012. That suggests, 767 million people lived on less than \$1.9 day in 2013 and in 2012 this number was 881 million (World Bank, 2018). But the poverty incidence in the Muslim countries is comparably higher than the other countries. Most of the Muslim countries fall under the criteria of the low or lower-middle income economies and some of those countries are even highly indebted (Chowdhury & Mukhopadhaya, 2012). Notably, the number of Muslim people in the world is about 1.6 billion that represents about 22% of the global population (World Bank, 2015). According to the new poverty line index (\$1.9 income per day), about 650 million Muslim people are immensely poverty-stricken in the current world (El-Zoghbi & Badawi, 2015). That indicates, about 40% of people in the Muslim community are poor.

A snap-shot of the 10 most poverty-stricken countries in the world presented below.

Table 2.2: Ten Most Poverty-Stricken Countries in the World

Rank	Country	Poverty Incidence (Household income less than \$ 1.90/ day)
1	Congo	50.71m people (77.18% of the total population) (The year 2012)
2	Zimbabwe	2.86m people (21.40% of the total population) (The year 2011)
3	Liberia	2.42m people (68.64% of the total population) (The year 2007)

Rank	Country	Poverty Incidence (Household income less than $ 1.90/ day)
4	Nigeria	85.40m people (53.47% of the total population) (The year 2009)
5	Burundi	6.24m people (77.65% of the total population) (The year 2006)
6	Central African Republic	2.78m people (66.27% of the total population) (The year 2008)
7	Eritrea	N/A
8	Sierra Leone	3.07m people (52.33% of the total population) (The year 2011)
9	Malawi	10.64m people (70.91% of the total population) (The year 2010)
10	Togo	3.51m people (54.18% of the total population) (The year 2011)

Source: Maps of World (2016); World Bank (2016b)

A snap-shot of the 10 most poverty-stricken Muslim populated countries in the world is presented below.

Table 2.3: Ten Most Muslim Populated Countries in the World

Rank	Country	Poverty Incidence (Household income less than $ 1.90/ day)
1	Indonesia	38.27m people (15.90% of the total population) (The year 2011)
2	India	262.80m people (21.25% of the total population) (The year 2011)
3	Pakistan	14.36m people (8.30% of the total population) (The year 2010)
4	Bangladesh	70.00m people (43.7% of the total population) (The year 2010)
5	Nigeria	85.40m people (53.47% of the total population)
6	Egypt	N/A
7	Iran	63,700 people (0.08% of the total population) (The year 2013)

Rank	Country	Poverty Incidence (Household income less than $ 1.90/ day)
8	Turkey	190,400 people (0.26% of the total population) (The year 2012)
9	Algeria	N/A
10	Morocco	958,400 people (3.13% of the total population) (The year 2007)

Source: PRC (2015); World Bank, (2016b)[15]

Table 2.3 (above) demonstrates that the incidence of poverty is very high in the Muslim populated countries namely, Indonesia (38.27 million), India[16](262.80 million), Pakistan (14.36 million), Bangladesh (70 million) and Nigeria (85.40 million).

2.3.1 Poverty in Malaysia

The incidence of absolute poverty is not significantly high in Malaysia. Due to several anti-poverty measures taken by the government, the level of absolute poverty came down to .40% (Department of Statistics, 2017). It is noteworthy, according to the recent census, the total population of Malaysia is 32.9 million GNI (per capita) US$ 10885 and the unemployment rate is 3.2-3.5%. (EPU, 2018). Since 1970's the Government of Malaysia has been pursuing several initiatives for poverty alleviation. As a result, the incidence of absolute poverty decreased from 49.3% in 1970 to 0.7 in 2009 (TMP, 2010). The census in 2014, defined the incidence of absolute poverty as .60% (EPU, 2016). Notably, the households with monthly income less than RM460 in Peninsular Malaysia, less than RM630 in Sabah and less than RM590 in Sarawak fall under the category of extreme (or absolute) poverty.

[15] **The different years in the statistical results in the Table 2.2 and 2.3 are based on the year of the latest survey reports of the respective countries

[16] India is a country of Hindu majority but in term of the number of Muslim this country is in the second position in the globe. The number of Muslim is 138,188,240 (The Registrar General & Census Commissioner, 2011).

On the other hand, households with average monthly incomes of less than RM760 in Peninsular Malaysia, less than RM1,050 in Sabah and less than RM910 in Sarawak are considered as poor (Jala, 2015). By the time being, the household income of the bottom 40% population increased from RM535 in 1992 to RM865 in 1999 and it raised significantly high to RM 2,537 in 2014. For the middle 40%, the average monthly income increased from RM1,392 to RM2,204 during 1992 to 1999 and RM5,662 in 2014, while for the top 20 percent, the average monthly household income has increased from RM4,022 to RM6,268 during 1992 to 1999 and RM9,173 in 2007. The censuses of 2012 and 2014 revealed that the household income increased significantly high for the top 20%, such as RM 12, 159 in 2012 and RM 14,305 in 2014 (EPU, 2016). The recent statistics suggests, the mean income of the Malaysian people is RM 6, 958 and median RM 5,228. Mean household of the top 20% mean 16,088 and median 13,148; middle 40% mean RM 6502 and median 6,275; and bottom 40% Malaysian RM 2,848 and median RM 3,000 (Department of Statistics, 2017). These statistics further suggest, though the incidence of absolute poverty is remarkably low in Malaysia, there is a significant income disparity among the higher income level (top 20% up) and lower income level (bottom 40%) people and that enhances the growth of relative-poor.

Table 2.4: The Average Monthly Income of Malaysian People

Income	**2004**	**2007**	**2009**	**2012**	**2014**
Bumiputra	2,711	3,156	3,624	4,457	5,548
Chinese	4,437	4,853	5,011	6,366	7,666
Indians	3,456	3,799	3,999	5,233	6,246
Others	2,312	3,561	3,640	3,843	6,011
Urban	3,956	4,356	4,705	5,742	6,833
Rural	1,875	2,283	2,545	3,080	3,831

Source: EPU (2016b)

Table 2.4 (above) shows the average income of Bumiputra is lower than the other ethnic groups and the income of the rural people is the lowest. However, poverty scenario is still prevalent with its original characteristics among the rural *Bumiputera,* indigenous minorities, the *Orang Asli* mostly in the poorest states of the Peninsular as well as East Malaysia. Besides, Sabah demonstrates the highest number of absolute poverty (3.9%) followed by Kedah and Sarawak (EPU, 2016; Nair & Sagaran, 2015). More importantly, the incidence of relative poverty is significantly high across the country (Saladin & Arifin, 2012). The bottom 40% of the Malaysian population is considered as relative-poor where 72.2% are *Bumiputera.* Besides, due to income inequalities among the ethnic groups as well as other social sectors, urban poverty is on the rise too (Nair & Sagaran, 2015).

2.4 Sustainable livelihoods Approach to Poverty Alleviation

The sustainable livelihoods (SL) framework presents a comprehensive and integrated approach to poverty eradication. The prominent organizations namely, the Institute for International Development Studies at the University of Sussex, Oxfam, the British Department for International Development (DFID) jointly designed the framework of SL in order to improve organizations' efforts to fight against poverty (Harvard Humanitarian Initiative, 2014). SL approach took place in the context of development since the 1980s. It links between micro and macro rather than embedding them in the community level. It changes the perspectives on poverty, the construct of poor's lives, and the importance of institutional efforts (Ashley & Carney, 1999). The framework introduced by DFID includes three livelihood strategies: 1) in terms of livelihood assets it includes natural, financial, physical, human and social capital; 2) in terms of institutional and policy context, public, private, and non-governmental organizations (NGOs) are considered; and 3) for the vulnerability context it includes shocks trend and seasonality (DFID, 1999; Sati & Vangchhia, 2016). SL can be used as a tool to address food insecurity and malnutrition in the developing and under developing worlds where production is unsustainable due to the excessive size of the population (Sati & Vangchhia, 2016).

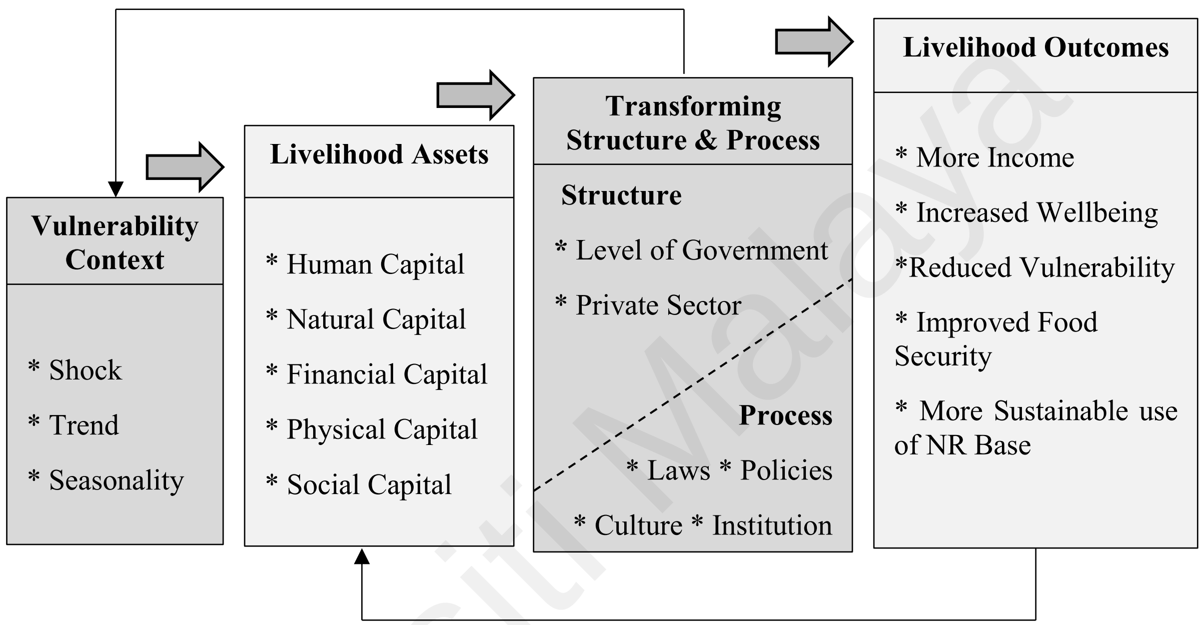

Figure 2.3: Sustainable Livelihoods Approach to Poverty Alleviation

The concept of "livelihoods" is synonymously used as creating jobs for poverty alleviation (Adato & Meinzen, 2002). The key points of SL approach to poverty are: 1) It systematically analyses poverty to define its causes in a more holistic and realistic manner. 2) It promotes a wider view of the development activities, their implications and impacts. 3) It places people in the priority and reinforces the best developmental practices (Ashley & Carney, 1999). However, sustainable livelihoods (SL) approach primarily analyses the causes of poverty, people's access to resources and their livelihoods activities. It also scrutinises the relationship between micro and macro levels. It differs from the conventional poverty measurement criteria that only includes income, consumption, and nutrition. SL emphasises on well-being aspects such as access to clean water, financial services, education, land, vulnerability to natural calamity, physical safety, gender issue, social relationship and economic security (Naraya et al., 2000). This approach does not look at poverty merely based on the household income at or below the poverty line. It recognises people's capabilities that can pursuit them towards their livelihood goals (Adato & Meinzen, 2002). SL approach describes the uncontrollable external factors that affect people's assets and livelihood opportunities. The factors are classified as i) vulnerability context, ii) livelihood assets, iii) transforming structure and process, and iv) livelihood outcomes (DFID, 2001; Harvard Humanitarian Initiative, 2014). Vulnerability context includes, shocks (e.g. conflicts, environmental), trend (e.g. technology, resources), and seasonality (e.g. employment opportunities, price fluctuation). While, livelihood Assets includes five necessities for the pursuit of positive livelihood outcomes such as: 1) Human capital (i.e. available knowledge and labour in a household), 2) Natural capital (i.e. available natural resources in a household), 3) Financial capital (i.e. savings and money inflow), 4) Physical capital (i.e. infrastructure, tools and equipment to increase productivity), and 5) Social capital (i.e. social resources, networking and cooperation, support and mutual trust) (DFID, 2001; Harvard Humanitarian Initiative, 2014). In the same vein, transforming structures and process deal with the implementation or enforcement of legislation, providing opportunities for acquiring and capitalizing assets, manage natural resources and so on (DFID, 2001; Harvard Humanitarian Initiative, 2014). Livelihood strategies deal with the individual's livelihood goals and availability of the options. The greater the diversity of livelihood strategies the higher household resilience to the shocks, trend and seasonality (DFID, 2001; Harvard Humanitarian Initiative, 2014). Livelihood outcomes indicate the outputs of livelihood strategies. This outcome includes higher income, well-being, food security, reduced vulnerability, and improved environmental sustainability (DFID, 2001; Harvard Humanitarian Initiative, 2014). Thus, SL marks as a better positive change than the contemporary approach of poverty alleviation. It promotes the holistic view of individuals' income and critical resources for households which seem a better alternative of the traditional income centring view of livelihood promotion (Harvard Humanitarian Initiative, 2014).

2.5 Alternative Development Theory

Alternative development theory has recently come forward with different approaches to the modern economic system. Though it took birth from the development theory but its key elements are somewhat different from the mainstream developmental ideology. It sees development from beyond the growth of GDP and human development. This theory devices that development efforts are more successful when there is a direct participation of the community. That is why, alternative development is termed as a labour-centred development (LCD) (Fishwick & Selwyn, 2016). This approach is considered as an alternative way to achieve development by using different means, such as participatory and people-centred development approach. It is more practice-oriented rather than theoretically inclined (Pieterse, 1998). Alternative development theory is linked with the appropriate development, participatory development, people-centred development, human-scale development, people's self-development, autonomous development and holistic development. It emphasises participation, grassroots movements, NGOs, empowerment, concretization, liberation theology, democratization, citizenship, human rights, development ethics, cultural diversity and so forth (Pieterse, 1998).

In the recent years, alternative development practice has gained remarkable success (Tang & Yu, 2014) and been accepted as more viable than the mainstream orthodox economic exercise

(Williams & Pendras, 2013). By implementing the alternative models of development, it is better possible to improve community economy. Besides, it assists to renew interpersonal relationships among the local villagers, rural producers, and urban consumers (Ting & Chen, 2012). In case of practical application of this theory, non-governmental organizations (NGOs) are playing the vital roles as being development cooperative partners. For instance, microfinance institutions (MFIs), are contributing to poverty alleviation by extending microfinance to the rural poor.

2.6 Microfinance

Microfinance (MF) has introduced a new type of banking system to the poor communities and ostensibly contributed to the social transformation (Dehejia et al., 2011). The clients of the microfinance institutions (MFIs) are the rural poor who have non-wage, self-employed income, usually generated through informal activities or practising of microenterprise (Gonzalez, 2008). By extending credit MFIs tend to scale up the livelihoods basically of the destitute rural women who have no access to the conventional financial system because of lack of collateral (Karim, 2011; Yunus, 2010). The activities that the microfinance institutions are generally involved in: 1) providing small loans as working capital, 2) group formation, 3) savings mobilization, 4) offering consequent loans based on the repayment performance, 5) flexible loan disbursement and monitoring, and 6) securing savings products (Samer, Majid, Rashid, & Rizal, 2013). Many microfinance institutions have recently introduced micro-insurance and micro-pension (García-Pérez, Muñoz-Torres, & Fernández-Izquierdo, 2017; Karim, 2011). Thus, microfinance enhances income and economic security of the poor as well as positively impacts the local community (IRTI-IDB, 2007). Besides, the performance of MFIs seems attractive for its collateral free lending technique, higher rates of loan repayment, operational efficiency and financial sustainability (Sidney, Syed, Ann, & Shireen, 1996; Velasco & Marconi, 2004; Widiarto & Emrouznejad, 2015). The operational process of microfinance is simple and quickly accessible. As part of the process, the MFIs goes to the client and not the other way around. Interest and capital are paid in the regular instalments at the frequent intervals (Khan, 2008). The lending program is complemented with a compulsory or voluntary saving (Argandoña, 2009; García-Pérez et al., 2017). MFIs democratise the credit by extending financial services to all. Thus, MF enables the poor to work for themselves to get rid of poverty. By investing micro-loan in micro-enterprises or asset acquisition the poor people, in turn, feed the economic growth (Dichter, 2007; Hassan, 2010).

2.6.1 Types of Microfinance

There are several models of microfinance. According to Lapenu & Zeller, 2001; Zeller (2006), 1) Credit Union, 2) Village Bank, 3) Microbanks, 4) Solidarity Retail Model, and 5) Linkage Retail Model are the most popular model in the world. These models are briefly introduced below.

1) **Credit Union:** Credit Union is a viable rural microfinancing model. This type of microfinance institution (MFI) is mainly owned and administered by its members. This model functions under the democratic rules. The profits from the loan-based projects are usually reinvested. The sizable Credit Unions are sometimes operated by the salaried staffs and professional management. This MFI is generally incorporated under the respective cooperative laws. The major advantages of Credit Union are: it to provide services to many depositors and it can sustainably achieve a large breadth of outreach.

2) **Village Banks:** This model of microfinance was first initiated by a non-governmental organization (NGO) named FINCA International and later, it was modified by some other NGOs such as Freedom from Hunger, CARE, Save the Children etc. These types of MFIs are the semiformal member-based institutions. The Village Bank generally imposes comparably higher interest rates on the loan as well as saving-deposits. The ultimate objective of the Village Bank is alleviating poverty while providing other services such as education and training to enhance entrepreneurial skills. The major advantages of Village Banks are: they operate in the rural area and being governed by the members as the autonomous institution. The rules for admission to the Village Bank are very flexible. This type of MFI has shown greater strength in reaching the poorer clients but mostly fails to achieve financial sustainability.

3) **Microbanks:** Microbank differs from the commercial bank in term of the loan size and the market segment. This type of bank provides financial services to the micro and small-scale entrepreneurs. To serve the poor is not the main objective of this financial institution. This bank also looks for financial sustainability. BRI in Indonesia, Bancosol in Bolivia, Calpia in El-Salvador are the examples of microbanks.

4) **Solidarity Credit Retailing:** The major microfinance institutions such as Grameen Bank, ASA, SHARE, and the SEWA Bank follow the solidarity retailing model. This model embodies group-based lending technology. This technique has been proved significantly reducing the transaction cost thereby, increase the poverty outreach.

Notably, solidarity-based microfinance institutions are deemed financially successful.

5) **Linkage Retailing Model:** This model is an alternative type to the group-based lending. It is like the self-help groups (SHGs) similar to ROSCAs. The major benefit of this model is the low group formation cost. This model combines the client's proximity, flexibility, social capital while reaching poorer clients. It also deals with risk pooling, team formation, provision of long-term investment loans and financial intermediation. This model has been promoted by German Agency for Technical Cooperation.

2.6.2 Microfinance and Women

Women are more vulnerable to poverty. They are mostly credit constrained as well as having marginal access to the labour market (Swain, 2007). Besides, they have less control over the household income and assets. As a result, they remain poorer than men. Empirical studies suggest that if women are involved in the credit-line they more likely to prioritise on the health and nutritional status, consumption, household-wellbeing and children's schooling. They also gain the sense of self-worth and greater confidence in household decision making (Mayoux & Hartl, 2009; Ngo & Wahhaj, 2012). Thus, the opportunities for income generation strengthen women to play the economic roles to contribute to their family (Sidney et al., 1996). Hence, women's abilities to earn can be described as their economic empowerment (White, 2010). Once a woman is involved with the credit program, she exhibits some indicators of empowerment, such as a sense of self-worth, economic contribution, purchasing power, mobility in the public domain and even the courage of participation in politics. Besides, the labour contribution to the loan-based activities reduces the domestic violence while accounting control decreases the gender gap. In addition, the training which is generally provided by the MFIs contributes to the greater social inclusion and group participation by enhancing self-reliant livelihood (Naila, 2001; Sidney et al., 1996). Thus, microfinance enthuses women abilities as well as their contribution to the household economy. Arguably, loan to men seems to have fewer contributions to the internal gender equalities and rational income distribution among the members of the household (Naila, 2001). These concerns pursue the microfinance institutions to extend loans to women.

2.6.3 Microfinance and Market Orientation

By 1970s microfinance (MF) evolved as an alternative developmental device to the government-subsidised free handouts to the poor (Barry, 2012). By extending credit and other financial services in a participatory and 'bottom-up' manner microfinance bridges the gap between supply and demand in the rural financial infrastructure (Siwale & Ritchie, 2012; Tsai, 2004). Initially, MF was practised by the not-for-profit organisations. But by the nineties, policymakers recommended the microfinance institutions (MFIs) to be profitable or at least, 'financially sustainable' in order to be unleashed from the subsidies and donation. Donor community also evoked MFIs to be financially self-sustaining[17] by adopting efficient loan recovery techniques (Barry, 2012; Goetz & Gufta, 1996). Then, MFIs embraced market-based approaches and remained self-sustained even the aid budget was slashed (Armendáriz & Morduch, 2005). But market-orientation gradually derived MFIs to becoming more prone

[17] The sustainability equation was figured out as: Coverage of Financial Expenses (incl. cost of funds + inflation) + Loan Loss + Operating Expenses (incl. personnel and administrative expenses) + Capitalization for Growth (CGAP, 2009).

to profit maximisation by installing a higher rate of interest with the loan (Nanayakkara & Stewart, 2015; Roberts, 2013). Arguably, most of the MFIs seem taken poverty as a 'market gap' and that is why they are seeking for the return on investment (ROI) from this niche market. This perception of commercialization has produced controversial debate arguing that profit orientation somehow fails the MFIs to alleviate poverty effectively (Armendáriz & Morduch, 2005). Though market orientation brings organizational sustainability, profitability and growth in the microfinance industry but, it overshadows the core mission of poverty alleviation.

2.7 Shortfalls of Microfinance

Recent literature suggests that the market-oriented conventional microfinance nowadays, is becoming responsible for the increasing level of debt and impoverishment of its clients and thus, it is exacerbating economic, social, and environmental vulnerabilities (Banerjee & Jackson, 2017). Several other studies pointed out that the interest rate imposed by the conventional microfinance institutions claiming as 'sustainable rate' is unaffordable for the poor borrowers (Ali, 2012; García-Pérez et al., 2017; Hermes & Lensink, 2011; Kassim & Rahman, 2008; Roberts, 2013; Shankar, 2007). This rate is considered exploitative deepening borrowers into debt as well as traps with the poverty (Li, Gan, & Hu, 2011). The poor borrowers rarely get benefit from this financing system (Bhatt & Tang, 1998; Correa & Correa, 2009). Microfinance is gaining notoriety because of its strict repayment process that reportedly includes a kind of demeaning behaviour of the loan officers and members of the peer monitoring group (Kassim & Rahman, 2008).

Recently, it has been well documented that the borrowers of microfinance are being indebted (Karim, 2011; Schicks, 2014). They are engaging with the multiple loan schemes of several MFIs in order to pay back the previous loans (Diop et al., 2007; Jain & Mansuri, 2003) and thus, falling into 'debt trap' (Ahmed, 2002; Haneef, Pramanik, Mohammed, Fouad, & Muhammad, 2015). They run into further hardship of paying bigger sized loan instalment in the shorter frequency of repayment schedules.

Furthermore, peer-group acts like a pressure-group[18] specially, for the borrowers who fail to pay the loan duly (Besley & Coate, 1995; Hirth & Pestonjee, 2016; Velasco & Marconi, 2004). This pressure group, in another way, pursues the borrowers seeking for the auxiliary loan/s from other MFIs or informal sources[19] and thus, their debts increase manifold. As a result, they experience a vulnerable economic condition as well as the dissonant family and social lives. For these reasons, this system is alleged not attending poverty rather giving it perpetuity (Hanck, West, & Tsui, 2007).

Most remarkably, conventional microfinance is entangled with interest/*riba*, which is forbidden by *Qur'an* and *Sunnah*[20] and unanimously rejected by the Islamic Jurisprudence (Obaidullah, 2008, 2015). Interest-based microfinance cannot be extended to the economically deprived poor Muslim because of their religious belief, social and economic restrictions (Segrado, 2005). So, this financing system seems unextendible to the Muslim poor. For better understanding, these drawbacks are elaborately discussed below.

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[18] "A group of people who work together to try to influence what other people or the government think about a particular subject in order to achieve the things they want" (Cambridge Advanced Learner's Dictionary, 2009).

[19] The informal sources refer to the sources available in arms' length from where people generally seek for borrowings. These sources include neighbours, friends, relatives, moneylenders and shopkeepers (McKernan, Pitt, & Moskowitz, 2005).

[20] The word *Sunnah* refers to the sayings and doings that are institutionalized by the Islamic Prophet Muhammad (PBUH).

2.7.1 Loan Trap

Loan trap can be considered a twist which is generally created when clients try to repay the dues by engaging themselves with the multiple loan schemes of several microfinance institutions. In this system, borrowers are eventually trapped in a cycle of 'borrowing-repaying' (Diop et al., 2007; Jain & Mansuri, 2003; Rahman, 2001). Presumably, MFIs create this trap with the view to expanding their market as well as sustaining clients. There are shreds of evidence that microfinance institutions used to offer bigger loans in a short processing time if any borrower migrates from another MFI (Ahmad, 2002). This practice provokes the borrower to be engaged with various loan schemes. On the other hand, borrowers may resort to informal financing sources for the additional funds probably because of inadequate supply, unavailability of seasonal working capital, and strictly scheduled frequent repayments of MFIs (Mallick, 2012; Shoji, 2012). Higher interest rates and loan security funds presumably bedevil the borrowing-repaying cycle. It is worth mentioning that to gain sustainability after accumulating all the default and transaction costs with the operational expenses, MFIs usually set the interest rate which is seemingly high (Goodwin-Groen, 2002; Hermes & Lensink, 2011; Shankar, 2007). This extravagant rate of interest exacerbates borrowers' indebtedness as well as prolongs impoverishment (Li et al., 2011).

2.7.2 Repayment Pressure

Repayment pressure[21] refers to the psychological or mental pressure which is typically created by the MFIs on their borrowers. The rigid repayment schedules and payment

[21] No terminology such as 'repayment pressure' exists in the finance and banking literature but this metaphor is adapted in this paper due to reflecting the core statement on the negative externalities that come out during loan repayment. The meaning of "pressure" herein is confined to be 'the use of persuasion or intimidation to make someone do something' (Oxford English Dictionary, 2012); similarly, 'when someone tries to make someone else do something by arguing, persuading, etc.' and 'a difficult situation that makes you feel worried or unhappy' (Cambridge Advanced Learner's Dictionary, 2009).

related to the strict liabilities of the borrowers and peer members induce the repayment pressure (Dulal et al., 2008). Many pieces of evidence indicated that group-based lending spread the lender's risk while using peer pressure to encourage borrowers to pay off the debt (Churchill, 1999; Gokhale, 2009). In this mechanism, the non-defaulting borrowers can use some kind of enforcement in order to coax the defaulter repaying her loan (Breza, 2010). But at times, it is observed that group pressure acts as an enforcement device, rather than stressing the dynamic incentives like progressive lending (Naveen, 2012). However, the overall purposes of inflicting repayment pressure are to achieve the economies of scale, operational & financial self-sufficiency, and to reduce the percentage of loans in areas of MFIs (Norell, 2001). This pressure incentivises only the organization but obviously creates an unpleasant experience for the borrowers.

Regulatory authorities generally measure the efficacy of the microfinance institution by the number of beneficiaries it can reach, the total amount of loan disbursed and the financial sustainability (Chowdhury & Mukhopadhaya, 2012). Among these criteria, the repayment rate is considered as the major indicator of success. In this case, microfinance institutions (MFIs) emphasise repayment maximisation (Godquin, 2004). But this policy never intends to see whether the borrowers can repay the loans from the surplus income from the loan-based projects (Chowdhury & Mukhopadhaya, 2012). Some critics pointed out that market orientation of microfinance institutions has a positive impact on the growth of this industry. But due to the presence of several players, the market-competition presumably deviates the MFIs from the purpose of poverty alleviation while leading to gain efficiency or competitive advantage. In order to gain competitive advantages MFIs, prioritise on minimising the operational cost as well as avoidance of the credit risks (Blanco, Pino, Lara, & Rayo, 2013).

Thus, paying greater importance on the higher loan disbursement and optimising repayment become the parts of the strategic practice of the MFIs.

2.7.3 Peer Members' Pressure

It is believed that group intervention increases individual's sense of liability that led to better repayment performance of the borrowers (de Quidt, Fetzer, & Ghatak, 2016). The group-based lending technique incorporates partial group liabilities where borrowers are penalised if their group members default (Allen, 2016). The group substitutes the physical collateral by utilising the existing social relationship among the borrowers. It quickens repayment by putting pressure on the defaulters (Velasco & Marconi, 2004). This lending methodology disallows the group for further access to future credit in case of default by any member. So, other group members suffer for an individual defaulter (Besley & Coate, 1995). In the occurrence of defaulting on the loan, peer members may not commonly be sympathetic to the non-remittal. In this case, the borrower who encounters difficulties in making payments may experience humiliation and stigma and that may create social tension, especially in small communities where everyone is likely to know the borrower's situation (Goetz & Gufta, 1996).

2.7.4 Roles of the Field Officers

Several studies revealed that higher repayment rates of the informal lenders, such as the rural elite, loan sharks, and pawn shops are simply a consequence of the strict procedures of retrieving loans where human value is almost absent (Aryeetey & Aryeetey, 1998; McKernan et al., 2005). Currently, microfinance institutions seem using the similar methods to ensure higher levels of loan recovery. In this case, roles of the loan officers have become more prototypical with debt collectors rather than group facilitators. Reportedly, they are oftentimes applying inappropriate methods in order to compel repayments (Dixon, Ritchie, & Siwale, 2007; Siwale & Ritchie, 2012). Allegedly, loan officers become rude to the defaulters or seize household items due to collect the loan amount (Dixon et al., 2007).

From the above discussion, it can be argued that because of market orientation and being entangled with interest/ *riba* the conventional microfinance has turned in to an unacceptable device to the Muslim society. This system commoditizes and democratises credit to the poor considering them as merely needy humanity, potential with little resilience (Dichter, 2007). They impose various types of pressures in order to ensure proper repayment which is solely linked to the benefits of the MFIs. As a result, the economic standing of the poor people remains unchanged. But poor people with the entrepreneurial quality can be seen through the lens of the capability approach. By accounting their abilities financial institutions can offer venture capital in order to enhance their entrepreneurial exercise. Thus, a new approach of poverty alleviation can be introduced. A brief on the capability approach is given below for better understanding.

2.8 Capability Approach

Capability approach was first introduced in the 1980s by Noble Laureate professor Amartya Kumar Sen, who envisioned poverty alleviation from the perspective of human wellbeing and freedom instead of merely economic well-being. The lacking of basic capabilities and freedom causes poverty. This theory gives equal importance to 'functioning' (Wagle, 2009). This theory alternatively considers capability as the way to address poverty.

Capability approach has brought back to the debates on poverty and inequality, social justice and human development. The specificity of this approach is to emphasize people's freedom to choose the life that they reasonably value (Subramanian, Miquel, Vero, & Zimmermann, 2013). "The [capability] approach is based on a view of living as a combination of various 'doings and beings' with quality of life to be assessed in terms of the capability to achieve valuable functionings" (Sen, 1999). Individual's life in terms of quality and well-being can be assessed based on the capabilities that enable her to achieve 'functioning'. Sen (1999), highlights the capability deprivation as a causative factor for poverty (Sen, 1999). He illustrates capability deprivation with a variety of traits rather than the lowness of income. Though income is seen having an instrumental impact on the capability. The degree of capability that an individual can generate depends on age, gender, location, social rules etc. In this vein, 'functionings' is linked to the achievement of a person where capabilities are the means to achieve 'functionings'. Generally, people possess a set of basic capabilities to achieve basic 'functionings'. In order to achieve complex 'functionings' such as political revolution, economic development and invention the rigorous capabilities are needed (Wagle, 2009). Capability approach primarily shades light on the freedom aspect. In term of freedom, it argues that the lack of meaningful freedom hinders achieving 'functioning' and decent living standards (Wagle, 2009). Overall, capability approach evaluates individual's capabilities to function while being concerned with the identification of the value-objective (Sen, 1999). Thus, Sen advocates on capabilities from a wider point of view, as the basis for evaluating equality. He also advocated that equality may vary in case of different space because of the different characteristics of the individuals (D'Agata, 2007).

2.8.1 Capability Approach towards Poverty

Capability approach perceives poverty from the point of the material and inner quality of welfare. Economic wellbeing and capability approach combinedly deem the personal aspects of human life. On the other hand, social inclusion links to the relational quality of life. In such life, an individual can achieve 'functionings' while having a relationship with the social institutions. This relationship assures social protection that everyone deserves. Social inclusion presumes that people may remain poor if they lack adequate conductive social order in spite of having capabilities (Wagle, 2009). The link between capability, poverty and social inclusion is delineated below.

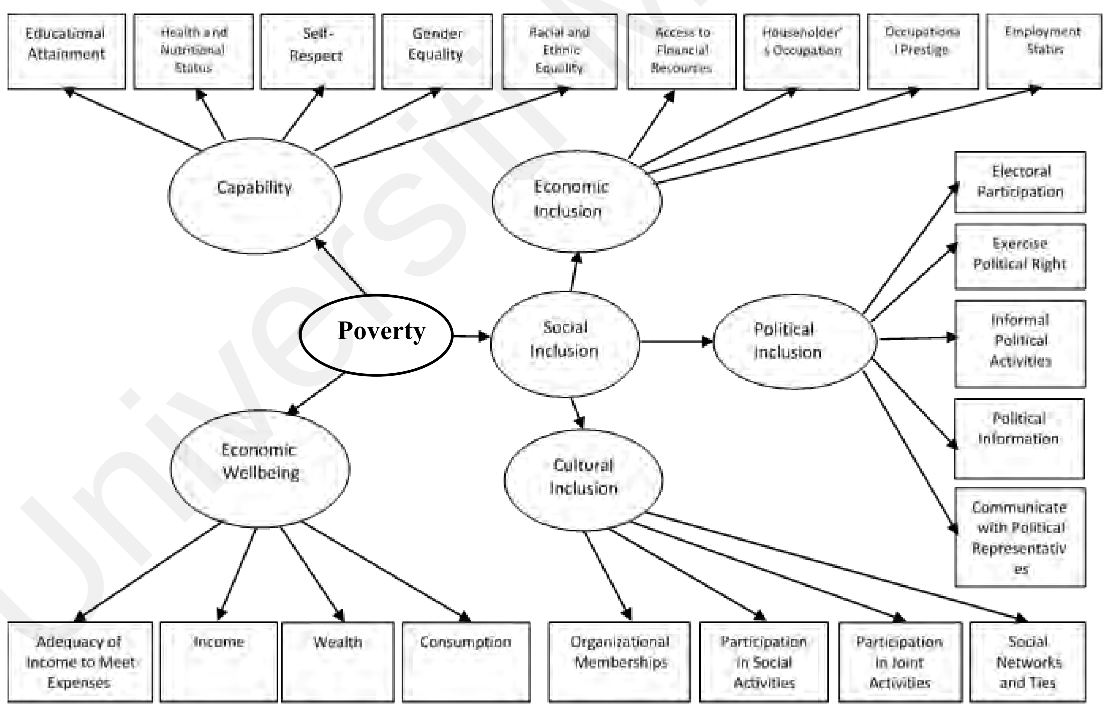


Figure 2.4: Capability Approach and Poverty

Source: (Wagle, 2009)

Sen's capability approach further explained by Robeyns, (2003). He pointed out capabilities as people's potentials 'functionings' that refer to beings and doings. He emphasizes capabilities in order to make a normative evaluation, especially those are used for the inequality analysis, poverty measurement, social justice, cost-benefit analysis and development ethics. On the other hand, the feminism perspective sees capability approach having potentials to address the women's movement that includes reproductive health, voting right, domestic violence, political power, social status and education (Robeyns, 2003).

2.8.2 Islamic Views towards Capability and Freedom

Islam offers high values to individual's capabilities while encourages and inspires to enhance capabilities. Prophet Muhammad (PBUH) first introduced a market in Medina for the Muslim community. Prophet (PBUH) allowed free trade with no charges or fees. But he appointed supervisors for the market. Based on this example, Islamic jurists recognize market supervision and control when necessary (Iqbal & Mirakhore, 2011). This story suggests that the Islamic market structure allows free trade as well as freedom but there must be proper supervision.

Creator-centred Islamic economic system conceptualizes man as physical form (*bashar*) and non-physical form, which is substantive and full of potentials (*insan*). These two concepts distinguish between man and human. In the exteriority, men are similar. But they are significantly different in interiority. Man's purposes, responsibilities, accountabilities are left on his free will and choice. His will is generated in his inner-self. But Allah (SWT) creates, preserves and guides. But finally, HE will judge the man for his performance, responsibilities, obedience and transgression. Thus, Islam perceives men's capability and freedom (Iqbal & Mirakhore, 2011).

In Islamic economics, every individual needs to be assessed according to her types and levels of human abilities. As per human abilities, different people cannot produce the same output by using equal opportunities. Therefore, poverty cannot be alleviated by income redistribution or providing equitable opportunities only. In this case, Islamic economic philosophy suggests a holistic approach, such as (a) pro-poor programs to increase income, (b) equitable distribution of income and (c) equal opportunities in all the social segments (Hassan, 2010). Standing on this philosophical ground, Islamic microfinance works for poverty alleviation.

In the same vein, equality of liberty and opportunity for all, justice in exchange and justice in distribution are the main components of an Islamic society. Where liberty means a person is not prevented by others from accomplishing his creative labours allowed by the Shariah. Opportunity refers to ‘a favourable conjunction of circumstances’ which is equally extended to individuals to try it. Though success depends on the efforts and abilities of the individuals (Iqbal & Mirakhore, 2011). Thus, Islam emphasises on individual’s capabilities and freedom.

2.9 Islamic Microfinance

Islamic finance is recognized as an asset-backed, equity-based, ethical, sustainable, socially responsible, and environment-friendly financing system. This system promotes risk sharing concept while relating the clients to the real economy ensuring financial inclusion and social welfare. The key principles of Islamic finance are 1) prohibition of interest (*riba*), 2) materiality in financing, 3) avoiding the unethical and immoral business and 4) returns is associated with the relevant risk (World Bank, 2015). According to Lewis and Algaoud (2001) [in (Jaffar & Musa, 2014)] and Gheeraert, (2014), there are five distinct features, such as, 1) *riba* (interest), 2) *haram* (forbidden) *or halal* (permissible), 3) *gharar* (speculative) *or* *maysir* (gambling), 4) *zakat* (the prescribed purifying alms) and 5) Shariah (Islamic) board. These features define Islamic finance as a unique system.

In *Qur'an* Allah (SWT[22]) states, '*Wealth must not circulate only among the rich ones among you' (Surah Al-Baqarah 188)*.

وَلَا تَأْكُلُوا أَمْوَالَكُم بَيْنَكُم بِالْبَاطِلِ وَتُدْلُوا بِهَا إِلَى الْحُكَّامِ لِتَأْكُلُوا فَرِيقًا مِّنْ أَمْوَالِ النَّاسِ بِالْإِثْمِ
وَأَنتُمْ تَعْلَمُونَ

This Quranic statement strongly suggests that the financial intermediaries should pay attention to the poor (Azhar, 2005). The above-mentioned divine revelation can be considered as the consent of Allah (SWT) to Islamic Microfinance.

Islamic microfinance is a Shariah-driven interest-free financial system that provides loans to poor people mainly for conducting *halal* business (Wulandari & Kassim, 2016). From the philosophical standpoint, Islamic microfinance embodies the holistic approach of poverty alleviation including (a) pro-poor programs to increase income, (b) equitable distribution of income, and (c) equal opportunities for all the social segments (Hassan, 2010). Furthermore, it takes three effective measures for poverty alleviation, such as 1) positive measures (measures that deal with income, growth, functional distribution of income and equal opportunities), 2) preventive measures (these measures are taken for ensuring the control of ownership and preventing the malpractice) and 3) corrective measure (measures taken for compulsory transfer of *zakat* and recommended transfer of charity and state responsibilities) (Sadeq, 2002). Overall, Islamic microfinance takes social responsibility while working for the common good (Hassan, 2015). Same as the conventional microfinance system, it deals

[22] "SWT" this abbreviation is of the Arabic words 'Subhanahu Wa Ta'ala', that means "Glory to Him, the Exalted"

with the poor who are not bank-worthy because of lack of collateral. It plays crucial roles in mission and market-based intervention (Obaidullah, 2008) by adopting four principles such as; 1) risk taking, 2) loan to socially productive activities, 3) financial risks solely borne by the lenders not with the borrowers, 4) free from Interest or *riba* (Tamkin, 1997). It offers Shariah-based and Shariah-compliant financial products. If the outcome of an Islamic financial product can be predicted, predetermined, and fixed within the *Shariah* constraint is called Shariah-compliant product. For instance, *murabaha* (cost plus profit sale), *bai bithaman ajil* (acquisition of asset or hire purchase financing or sales of goods on differed payment), *ijarah* (leasing), *musharakah mutanaqisah* (diminishing *musharakah*), *bai salam* (sale of goods on the spot payment but future delivery), *istisna* (acquisition of goods based on the specification where price is paid on the spot but goods deliver in future) and *qardul hasan* (benevolent loan) fall into this category. On the other hand, Shariah-based products deal with the profit and loss sharing (PLS) proposition where the return is unpredictable and it depends on the outcomes of the project. *Mudarabah* and *musharakah* are the Shariah-based financial products according to the Shariah law (Hanif & Iqbal, 2009).

Islamic microfinance institution (IsMFI) classifies its products into two categories such as microcredit, micro-equity. For instance, *murabah* with *bi bithama ajil*'*ijara*, *bai salam* and *qardul hasan* are the products for microcredit. These Shariah compliant products do not share the business profit they deal with the murk up basis trading (Adnan & Ajija, 2015). Among these products, the nature of *qardul hasan* is totally different. It does not seek even for any markup. It is used as the benevolent loan. Borrowers only pay back the principal amount in a flexible condition. Some Shariah scholars permit a certain fee so that the transaction cost for this financing can be met (Abidin, Alwi, & Ariffin, 2011). On the other hand, micro-equity products are the trustee financing and equity capitals (Shariah-based) that deal with the profit and loss sharing (PLS) approach. The major equity financing tools are *mudarabah* and *muskarakah and mujarah*. Micro-savings, microinsurance and micro-transfer are the common services in Islamic microfinance (IsMF) (Obaidullah, 2008).

2.9.1 Islamic Microfinance as an Alternative System

Islamic microfinance differs from the conventional microfinance in many ways. At first, it is operated by the divine rules called Shariah law. Shariah does not define poverty from the income aspect only. It focuses on the five basic human needs: religion, physical self, knowledge, offspring and wealth (Saladin & Ariffin, 2014). Shariah suggests equal opportunities for every human being while emphasizing the equitable distribution of wealth. Based on these principles Islamic microfinance works for the common good taking social responsibility (Hassan, 2015). Hence, this system embodies the holistic approach of poverty alleviation. At first, it includes pro-poor programs that envision increase the income of the underprivileged people. In this regard, it prioritises on the benefits or wellbeing of the poor rather than the profitability of the organization. Secondly, this system emphasises the equitable distribution of income so that income distance, inequalities and discrimination can be uprooted from the society. At the end, it facilitates the equal opportunities for all the social segments so that people are not deprived of their rights (Hassan, 2010).

Islamic microfinance also plays crucial roles in mission and market-based intervention (Obaidullah, 2008). The mission-based approach aims at bringing out the people who are entrapped by poverty while the market-based approach prioritises on gaining organizational sustainability and growth. For achieving these goals Islamic microfinance builds its product portfolio in a pragmatic way. It uses some specific products such as *zakat, waqf,* and *sadakah* to help the destitute people so that they can meet the immediate subsistence. On the other hand, it offers some market-based products that facilitate people to be involved with the business activities (Obaidullah, 2008). In this case, Islamic system adopts four principles such as; 1) risk taking, 2) finance to socially productive activities, 3) financial risks solely borne by the lenders not with the borrowers, 4) free from Interest or *riba* (Tamkin, 1997). For the purpose of resolving financial risks for both parties (clients and the organization), this system can use *zakat, waqf, sadakah* and *qardul hasan* (Mohieldin et al., 2012). By being free from interest and practising the profit and loss sharing (PLS) approaches, this system ensures, mutuality, cooperation, trust and social wellbeing. Therefore, Islamic microfinance remains uncontaminated with the shortfalls such as loan trap, the higher rate of interest, repayment pressure that have already diluted the performance of the conventional microfinance. Thus, Islamic microfinance outperforms the conventional microfinance.

2.9.2 Exemplary Practices of Islamic Microfinance (IsMF)

As early as 1903 interest was formally declared as illegal by the Shariah scholars in Egypt. In Southern India, a minority community of Muslim took the first step toward building an Islamic mode of economic activities by initiating an interest-free loan by 1890. It was a donation-based fund which was built for helping the poor. The similar practice was observed in Hyderabad in 1923 which was a credit-free society. By 1953 Islamic economists first designed an interest-free banking system on two-tire *mudarabah* and *wakala* basis. By the end of 1950, a comprehensive theoretical model of interest-free banking was developed as a substitution of the conventional interest-based bank (Iqbal & Mirakhore, 2011). This story suggests that Islamic finance was formally introduced to assist the poor. The primary steps of Islamic banking seemed similar to Islamic microfinance since it was capitalised with the charity-fund. However, Mit Ghamr a local savings bank in Egypt launched its activities to contribute to social welfare. It was designed as a village bank to serve the rural people. But this venture lasted only four years (1963-67). By that time Malaysia initiated *Tabung* Haji, an interest free financing institution that offered a loan to the pilgrimage (Iqbal & Mirakhore, 2011). Though these institutions were providing interest-free micro loans the institutional practice of Islamic microfinance started much later.

The most recent survey that has been conducted by CGAP over 125 institutions in 19 Muslim countries, explored that Islamic microfinance has so far reached about 380,000 customers across the globe (El-Zoghbi & Badawi, 2015). The activities of the major Islamic microfinance institutions (IsMFIs) are briefly narrated below.

Sanadiq, (Village Bank) an Islamic microfinance institution in Syria runs a project namely *Al Jabal Al Hoss* that offers mainly *musharahka* and *murabaha* products to the poor. By the year 2010, this organisation disbursed USD 1.12 million loans to the male and female in an equal ratio and provided certain training to develop their enterprising skills (MIX, 2017). *Bayt al Mal* in Lebanon mainly offers *qardul hasan* financing scheme. Besides, through its sister organisation, it deals with the profit and loss sharing (PLS) financing, such as *mudarabah* and *musharaka* (M&M). But it demands the tangible collateral, which is beyond the principle of M&M financing. *Hudeidah* microfinance project in Aden of Yemen disburses micro-loan among the poor in *murabaha* mode of financing. *Reef* (Rural) Finance, in the West Bank town of Ramallah, operates its activities as not-for-profits basis. This institution offers three categories of Shariah-compliant products those are *murabaha*, for short-term trade financing, *ijarah-wal-iqtina* for purchasing equipment and machinery and *bai'salam*. In North Mali of Sub-Saharan Africa, a development project of Grameen Technical Cooperation (GTZ) and *Grameen* Financial Cooperation (KFW) are assisting the tribes mainly Moors and the *Tuareng* of *Timbactu*. These organisations adopted profit and loss sharing (PLS) methods. In Indonesia, Islamic Microfinance is practised widely by the commercial banks. Islamic Rural Bank, *Baitul Maal wat Tamweels* (BMTs) work through some organisations namely *Nahdatul Ulama and Muhamadiyah*. *Mudarabah, musharaka, murabaha, qardul hasan, and ijara* are offered by this organization. But for *mudarabah, musharaka* financing it seeks for some kind of tangible collateral. In central Asia, the practice of IsMF is observed in Afghanistan, where FINCA is practising *qardul hasan* financing. It disburses loan to the working poor based on solidarity. In South Asia, the exercise of Islamic microfinance is on a small scale. *Essar*, an Islamic microfinance institution started operation in the 25 districts in Pakistan and AJK[23] with the view to improving the economic condition of the underprivileged people. This institution offers financial and non-financial assistance to inspire microenterprise. It deals with brotherhood, transparency, cooperation and Islamic value (IMFN, 2016). *Akhuwat* in Pakistan, a mosque-based model deals with *qardul hasan* where all the activists work voluntarily with the spirit of brotherhood. The loan is completely collateral free and is disbursed to a group or an individual. Islamic Bank Bangladesh, Social Investment Bank, *Al Fallah* and Rescue provides *bai muajjal* as microfinance. Rural Development Scheme (RDS) is an Islamic microfinance programme in Bangladesh. This programme is run by Islamic Bank Bangladesh with the view to provide the loan to the rural farmers. It provides, BDTK[24]50,000 as a collateral free loan for various income generating activities but BDTK 300,000 is collateralized. Besides, it offers BDTK 10,000 as a benevolent loan (*qardul hasan*) to the hardcore poor and distressed people (Hassan & Saleem, 2017). In Australia, four Islamic financial institutions namely, Muslim Community Co-operative (Australia) Ltd, Islamic Co-operative Finance Australia Limited, *Iskan* Finance Pty Limited and *Al Salam* House Loans are reportedly practising Islamic microfinance to a

[23] Ajad Kashmir
[24] BDTK: Bangladeshi Taka, the monetary unit of Bangladesh.

limited extent (Ahmad & Ahmad, 2009). In most of the financial institutions have an intricate monitoring system to review all the transactions in order to assure the appropriation of managing the financial, ethical, and religious terms. They also include a panel of Islamic clerics and scholars, who issue advisory opinions as to whether the activities meet or violate Shariah law (Barden, 2010). In Malaysia, the practice of Islamic microfinance is on a limited scale. *Tabung Haji* provides financial assistance to the poor to perform Hajj. Another major microfinance institution, namely *Amanah Ikhtiar* Malaysia (AIM) offers *qardul hasan* to a limited extent with 10% service charge for each loan (Saad, 2012a). But the real application of *mudaraba* and *musharakah* (M&M) financing is almost absent in the practice of those microfinance institutions.

2.9.3 Microfinance in Malaysia

The process of financial sector reformation has started in Malaysia since 1970s and so far, significant progress has been achieved (Anwar & Sun, 2011). Simultaneously, the microfinance sector is evolving and flourishing over the time. To fight against poverty, five microfinance institutions (MFIs) are working across the country. The MFIs are: 1) *Tabung Ekonomi Kumpulan Usahawan National* (National Entrepreneurs Economic Group Fund, TEKUN), 2) Agrobank, 3) *Lembaga Kemajuan Ikan* Malaysia (Malaysian Fisheries Development Board, LKIM), 4) *Yayasan Basmi Kemiskinan* (Poverty Eradication Foundation, YBK) and 5) *Amanah Ikhtiar Malaysia* (AIM) (Mamun, Adaikalam, & Sazali, 2012). More than one million microentrepreneurs are being served by microfinance, according to Bank Negara Malaysia (BNM). The total outstanding financing of this sector stood at US 1.2 billion (RM 5.2 billion) in 2016, as reported by Abdul Rasheed Ghaffour, the deputy governor of BNM (The Star Online, 2017).

Amanah Ikhtiar Malaysia (AIM) and *Tabung Ekonomi Kumpulan Usahawan National* (TEKUN) are Non-Governmental Organizations (NGOs). AIM was established in 1987 as a replication of Grameen Bank in Bangladesh. It provides financial services to the vulnerable poor. AIM does not take any legal action against the defaulted members. It also provides skills enhancement training on basic accounting, entrepreneurship, financial management, business communication and interpersonal development. AIM focuses on financing the poor household mainly the women in rural are to alleviate poverty. While TEKUN is specialized in providing small loans to the micro enterprises. This institution was incorporated in 1998 under the Ministry of Entrepreneur Development and Cooperatives. It provides the microloan to the poor and nonpoor Bumiputra. Some other NGOs namely Yayasan Usaha Maju (YUM) in Sabah and Koperasi Kredit Rakyat (KKR) are working in Selangor on a smaller scale compared to AIM and TEKUN. KKR mostly depends on members' saving for its own capitalization. On the other hand, TEKUN, AIM and Pembiayaan Kredit Mikro of Bank Pertanian Malaysia (BPM-Malaysian Agricultural Bank) mostly rely on governmental grants and aids. Notably, the grants given to AIM are interest-free (Adejoke, 2010; Mamun, Adaikalam, & Wahab, 2012). Agrobank extends microcredit to practice microenterprise too. It offers financial services to all poor and nonpoor Malaysian with a slogan "Entrepreneur Capital 1 Malaysia". LKIM serves the fishermen only. *Yayasan Basmi Kemiskinan* (Poverty Eradication Foundation, YBK) specifically runs its operation in Selangor to improve the quality of life as well as the practices of microenterprises in this state. The state government mainly provides funds to this institution (Mamun et al., 2012).

The history of interest-free microfinance in Malaysia is not so far back. In late twenties, government of this country took initiative for Muslim people to save money to perform the pilgrimage. This saving mechanism was compliant with the Shariah in order to protect from the contamination of prohibited *riba*/interest. The Pilgrims' Savings Corporation was launched in 1963 but in 1969 it was incorporated into the Pilgrims' Management and Fund Board (Tabung Haji) (Iqbal & Mirakhore, 2011). Though this organization offers interest-free microloans the real practice of Islamic microfinance was observed much later. Amanah Ikhtiar Malaysia (AIM) has recently started offering some resale based Shariah-compliant financial products and *qardul hasan* to a small number of borrowers (Saad, 2012a).

2.10 Shariah Principles

To architect human life according to the pattern that the Creator intended, humans are prescribed with a network of injunctions and rules with the embodiment of the Divine Will of specific codes of behaviour. By acceptance of these codes of behaviour through the exercise of free choice, an individual becomes a Muslim. This network of rules is called Shariah which is etymologically derived from the word "road" that leads man to a harmonious life here and hereafter (Iqbal & Mirakhore, 2011). The root source of Shariah rules is the *Qur'an* and it was operationalized by the Prophet (PBUH). The first set of Shariah principles, which is concerned about the core relationship between man and God is known as *aqidah* (faith); the second set deals with transformation and manifestation of faith and belief into action, which is called Shariah law. The third set is known as *akhlaq* that covers the behaviour, attitude and work ethics. Besides, Shariah is further divided into two components such as *ibadat* (rituals) that focus on the rites and rituals; and another component is *muamalat* that deals with the rules of governing social, political and economic life. *Ijtihad* plays the critical roles in Shariah in resolving issues that arise for timely challenges. It refers to the efforts of distinct jurists to find the solution to the emerging problems in human society. *Ijtihad* is formulated based on the earlier consensus of jurists (*ijma'*), analogy (*qiyas*), judicial preferences (*istishna*), public interest (*maslahah*) and customs (*urf*) (Iqbal & Mirakhore, 2011).

Islamic finance is driven by the principle of Shariah (Gheeraert, 2014). The legal guidelines of Shariah principle are developed based on three sources, such as 1) *Qur'an*, 2) *Hadith* and 3) *Ijtihad.* The Holy *Qur'an*, the Command of Allah (SWT) to the human being is the primary source of Islamic law. Then, the second source is the doings and sayings of Prophet Muhammad (PBUH). The third one is *Ijtihad* which is a formulation of Shariah laws created in the light of *Qur'an* and *Hadith* (Derigs & Marzban, 2009). Notably, over the time different methods of exercising *Ijtihad* evolved because of different circumstances and different schools of thought (*madhahib*). The most commonly practised methods are *Hanfi, Maliki, Shafi'I, Hanbali* and *Jafari* (Iqbal & Mirakhore, 2011).

2.11 ***Riba*/ Interest**

Riba or interest or usury can be simply explained as, "the practice of charging financial interest or a premium in excess of the principal amount of a loan" (Iqbal & Mirakhore, 2011, p.57). The literal meaning of *riba* is "an excess" that can be interpreted as "any unjustifiable increase of capital, whether in loans or sales". More precisely, any positive, predetermined, fixed rate imposed on the principle upon a maturity period is considered *riba* and is prohibited. According to Islamic scholar, *riba* covers usury as well as interest (Iqbal & Mirakhore, 2011).

Riba was first mentioned in the *Qur'an* in Mecca (El-Gamal, 2006). The Divine Revelation states:

"*That which you lend to increase in the property of others will not increase with God; but that which you give out in charity, seeking God's pleasure, it will surely multiply*"

(*Surah Ar-Rum:39*).

"وَمَا آتَيْتُمْ مِنْ رِبًا لِيَرْبُوَ فِي أَمْوَالِ النَّاسِ فَلَا يَرْبُو عِنْدَ اللهِ وَمَا آتَيْتُمْ مِنْ زَكَاةٍ تُرِيدُونَ وَجْهَ اللهِ فَأُولَئِكَ هُمُ الْمُضْعِفُونَ."

This element (*riba*) was forbidden in the second revelation in Medina where interest was charged at the maturity of debts or credit sales and it was compounded at later maturity dates. The principal due on the debtor was described in the Qur'an as "*riba doubled and multiplied*" *(Surah Al-Imran:130).*

يَا أَيُّهَا الَّذِينَ آمَنُوا لَا تَأْكُلُوا الرِّبَا أَضْعَافًا مُضَاعَفَةً وَاتَّقُوا اللهَ لَعَلَّكُمْ تُفْلِحُونَ."

In the last verses of *Surah Al-Baqarah* (2:275-9) Allah (SWT) strictly orders human being to abandon *riba* otherwise a war from Him and His Messenger is declared.

"الَّذِينَ يَأْكُلُونَ الرِّبَا لَا يَقُومُونَ إِلَّا كَمَا يَقُومُ الَّذِي يَتَخَبَّطُهُ الشَّيْطَانُ مِنَ الْمَسِّ ذَلِكَ بِأَنَّهُمْ قَالُوا إِنَّمَا الْبَيْعُ مِثْلُ الرِّبَا وَأَحَلَّ اللهُ الْبَيْعَ وَحَرَّمَ الرِّبَا فَمَنْ جَاءَهُ مَوْعِظَةٌ مِنْ رَبِّهِ فَانْتَهَى فَلَهُ مَا سَلَفَ وَأَمْرُهُ إِلَى اللهِ وَمَنْ عَادَ فَأُولَئِكَ أَصْحَابُ النَّارِ هُمْ فِيهَا خَالِدُونَ. يَمْحَقُ اللهُ الرِّبَا وَيُرْبِي الصَّدَقَاتِ وَاللهُ لَا يُحِبُّ كُلَّ كَفَّارٍ أَثِيمٍ. إِنَّ الَّذِينَ آمَنُوا وَعَمِلُوا الصَّالِحَاتِ وَأَقَامُوا الصَّلَاةَ وَآتَوُا الزَّكَاةَ لَهُمْ أَجْرُهُمْ عِنْدَ رَبِّهِمْ وَلَا خَوْفٌ عَلَيْهِمْ وَلَا هُمْ يَحْزَنُونَ. يَا أَيُّهَا الَّذِينَ آمَنُوا اتَّقُوا اللهَ وَذَرُوا مَا بَقِيَ مِنَ الرِّبَا إِنْ كُنْتُمْ مُؤْمِنِينَ. فَإِنْ لَمْ تَفْعَلُوا فَأْذَنُوا بِحَرْبٍ مِنَ اللهِ وَرَسُولِهِ وَإِنْ

تُبْتُمْ فَلَكُمْ رُءُوسُ أَمْوَالِكُمْ لَا تَظْلِمُونَ وَلَا تُظْلَمُونَ. وَإِنْ كَانَ ذُو عُسْرَةٍ فَنَظِرَةٌ إِلَىٰ مَيْسَرَةٍ وَأَنْ

تَصَدَّقُوا خَيْرٌ لَكُمْ إِنْ كُنْتُمْ تَعْلَمُونَ".

Most of the scholars recognize two types of *riba,* namely *riba al-nasi'a* synonymously *riba al-jahiliyya* and *riba al-fadl,* synonymously *riba al-sunna*. First type of *riba* is strictly prohibited in Qur'an. In this case, Imam Malik[25] determined it as the severest one. The second category of *riba* prohibits trading the same kind of products in different quantities. The products were specified during the Prophetic time, such as "gold for gold, silver for silver, wheat for wheat, barley for barley, dates for dates and salt for salt, like for like and hand to hand, and any increase is *riba*." Non-*Zahiri*[26] jurists also recognized the increase of the aforesaid six commodities as *riba* but, *Hanafi*[27] jurists considered the increase in all the fungible products that can be measured by weight or volume is *riba*. *Shafi'i*[28] and *Maliki*[29] jurists confined to the financial products and storable foodstuffs only (El-Gamal, 2006).

Riba is not only a subject of *fiqh* (interpretation of Islamic law) but also a matter of religious identity for the Muslim (Kamla & Alsoufi, 2015). El-Gamal outlined three rational explanations against the prohibition of interest, such as (1) poor debtor can be exploited because of *riba*; (2) fluctuation in currency values may outbreak because of trading money, (3) shortage of foodstuff can be appeared in the market due to the trading larger amount of food (El-Gamal, 2006). On the other hand, Karsten (2007) underscored four reasons behind the strict condemnation of *riba* in Islam, those are: 1) it reinforces the accumulation of wealth in a few hands and thus, the rights of the fellow men be ignored. 2) Financial gain from the

[25] An Islamic jurisprudence
[26] An Islamic school of thought
[27]An Islamic school of thought founded by the Islamic jurist Imam Abu Hanifa
[28] An Islamic school of thought founded by the Islamic jurist Al-Safi'i
[29] An Islamic school of thought founded by the Islamic jurist Malik ibn Anas

financial practice without any exposure of the risk of the potential loss is discouraged in Islam. 3) The gain of wealth through interest merely an achievement of selfishness in comparison to the gain through hard work and personal activity. 4) Interest rate negatively affects the investment and employment opportunity (Karsten, 2007). Iqbal and Mirakhor (2011) pointed out four major reasons for *riba* to be prohibition, those are: 1) it is positive and predefined; 2) it is entangled with the amount of loan and the period; 3) payment is mandatory regardless of the purposes of borrowing or the positive or negative outcome of the business; and 4) it goes through the complex methods of sanction and collection.

But there are different notions too. According to the revelation in *Surah Al-Imran* (3-130), *Surah Al-Rum* (30-39) and *Surah Al-Baqarah* (274-80), in the pre-Islamic period, the return of a loan was considered as *riba* once the principle amount became doubled or redoubled (Rahman, 2007). In this light, Khan (1987) and Khan, (2007) argued that interest on the productive loan should not be prohibited and the word *riba* does not mean it. They also agreed that *riba* adversely impacts on the consumption, investment and employment. It is detrimental to the social well-being because of creating unemployment by raising the cost of the capital. Furthermore, the marginal efficiency of capital (MEC) cannot reach the optimum level in the presence of *riba*. As a result, investment becomes unattractive.

Ahmad, (2007) contended that the bank interest does not fall under the ambit of *riba* unless it is imposed on the consumption-loan to the needy people. In the same vein, he denied the reasonable predefined rate of return on capital as *riba* (Ahmad, 2007). Therefore, interest is permissible when it is used by the government to enhance national savings in order to capitalise trade and productive investments. Arguably, it is permissible to use as a punishment to the clients who fail to fulfil their commitment (Karsten, 2007). Furthermore, Islamic jurists of all the major schools agree on the time value of money meaning that the time has a share in the price. Therefore, seeking compensation for the time value in credit is legitimate (El-Gamal, 2006). Arguably, money is a medium of exchange. Money has time value only when it acts as real capital, not potential capital. In this case, time facilitates completion of the economic activity. Hence, the capital provider deserves to be compensated only when investment makes a return after a period of time (Iqbal & Mirakhore, 2011). Another group of Muslim scholars are adamant in prohibiting all forms of interest. They also univocal against commodifying money. They find it indifferent the uses of interest-bearing funds for the purposes of consumption or investment. They mark *riba* in the Islamic economic system as a prominent source of unjustified advantage (Ahmad & Rafique, 2016). Most remarkably, a *fatwa,* "Interest of any type of loan is forbidden *riba*" was issued in a meeting organized by Islamic Research Institution in Cairo in May 1965 in the presence of 85 greatest Muslim scholars, who were the representatives of 35 Islamic countries (El-Gamal, 2003). The conventional microfinance is allegedly imposing a high rate of interest (Ali, 2012; Shankar, 2007), which is exploitative as well as rarely beneficial to the poor (Correa & Correa, 2009). Based on the above discussion, this study considers the interest charged by the microfinance institution falls within the ambit of *riba,* which is forbidden in Islam.

2.12 Profit and Loss Sharing (PLS) Finance

The term profit and loss sharing (PLS) refers to a contractual arrangement in the business. This arrangement occurs between two or more parties who are involved in a joint business endeavour with the condition of sharing profit and loss that can be resulted from the business. This agreement is just opposite to the interest-based system where the financial institutions (such as conventional banks) offer capital with a predefined rate of interest to the borrowers who can pay the physical collateral. But in profit and loss sharing (PLS) system there is no requirement of collateral. The partners contribute financial or intellectual capital or both under the condition of sharing the business outcome whether it is profit or loss. Majority of the Shariah scholars suggest, sharing a proportion of profit and loss cannot be predetermined. It must differ from time to time based on the nature of the business and mutual agreement (Karsten, 2007).

In Islamic finance, two financial instruments, namely *mudaraba* and *musharaka* (M&M) are the profit and loss sharing (PLS) financial tools (Alchian & Demsetz, 1972). In these financing, two parties are involved. One party is called rab-al-mal (the capital provider) and another party is called *mudarib* (the entrepreneur). Both parties contribute financial capital and/or intellectual capital (managerial efforts) in a business venture. They share the outcomes rationally based on a pre-agreed ratio. However, in this financing, profit acts as a residual that encourages the entrepreneur (*mudarib*) to undertake a risky investment while the capital provider (*rab-al-mal*) remains concerned about the entrepreneurial skills of the *mudarib* in running the business (Karsten, 2007). The allocation of such capital to the lower-creditworthy *mudarib* is considered more efficient (Khan, 2010) probably because this type of people become sincerer as well as pay greater efforts in order to meet their needs. From the institutional perspective, financing institutions generally contribute value-adding services, such as reviewing the business plan, giving financial advice and improving the network in order to assist the *mudaribs* (Azhar, 2005). Islamic financial institutions mostly utilise PLS products for the purpose of creating values for their shareholders (Muda & Ismail, 2010). This system brings greater efficiency to the organization only when the underpinning problems such as agency problems that may occur due to the moral hazard of the *mudaribs* are properly addressed (Ismath, 1997). *Mudarabah* and *musharakah* are elaborately discussed below.

2.13 *Mudarabah*

Mudarabah is one of the earliest forms of business partnership existing in the pre-Arab society. The term *muqaradah* was synonymously used as *mudarabah* by the schools of Hanafi and Hanbali. But Maliki and Shafie schools of thought considered it as a *qirad*. This partnership method is neither clearly mentioned in Qur'an nor practised by the Prophet (PBUH) but it was widely exercised in the early business transaction. According to some scholars, the divine approval for *mudarabah* transaction is found Qur'an as "*al-darb al-ard*" that means "traveling through the land" (Sapuan, 2016).

Allah (SWT) states, *".... others traveling the land seeking of Allah's bounty"*

(*Al-Muzzammil*: 20).

إِنَّ رَبَّكَ يَعْلَمُ أَنَّكَ تَقُومُ أَدْنَىٰ مِن ثُلُثَيِ اللَّيْلِ وَنِصْفَهُ وَثُلُثَهُ وَطَائِفَةٌ مِّنَ الَّذِينَ مَعَكَ ۚ وَاللَّهُ يُقَدِّرُ
اللَّيْلَ وَالنَّهَارَ ۚ عَلِمَ أَن لَّن تُحْصُوهُ فَتَابَ عَلَيْكُمْ ۖ فَاقْرَءُوا مَا تَيَسَّرَ مِنَ الْقُرْآنِ ۚ عَلِمَ أَن سَيَكُونُ
مِنكُم مَّرْضَىٰ ۙ وَآخَرُونَ يَضْرِبُونَ فِي الْأَرْضِ يَبْتَغُونَ مِن فَضْلِ اللَّهِ ۙ وَآخَرُونَ يُقَاتِلُونَ
فِي سَبِيلِ اللَّهِ ۖ فَاقْرَءُوا مَا تَيَسَّرَ مِنْهُ ۚ وَأَقِيمُوا الصَّلَاةَ وَآتُوا الزَّكَاةَ وَأَقْرِضُوا اللَّهَ قَرْضًا حَسَنًا
وَمَا تُقَدِّمُوا لِأَنفُسِكُم مِّنْ خَيْرٍ تَجِدُوهُ عِندَ اللَّهِ هُوَ خَيْرًا وَأَعْظَمَ أَجْرًا ۚ وَاسْتَغْفِرُوا اللَّهَ ۖ إِنَّ
اللَّهَ غَفُورٌ رَّحِيمٌ

According to the Islamic jurists, this transaction was also approved by Prophet Muhammad (PBUH).

As narrated by Suhayn (r.a.):

"Three matters that have the blessing [of Allah (S.W.T)] i.e. a deferred sale, *muqaradah* (*mudarabah*), mixing the wheat and barley for domestic use and not for sale" [in (Sapuan, 2016)].

Another *Hadith* states this partnership arrangement was approved by the Prophet Muhammad (PBUH):

Ibnu Abbas (r.a.) reported that:

"When Abbas Ibn Abd al-Muttalib gave his property to someone for *mudarabah* (profit sharing), he stipulated conditions for his partner not to bring the capital onto the sea; and not to bring with him the capital crossing a valley; and not to buy livestock with the capital; and if his partner violates the conditions, he should guarantee the loss occurred. These conditions have been bought to the attention of Prophet Muhammad (peace be upon him) and he approved them". (Narrated by Al-Bayhaqi in Al Sunan al-Kubra).

Mudarabah is a trust-based mutual partnership where one party invests money or goods and another party manages a commercial enterprise (Ahmad & Ahmad, 2009; Hassan & Saleem, 2017). The investor is called *rab-al-mal* and the person who manages the business is a *mudarib*. In this contract, *rab-al-mal* is solely responsible for investment but cannot perform the managerial activities. The management is solely operated by the *mudarib* who is not entitled to invest any tangible resources or financial capital. (Obaidullah, 2015). Any financial loss is carried by the capital investor. *Mudarib's* loss is confined to her time and efforts paid for the business operation. But if the financial loss occurs due to *mudarib's* reluctance a portion or the entire loss can be imposed on her. Besides, *mudarib* must practice the agreed business with the allocated capital unless she is permitted to infuse debts on behalf of *rab-al-mal*. All the goods purchased by *mudarib* are solely owned by *rab-al-mal* while *mudarib's* earning is limited to the share of the sales profit. That implies, *mudarib* is not entitled to claim any share of the capital (financial or goods) if its value goes high (Ahmad & Rafique, 2016; Azhar, 2005; Mansori, Kim, & Safari, 2015; Tamkin, 1997; Usmani, 1999).

There are two types of *mudharabah* contracts such as; (i) *mudarabah muqayyadah* (restricted *mudarabah*) and (ii) *mudarabah mutlaqah* (unrestricted *mudarabah*). In restricted *mudarabah,* capital provider specifies the nature of the business and the place of operating the business. On the other hand, in the unrestricted condition, the *mudarib* is free to practice certain types of *halal* businesses (Mansori et al., 2015). In case of unrestricted *mudarabah*, Professor Borhan Tamkin (2004) outlined nine types of business activities are permissible, such as 1) buying and selling all types of merchandise; 2) buying and selling for cash and credit; 3) leaving goods as a deposit or pledge (*rahn*); 4) hiring helpers as needed; 5) renting or buying animals and equipment; 6) travelling with capital; 7) mingling the *mudarabah* capital with *mudarib's* own resources; 8) investing the *mudarabah* capital in a third party *mudarabah* contract; and 9) investing in the *mudarabah* capital with a third party partnership (*Sharikah*) (Tamkin, 2004).

2.13.1 *Muzara'ah*

Muzara'ah is a form of *mudarabah* financing that can be applied in farming where the microfinance institution provides financial capital to the agrarians with a condition of sharing profit from the harvest based on a pre-agreed ratio. In this regard, microfinance institutions are involved in the farming sector with the provision of assets, such as land etc. Mudarib employs her skills. At the end, both parties share the products in an agreed ratio. If it incurs loss *rab-al-mal* solely bears the loss (Rahman, 2010).

2.14 *Musharakah*

Musharakah was practised in the pre-Islamic society before the first revelation of *Qur'an*. Prophet Muhammad (PBUH) himself exercised this type of partnership business. Since then it has become a part of Islamic finance literature (BNM, 2010). In this partnership mechanism the capital provider is linked with the client in a cooperative and evolving manner (A. Hassan & Saleem, 2017). Both parties combine the financial resources to undertake a venture where profit is shared between the parties in a pre-agreed ratio (Obaidullah, 2015). This contract is like the term *shirkah* that means *sharing.* According to Islamic *Fiqh*, *shirkah* is divided into two kinds:

1) *Shirkat-ul-milk*: This is a joint ownership of two or more people in a property. This kind of *shirkah* comes into practice when two or more individuals purchase an equipment and they own it jointly.

2) *Shirkat-ul-'aqd*: This kind of *shirkah* refers to the partnership based on a mutual contract or joint commercial enterprise.

Shirkat-ul-'aqd is classified into three categories, such as:

1) *Shirkat-ul-amwal*: In this *shirkah* all the participants mutually invest capital into a commercial enterprise.

2) *Shirkat-ul-a'mal*: This *shirkah* is also called *shirkat-ul-taqabbul* or *shirkat-ul-sana'i* or *shirkat-ul-abdan*. In this *shirkah*, all the partners jointly participate in rendering services to the customers based on fees. The earning is distributed among them in proportionate to their capitals and contributions.

3) *Shirkat-ul-wujooh*: The third kind of *shirkat-ul-'aqb* is *shirkat-ul-wujooh*. The partners do not need to have any financial investment in this agreement. They only purchase the

commodities on deferred prices and sell them at the spot. The earning is distributed between them at an agreed ratio. Notably, this type of *musharakah* has been recently introduced in Islamic finance (INCEIF, 2006; Obaidullah, 2015).

2.14.1 *Musaqa*

Musaqa is another type of *musharakah* contract that occurs between the financer and the owner of an orchard. The financier provides money for gardening. The output from the orchard is shared between the partners based on the pre-agreed ratio (Obaidullah, 2015; Rahim, 2010).

2.14.2 The Basic Rules of *Musharakah*

Musharakah is a relationship between the entrepreneurs based on a valid contract where all the partners can participate in a business. This contract is made with the mutual consent of the involving parties avoiding any enforcement, fraud, ambiguity or misrepresentation, etc. (BNM, 2010).

There terms and conditions of *musharakah* are mentioned below:

a) The proportion of profit and loss distribution between or among the participants is determined based on a pre-agreed ratio and the duration of investment is defined for a certain period. A contract with a un-predetermined proportion of profit and loss sharing is invalid, according to the Shariah law (Azhar, 2005; Usmani, 1999).

b) The ratio of profit and loss (PLS) for each partner is to be counted on the proportion of the actual profit the business yields. Offering a lump sum amount of profit is prohibited in *shari'ah* (Azhar, 2005; Usmani, 1999). Profit must be shared based on a pre-agreed ratio but loss must be shared in proportion to the invested capital. In *musharakah* all the participants are entitled to involved in management but it is not mandatory. That is why profit sharing is to be defined by an agreement considering the managerial contribution of the partners. Thus, the proportion of sharing profit may differ from the ratio of capital investment (Ahmad & Rafique, 2016).

2.15 *Musharakah Mutanaqisah*

Musharakah mutanaqisah is also named as diminishing *musharakah*. In this contract, both parties (client and Islamic financing institution) jointly acquire and own the property. Financial institution leases its share to the client based on *ijarah* (lease). The client acts as an owner-tenant entails acquiring the property for a certain period. She pays rental to the financing institution under *ijarah* and partially contributes to increasing her share in the property. At the end of the period of *ijarah* (lease), a client can acquire the total share by paying the total lease rentals. Thus, partnership comes to an end and the customer becomes the sole owner of the property (BNM, 2007, 2010; Hasan, 2016; IMFN, 2016; INCEIF, 2006).

2.15.1 The Qur'anic Principles

The following Qur'anic verses indicate the validity and authenticity of *musharakah.*

وَلَكُمْ نِصْفُ مَا تَرَكَ أَزْوَاجُكُمْ إِن لَّمْ يَكُن لَّهُنَّ وَلَدٌ ۚ فَإِن كَانَ لَهُنَّ وَلَدٌ فَلَكُمُ الرُّبُعُ مِمَّا
تَرَكْنَ ۚ مِن بَعْدِ وَصِيَّةٍ يُوصِينَ بِهَا أَوْ دَيْنٍ ۚ وَلَهُنَّ الرُّبُعُ مِمَّا تَرَكْتُمْ إِن لَّمْ يَكُن لَّكُمْ وَلَدٌ ۚ
فَإِن كَانَ لَكُمْ وَلَدٌ فَلَهُنَّ الثُّمُنُ مِمَّا تَرَكْتُم ۚ مِّن بَعْدِ وَصِيَّةٍ تُوصُونَ بِهَا أَوْ دَيْنٍ ۗ وَإِن كَانَ

رَجُلٌ يُورَثُ كَلَالَةً أَوِ امْرَأَةٌ وَلَهُ أَخٌ أَوْ أُخْتٌ فَلِكُلِّ وَاحِدٍ مِّنْهُمَا السُّدُسُ فَإِن كَانُوا أَكْثَرَ
مِن ذَٰلِكَ فَهُمْ شُرَكَاءُ فِي الثُّلُثِ ۚ مِن بَعْدِ وَصِيَّةٍ يُوصَىٰ بِهَا أَوْ دَيْنٍ غَيْرَ مُضَارٍّ ۚ وَصِيَّةً
مِّنَ اللَّهِ ۗ وَاللَّهُ عَلِيمٌ حَلِيمٌ

"...but if more than two, they share in a third..." (Al-Nisa':12) (BNM, 2010)

This verse precisely states the rule of Islamic inheritance. However, in a general context, Muslim jurists have accepted this text as a general permission for any form of partnership.

"قَالَ لَقَدْ ظَلَمَكَ بِسُؤَالِ نَعْجَتِكَ إِلَىٰ نِعَاجِهِ ۖ وَإِنَّ كَثِيرًا مِّنَ الْخُلَطَاءِ لَيَبْغِي بَعْضُهُمْ عَلَىٰ بَعْضٍ
إِلَّا الَّذِينَ آمَنُوا وَعَمِلُوا الصَّالِحَاتِ وَقَلِيلٌ مَّا هُمْ ۗ وَظَنَّ دَاوُودُ أَنَّمَا فَتَنَّاهُ فَاسْتَغْفَرَ رَبَّهُ وَخَرَّ
رَاكِعًا وَأَنَابَ"

"Verily many are the partners (in business) who wrong each other except those who believe and work deeds of righteousness and how few of them…." (Al-Sad: 24) (BNM, 2010)

2.15.2 The *Sunnah* of the Prophet Muhammad (PBUH)

The Islamic prophet Muhammad (PBUH) practised and supported the musharakah based business. His practices and consents are documented by his companions. The narration of Abu Hurayrah and Abu al-Minhal is cited below.

2.15.2.1 The Narration of Abu Hurayrah

The messenger of Allah (SWT) said: *"Allah says: I am the third [partner] of the two partners as long as they do not betray each other. When one of them betrays the other, I depart from them" (Sunan Abu Daud)* (BNM, 2010) (pg. 4).

2.15.2.2 The Narration of Abu al-Minhal

Abu al-Minhal narrated the partnership that occurred between Zayd ibn Arqam and al-Barra' Ibn 'Azi, and they bought silver in cash and credit. Their practices were brought to the Prophet (PBUH), and he commented: *"what was bought on cash then they could benefit from it and what was bought on credit then they should reject it"* (Musnad Ahmad) (BNM, 2010) (pg. 4).

2.15.3 The Consensus of the Muslim Jurists about M&M

Mudarabah and *musharakah* financing seems practised throughout the history of Muslim. In this regard, Imam Ibn al-Munzir narrated: "And they (Muslim jurists) agreed on the validity of partnership where each of the two partners contributes capital in dinar or dirham, and co-mingles the two capitals to form a single property which is indistinguishable, and they would sell and buy what they see as (beneficial) for the business, and the surplus will be distributed between them whilst the deficit will be borne together by them, and when they really carry out [as prescribed], the partnership is valid" (BNM, 2010; pg. 4-5).

2.16 Drawbacks of M&M Financing

Though *mudarabah* and *musharakah* are the most authentic Shariah-based financial products, they have some critical drawbacks too. For instance, in *mudarabah* contract, one party (*rab-al-mal*) provides capital (financial capital or sellable goods) and another party (*mudarib*) contributes managerial skills for running a commercial enterprise. In this case, Shariah prohibits *rab-al-mal* interposing the business management and taking any legal action against *mudarib* in the case of business loss (Ismath, 1997). Besides, if the business encounters any loss, it is solely carried by the *rab-al-mal* (Ismath, 1997). By taking these as opportunities a *mudarib* may become reluctant and immoral. As a result, any investment may turn into unprofitable. On the other hand, in both *mudarabah* and *musharakah* financing, if the *mudarib* lacks entrepreneurial quality (BNM, 2010, 2012), or if the risk of moral hazard rises high due to the discretionary power and adverse selection of *mudarib,* the investment may encounter credit risk (Khalil et al., 2000). Besides, as a precondition, M&M financing must be used for the commercial or productive purposes avoiding any kind of financial speculation (Khan, 2008). This fund cannot be used for *haram* business, such as gambling, prostituting, pork raising and selling alcohol etc. (Kamla & Alsoufi, 2015). But a *mudarib* may hide the business-related information to the *rab-al-mal* as well as conceal the real profit in order to grasp higher share than the agreed ratio (Rashidah & Dean, 2013). In the same way, overconsumption, risk avoidance and risk shirking by the *mudarib* can create agency problem (Khalil et al., 2000). As a result, *rab-al-mal* can be deprived of the due profit of the business (Iqbal & LIewellyn, 2002).

2.17 Agency Theory

Agency theory, synonymously agency cost theory first introduced by Jensen and Meckling in 1976 with the notion that the interest of the managers and the shareholders in an organization is sometimes unadjusted. They outlined that conflict between the managers (agents) and shareholders (principals) arises when managers tend to increase their own utility rather than the value of the firm (Jensen & Meckling, 1976). This theory also explains the possibility of agent's misconduct or opportunistic behaviour (Dion, 2016). This theory sheds lights on two specific problems, such as 1) the principle and agent conflict and 2) difficulties to cut cost or monitor the activities of the agent. These issues pose difficulties in making any decision for risk-taking and risk-sharing in the business (Eisenhardt, 1989). Arguably, the principal can limit the interest of the agent by paying appropriate incentives or compensation as well as monitoring his activities (Jensen & Meckling, 1976).

However, in the avenue of microfinance, the agency problem occurs due to the lender's (principal) inability to observe the borrowers' (agent) characteristics, their efforts for conducting business, and the profits generated from the ventures. These problems bring about inefficiencies in the investment while increasing tension between the borrower and lender (Armendáriz & Morduch, 2005). Agency problem mostly arises due to the adverse selection and moral hazard and information asymmetry (Arnold & Lange, 2004). In the same vein, in *mudarabah* and *musharakah* (M&M) financing agency problem appears mainly for the moral hazard of the *mudarib* (Ismath, 1997). Besides, overconsumption, under-reporting profit, risk avoidance and risk shirking by the *mudarib* excel this problem as well (Khalil et al., 2000). In order to make M&M financing viable for the microfinance institutions (MFIs), the issues of agency problem need to be resolved (Ibrahim, 2015).

2.18 Religiosity

The fundamental axioms of Islamic ideology are the belief in the Unity and Oneness of the Creator; the prophethood (*Nubuwwat*), the ultimate return to the God for judgement and accountability (*Ma'aad*) (Iqbal & Mirakhore, 2011).

The Holy *Qur'an* says,

وَمَنْ لَمْ يَسْتَطِعْ مِنْكُمْ طَوْلًا أَنْ يَنْكِحَ الْمُحْصَنَاتِ الْمُؤْمِنَاتِ فَمِنْ مَا مَلَكَتْ أَيْمَانُكُمْ مِنْ فَتَيَاتِكُمُ

الْمُؤْمِنَاتِ ۚ "وَاللَّهُ أَعْلَمُ بِإِيمَانِكُمْ ۚ بَعْضُكُمْ مِنْ بَعْضٍ ۚ فَانْكِحُوهُنَّ بِإِذْنِ أَهْلِهِنَّ وَآتُوهُنَّ

أُجُورَهُنَّ بِالْمَعْرُوفِ مُحْصَنَاتٍ غَيْرَ مُسَافِحَاتٍ وَلَا مُتَّخِذَاتِ أَخْدَانٍ ۚ فَإِذَا أُحْصِنَّ فَإِنْ أَتَيْنَ

بِفَاحِشَةٍ فَعَلَيْهِنَّ نِصْفُ مَا عَلَى الْمُحْصَنَاتِ مِنَ الْعَذَابِ ۚ ذَٰلِكَ لِمَنْ خَشِيَ الْعَنَتَ مِنْكُمْ ۚ وَأَنْ

تَصْبِرُوا خَيْرٌ لَكُمْ ۗ وَاللَّهُ غَفُورٌ رَحِيمٌ

"Who can be better in religion (din) than one who submits (aslama) his face (i. e. his whole self) to Allah..." (Surah An-Nisa:125).

Noble, Galbraith, Singh, & Stiles (2007) argued that people have the intrinsic and extrinsic orientation towards religiosity. Intrinsic orientation leads towards unification of being, the commandment of brotherhood and transcending all self-centred needs. They further outlined that intrinsic religiosity as an internalized belief which is useful for self-safety, social standing, solace and endorsement of choosing the way of life. On the other hand, extrinsic religiosity directs to the rituals and religious disciplines that are required for achieving spirituality.

Krauss, Hamzah, & Idris, (2007) developed an Islamic religiosity measurement scale by conducting a grand research that was carried out jointly by the Institution for Community and Peace Studies (PEKKA)[30] of Universiti Putra Malaysia (UPM) in collaboration with Universiti Kebangsaan Malaysia (UKM). The research was entitled as, "Religiosity and Personality Development Index: Implications for Nation Building." However, that study re-justified Islam as a comprehensive way of life (*al-din*), a complete religion for the sanctification of all daily living into worshipful acts that unify life in a manner which is consistent with the *tawhidic* principle of the divine unity (Krauss, Hamzah, & Idris, 2007).

Form their study, Islamic religiosity was diagrammed as below:

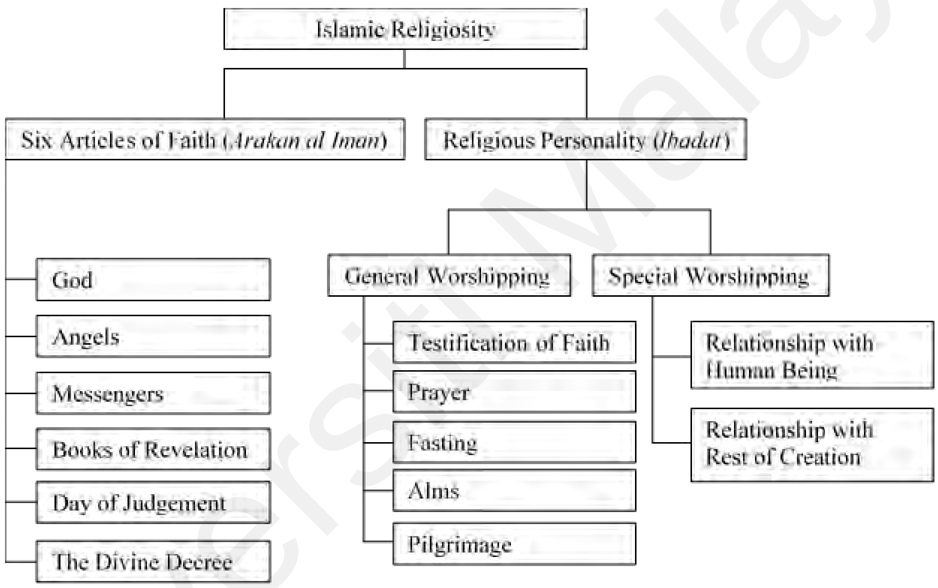


Figure 2.5: MRPI Muslim Religiosity Measurement Model

Source: Krauss et al. (2007)

According to the

Figure 2.5, religiosity is combined with two fundamental elements, such as *Arakan al Iman* (six articles of faith) and *Ibadat* (religious personality). *Arakan al Iman* is comprised with

[30] Institution of community and Peace Studies (PEKKA) is now renamed as Institution for Social Science Studies (IPSAS), which is a research organization under Universiti Putra Malaysia (UPM) focusing on youth development and leadership.

the faith on God, angels, messengers, books of revelation, the day of judgement, and the divine decree (Al-Lahem, 1995; Krauss et al., 2007). On the other hand, *Ibadat* is categorised into two types, such as 1) general worshipping and 2) special worshipping. General worshipping refers to the testification of faith, prayer, fasting, alms and pilgrimage. Whereas, the special worshipping includes the relationship between the human being and the relationship with the rest of creation (Krauss et al., 2007). Similarly, El-Menouar and Stiftung, (2014) suggested belief, ritual, devotion, experience, knowledge and consequences as the basis of religiosity (El-Menouar & Stiftung, 2014).

2.18.1 Religiosity in Economic Performance

Religiosity plays the significant roles in enhancing micro-entrepreneurship as well as economic performance (Rulindo & Mardhatillah, 2011). More specifically, the principles of Islamic religiosity have a significant positive impact on the job satisfaction and financial transaction (Amaliah et al., 2015; Amin, 2010; Johan & Putit, 2016). Besides, religious practices decrease idiosyncratic risks and volatility (Adhikari & Agrawal, 2016). Besides, virtue positively influences the moral decision making (Tepe et al., 2016). Overall, every religion provides guidance for economic activities and social behaviour while promoting the higher ethical standard. In this light, observant religious *mudarib* can reduce the default risk, cost of debt as well as the lending cost (Chen, Huang, Lobo, & Wang, 2016).

2.19 Entrepreneurship

Entrepreneurship refers to the attempt to create a new venture or establish or expand a business or create self-employment. It is an undertaking either by an individual or by an entity that adds economic or social values (Ruiz, Soriano, & Coduras, 2016). Primarily, entrepreneurship is categorized into two kinds, such as 1) necessity entrepreneurship and 2) opportunity entrepreneurship (Amin, 2010; Edoho, 2016).

But Fiet at.al. (2006) categorized entrepreneurship as three kinds, such aspiring, nascent and actual entrepreneurship. Whereas, the aspiring entrepreneur explore a venture idea with their present knowledge and keep looking for the new opportunities. The nascent entrepreneur searches for an idea to create a new venture while an aspiring entrepreneur is in between the nascent and actual entrepreneur. On the other hand, an actual entrepreneur, who is in a venture and seeks for a new venture (Fiet, Nixon, Gupta, & Patel, 2006). Entrepreneurship is further categorized as, 1) productive entrepreneurship, 2) unproductive entrepreneurship, 3) destructive entrepreneurship and 4) evasive entrepreneurship (Padilla & Cachanosky, 2016). Productive entrepreneurship is generally involved in producing goods or rendering services to the customers' needs (Kirzner, 2015; Schumpeter & Elliott, 2011). Unproductive entrepreneur basically goes through a rent-seeking procedure by bringing back the previously unused techniques for production or rendering services (Baumol, 1990). Destructive entrepreneurship is a subset of unproductive entrepreneurship. This kind of entrepreneur introduces destructive goods for personal gain while leaving negative effects on GDP (Baumol, 1990; Desai & Ács, 2007; Desai, Acs, & Weitzel, 2013). This type of entrepreneur reduces production in two ways such as 1) convincing the capitalists to invest their venture through misappropriation or 2) raiding any productive asset in an economy (Sameeksha Desai et al., 2013). On the other hand, the evasive entrepreneurship denotes the expansion of resources to evade the legal system or avoid the unproductive activities. This kind of entrepreneur divert the unproductive activities towards productive activities by redistributing wealth. For instance, politicians and the bureaucrats fall into this category of entrepreneur

(Coyne & Leeson, 2004; Elert & Henrekson, 2014). However, it often works as a remedy for the political and economic institutions (Elert & Henrekson, 2014).

Any kind of entrepreneurship must have the entrepreneurial actions. These actions look for the market niches, developing human resource, adopting technological chances or developing and implementing strategies. The entrepreneurial actions depend on the entrepreneurial qualities that comprise creativity, taking initiative, flexibility, responsibility, independence, prevision, anticipation, internalization, dynamism, ability to treat people, orientation toward profit or gain, non-conformity (Ruiz et al., 2016). The entrepreneurs need to be adopted with the updated regulatory by training and education in order to excel their entrepreneurial skills (Ruiz et al., 2016). Nevertheless, some specific parameters such as age, gender, education, entrepreneurial experience, and industrial experience, business experience, size of business, risk-taking, innovativeness, motivation affect the entrepreneurship (Levie & Autio, 2013; Santos, Romero, & Fernández-Serrano, 2012).

The Holy *Qur'an* and the *Hadith* of Prophet Muhammad (PBUH) are the main sources of Islamic business rules. Islam gives high importance on the entrepreneurial exercise as well as provide a specific guideline. In Holy *Qur'an* Allah (SWT) says:

رِجَالٌ لَّا تُلْهِيهِمْ تِجَارَةٌ وَلَا بَيْعٌ عَن ذِكْرِ اللَّهِ وَإِقَامِ الصَّلَاةِ وَإِيتَاءِ الزَّكَاةِ يَخَافُونَ يَوْمًا

تَتَقَلَّبُ فِيهِ الْقُلُوبُ وَالْأَبْصَارُ

"*by men whom neither traffic nor merchandise can divert from the remembrance of Allah, nor from regular prayer, nor from the practice of regular charity*" (*Surah an-Nur* :37)

In another verse, Allah (SWT) says:

الَّذِينَ يَأْكُلُونَ الرِّبَا لَا يَقُومُونَ إِلَّا كَمَا يَقُومُ الَّذِي يَتَخَبَّطُهُ الشَّيْطَانُ مِنَ الْمَسِّ ۚ ذَٰلِكَ بِأَنَّهُمْ قَالُوا
إِنَّمَا الْبَيْعُ مِثْلُ الرِّبَا وَأَحَلَّ اللهُ الْبَيْعَ "وَحَرَّمَ الرِّبَا فَمَن جَاءَهُ مَوْعِظَةٌ مِن رَبِّهِ فَانتَهَىٰ فَلَهُ
مَا سَلَفَ وَأَمْرُهُ إِلَى اللهِ وَمَنْ عَادَ فَأُولَٰئِكَ أَصْحَابُ النَّارِ هُمْ فِيهَا خَالِدُونَ

"Those who consume interest cannot stand [on the Day of Resurrection] except as one stands who is being beaten by Satan into insanity. That is because they say, 'Trade is [just] like interest'. But Allah has permitted trade and has forbidden interest. So, whoever has received an admonition from his Lord and desists may have what is past, and his affair rests with Allah. But whoever returns to [dealing in interest or usury] - those are the companions of the Fire; they will abide eternally therein." (*Surah al-Baqarah*: 275)

The above verses intertwine entrepreneurial exercise with the faith of Muslim while strictly warning the ethical violation and forbidden interest. Thus, Islam encourages entrepreneurship but strongly discourage unethical practices.

Islam interprets entrepreneurship in a unique way. It keeps the presence of Allah (SWT) at the centre of all things. It suggests admitting that any opportunity comes from Allah (SWT). Therefore, the business must be conducted following His guidance manifested by His messenger (PBUH). That means The *Qur'an* and *Sunnah* must be driving mechanism of any venture initiated by the Muslim entrepreneur. Nevertheless, Islam suggests to look for opportunities, being innovative, risk-taking, managing resource, financing (capitalising or making investment), being socially responsible and making the prudential decision.

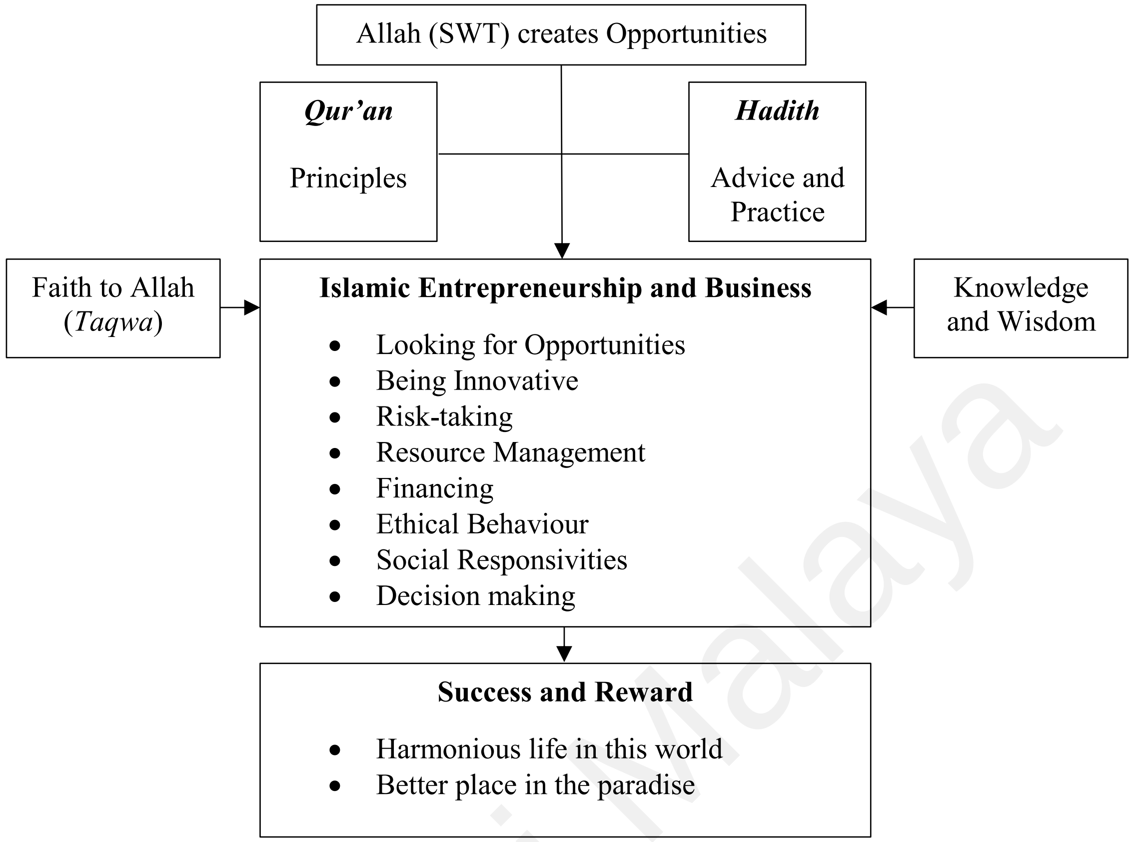


Figure 2.6: Shariah Compliant Business Model

Source: Ramadani et al. (2015)

In every aspect of business dealing faith to Allah (*Taqwa*) and wisdom must be prioritised. This way of practising business brings greater success and the bounty of Allah (Ramadani et al., 2015). From the Islamic point of view, all sorts of entrepreneurial exercises need to the underlying Shariah law. Entrepreneurship should be motivated by the need of the society while satisfying the religious obligation. Islam prohibits excessive risk and non-Shariah-compliant business (Hassan & Hippler, 2014). Arham, (2010) outlined four dimensions that should be integrated with any venture conducted by the Muslim, such as 1) spiritualistic, 2) realistic, 3) ethical and 4) humanistic (Arham, 2010). Overall, every venture must be Shariah-compliant and productive. The entrepreneur must create real goods and services and the business capital should come from the interest-free sources that share profit and loss (PLS).

2.20 Theoretical Framework

The theoretical framework refers to a specific structure built with the relevant theories grounding on a specific topic, phenomenon or circumstance. It explains the research problem and assists to formulate the hypotheses. It describes an observed phenomenon insightfully and generalizes the event from certain aspects (USC, 2018)[31]. Furthermore, a theoretical framework intertwines the existing concepts, scholarly works and theories and thus, it explains the underlying discourse and interrelationship among the theories (Borgatti, 2009; USC, 2018). A flow chart below exhibits the theoretical framework of this study:

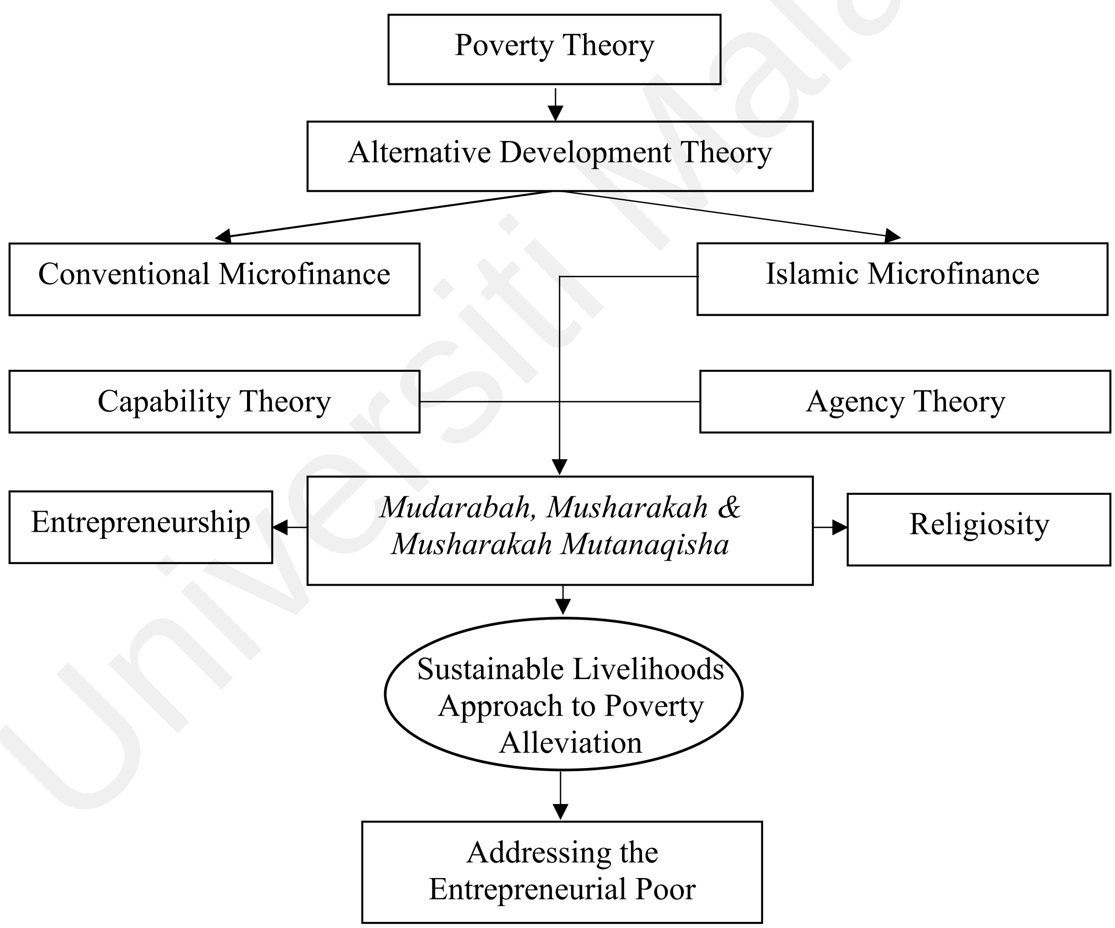


Figure 2.7. Theoretical Framework

[31] USC: University of Southern California

The theory of microfinance is a progeny of the alternative development theory. Because microfinance theory has come in to practice mostly by the non-governmental organizations (NGOs). This financing system works with the participatory approach. Considering every human being is creditworthy microfinance democratises credit to the disadvantaged people, specifically the assetless rural women. This system envisions to impact on the overall economic health by scaling up the financial condition of this group of people.

Arguably, microfinance and alternative development theory are interwoven with the capability theory. Capability theory emphasizes the human capabilities and functioning with the freedom. This provocative philosophy devices that the capability of a person depends on the various factors including personal characteristics and social arrangements (Sen, 1999). However, profit and loss sharing (PLS) based Islamic microfinance system emphasises capability and human freedom. In this regard, two Shariah-based financing tools namely, *mudarabah* and *musharakah* (M&M) seek for clients' (*mudarib*) entrepreneurial skills and managerial capabilities. These financial instruments work based on the trust while extending ample freedom to the *mudarib* to operate any *halal* business. Hence, Islamic Microfinance institutions offer M&M financing to the entrepreneurial poor who cherishes good morals and ethical values. In these financing schemes, *mudaribs* can enjoy full liberty in terms of developing and managing the businesses.

The religious practice is a divine obligation for every Muslim. The adhered religiosity can ensure a harmonious life for the individual on the earth and hereafter. The devoted religious Muslims possess the higher degree of morals and ethical values. So, religiosity can be one of the most important means for the *mudaribs*' to lead a life with honesty and integrity. Since M&M look for trustworthy clients, religiosity could be one of the options for client-selection.

On the other side, entrepreneurship is the prerequisite for M&M finance. M&M instruments can be extended only to the entrepreneurial people for conducting businesses. M&M financing suffers from the agency problem including adverse borrowers-selection, moral hazards and information asymmetry etc. Besides, conflicts of interest might appear between the *rab-al-mal* (Islamic microfinance institution) and the *mudarib* (client).

To explain all these issues from the theoretical perspective, the theoretical framework of this study included poverty theory, alternative development theory, capability theory, microfinance and Islamic microfinance and agency theory. Since entrepreneurship and religiosity are the main requirements for the M&M financing, this study casts attention to religiosity and entrepreneurship theories as well. It further linked the sustainable livelihoods approach to poverty alleviation. Because by adopting *musharakah mutanaqisah* (one kind of *musharakah* instrument) the proposed financing model (see Chapter 3, Section 3.3 and Section 3.4) model intends to facilitate asset ownership to the poor. The asset acquisition-based poverty alleviation technique falls within the ambit of the sustainable livelihood approach. Thus, this study develops its theoretical ground.

2.21 Conclusion

This chapter draws a theoretical framework combining the relevant theories of the development-economics. It debuts highlighting the comparative features of the conventional microfinance and Islamic microfinance. The rationales of Islamic microfinance, specifically profit and loss sharing (PLS) micro-equity finance have been established in a logical manner. Several different features exist in these two financing systems. Conventional microfinance is driven by the man-made rules but, Islamic microfinance follows the divine regulation. Hence, they are rooted in two different philosophical grounds. Conventional microfinance is mostly risk average and charges a predefined price for the capital. On the other hand, Islamic microfinance reasonably shares risks while seeking for no predetermined price for the capital. There are some commonalities exist between these two financial systems. Their primary purpose is to alleviate poverty by scaling up the economic condition of the rural people. These systems are mostly functioning through the non-governmental organizations (NGOs). Besides, they believe in the financial liberalization by offering collateral-free loans to the poor. The basic purpose of both systems is to provide business capital. That is why clients' entrepreneurial skill is the primary requirement for both systems. They also emphasize clients' capability and freedom in terms of investment decision making and business management. Both systems encounter somewhat agency problems. Nevertheless, conventional microfinance doesn't consider the *ex-post* factors of the loans except for the repayment. On the other hand, Islamic microfinance is highly concerned about the *ex-ante* and *ex-post* factors and shares the financial risks. This system encounters the higher level of agency problem as well as credit risks. But in the case of poverty alleviation, from the theoretical view, *mudarabah* and *musharakah* (M&M) based profit and loss sharing approach seems more effective than the conventional one. Because they provide higher incentive and motivation. Islamic microfinance institutions monitor the performance of its clients and participate in the management. The presence of mutuality, cooperation, risk-sharing and trust presumably can bring higher effectiveness and efficiency to M&M based microfinancing for poverty alleviation.

CHAPTER 3: CONCEPTUAL FRAMEWORK

3.1 Introduction

This chapter attempts to chalk out a conceptual framework of profit and loss sharing (PLS) Islamic microfinance system which is compliant with the sustainable livelihoods approach to poverty alleviation. For this purpose, three specific financial instruments such as *mudarabah*, *musharakah* and *musharakah mutanaqisah* are chosen to develop a comprehensive financing model. *Mudarabah* financing can be offered to the assetless entrepreneurial poor to create business opportunity while *musharakah* financing can assist the poor, who have a shortage of capital. In the same vein, *musharakah mutanaqisah* can facilitate the clients owning tangible resources. Since the combination of these three modes of financing can assist the poor to own asset while escaping from income poverty, this approach falls within the sustainable livelihoods approach to poverty alleviation (detailed discussion in Chapter 2, Section 2.4). However, this conceptual model clarifies three key issues: 1) defining the appropriate client-segment for M&M; 2) financing process and 3) viability of M&M financing. In order to define the client segment (entrepreneurial poor), this study depends on the poverty-pyramid approach (Figure 3.1, Section 3.2) that classifies the poor people into four groups, such as entrepreneurial, self-employed, labouring and vulnerable poor (ADB, 2001). Then, the asset acquisition-based poverty alleviation technique has been delineated in section 3.3. Shariah principles that are the main driving mechanism of M&M schemes were adopted from Bank Negara Malaysia (BNM). Notably, the Shariah parameters were chosen for addressing four specific issues, such as identification, measurement, monitoring and controlling (elaborately discussed in Chapter 1 Section 1.2).

At the end, the viability of the application of M&M financing was shown by means of economic equations.

3.2 Poverty Pyramid Approach and Financing Mechanism

Islamic Microfinance (IsMF) system comprises three types of financing schemes, such as microcredit, micro-equity and charity (Obaidullah, 2008). Microcredit is similar to the conventional loan but without interest. It is also called benevolent loan. An instrument named *qardul hasan* is mostly used for this purpose. Financer can only charge a fee in order to manage the administrative cost. Other instruments of microcredit are the resalable products such as *murabaha* with *bai bithaman ajil*, *ijara* and *bai salam* etc.

On the other hand, the equity products are offered to conduct joint venture. *Mudarabah* and *musharakah* are main equity-financing products in Islamic finance. *Mudarabah* is a trust-based financing used for the joint commercial exercise and *musharakah,* a joint financing for the partnership business. The charity financing is to assist the destitute poor to meet the basic needs of living. The funds of *zakat, waqfa* and *sadaka* are generally used for the purposes. Besides, these instruments are also utilized for managing financial risks.

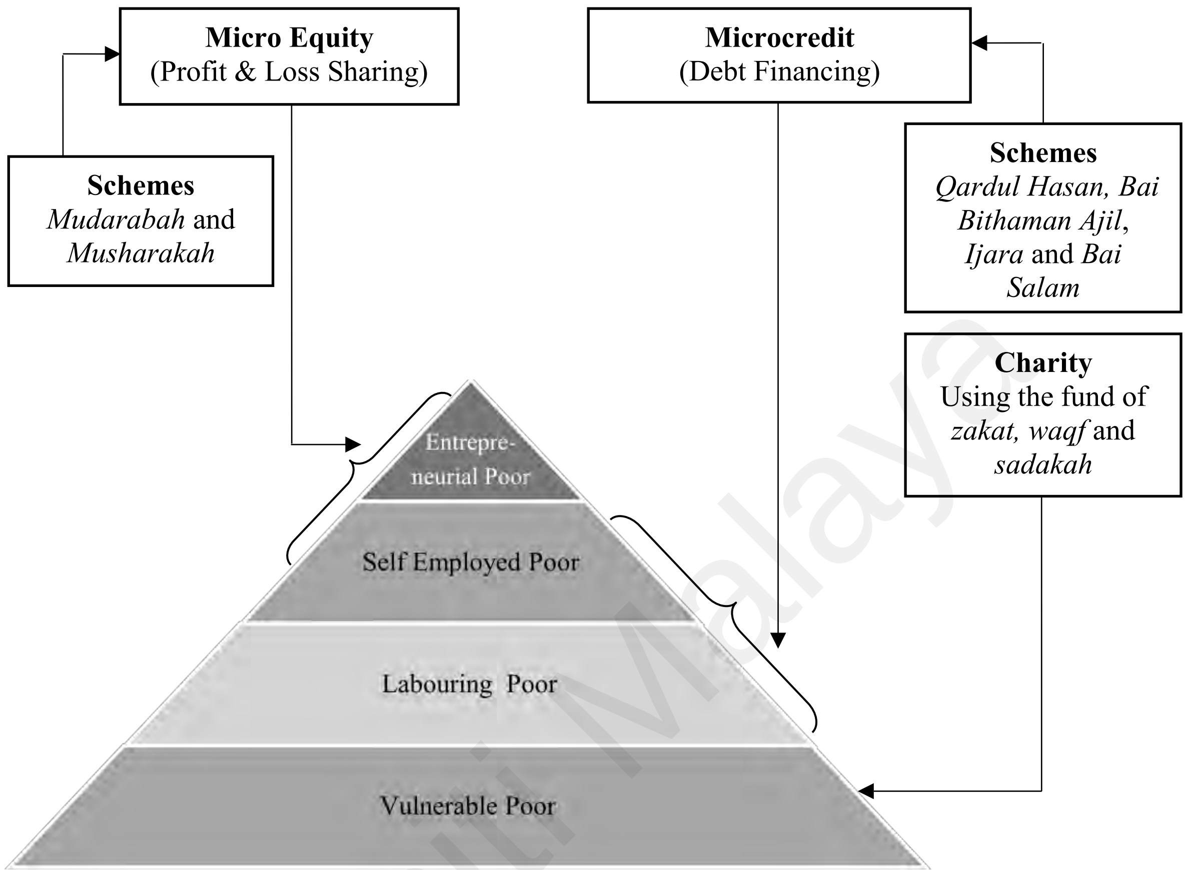


Figure 3.1: Poverty Pyramid and Financing Schemes

Adopted from: ADB (2001), Fisher, Sriram, Harper, & Foundation, (2002), KFH (2011) and Obaidullah (2008)

3.2.1 Vulnerable Poor

Vulnerable poor are displayed in the bottom layer of the pyramid. The household income of vulnerable poor is below the poverty line income (PLI). Several factors, such as having many young children, old aged household head, disabilities and unemployment keep them entrapped with poverty (Quinones & Remenyi, 2014).

3.2.2 Labouring Poor

This type of poor people (displayed in the second layer from the bottom of the pyramid) sell physical labour in the labour market. Some of them generate earning from the subsistence activities like farming (Quinones & Remenyi, 2014).

3.2.3 Self Employed Poor

This kind of poor (displayed in the third layer from the bottom of the pyramid) usually wages themselves by consuming the products that they produce. There earning is below the wage of the unskilled labour. Mostly they can employ only themselves but unable to employ other (Quinones & Remenyi, 2014).

3.2.4 Entrepreneurial Poor

This kind of poor (displayed at the pick of the pyramid) are self-employed. They do patty trading and able to create employment for others on a small scale. Their income level is generally low because of lacking enough capital (Quinones & Remenyi, 2014).

Islamic microfinance institutions (IsMFIs) can offer the charitable financing to the vulnerable poor by using *zakat* and *sadakah*. To address the labouring poor, the microcredit scheme namely, *qardul hasan* can be offered. Because this group of people seemingly unable to pay the any surplus amount or share of profit due to their low income. The poor who are classified as 'self-employed poor' and 'entrepreneurial poor' might have the ability to generate income by conducting business. They can be offered *bai bithaman ajil*, *ijara* and *bai salam* or profit and loss sharing (PLS) schemes, such as *mudarabah* and *musharakah* (M&M). Since the application of *mudarabah* and *musharakah* (M&M) is the focal point of this study, further discussion casts on the M&M financing only. A comprehensive framework of poverty alleviation by using M&M is below.

3.3 M&M Financing for Poverty Alleviation

This study proposes a comprehensive framework of *mudarabah* and *musharakah* (M&M) financing for poverty alleviation. Figure 3.2 demonstrates that entrepreneurial poor are eligible for *mudarabah* and *musharakah (M&M)* schemes. These schemes do not require any tangible collateral or asset-backed guarantee (Azhar, 2005). *Mudarabah* scheme seeks for the business skills and good morals of a *mudarib* (ElGindi et al., 2009). In this contract, microfinance institution (*rab-al-mal*) pays the business capital and the client (*mudarib*) manages the business. It can be assumed that after completing a successful business cycle/s under the *mudarabah* contract the *mudarib* can join the *musharakah* scheme as being a business partner. In this case, the *mudarib* needs to contribute a portion of the business capital. Simultaneously, the *mudarib* can also participate in the diminishing *musharakah (musharakah mutanaqisah)* scheme. After a certain period by completing the lease-rental agreemnet she can own the tangible asset as well as the entire business. This state of asset acquisition can be regarded as the complete cycle of M&M financing and the client is considered as poverty free. Since the client in this financing model is entitled to acquire tangible asset it can be regarded as the sustainable livelihoods approach to poverty alleviation in Islamic microfinance.

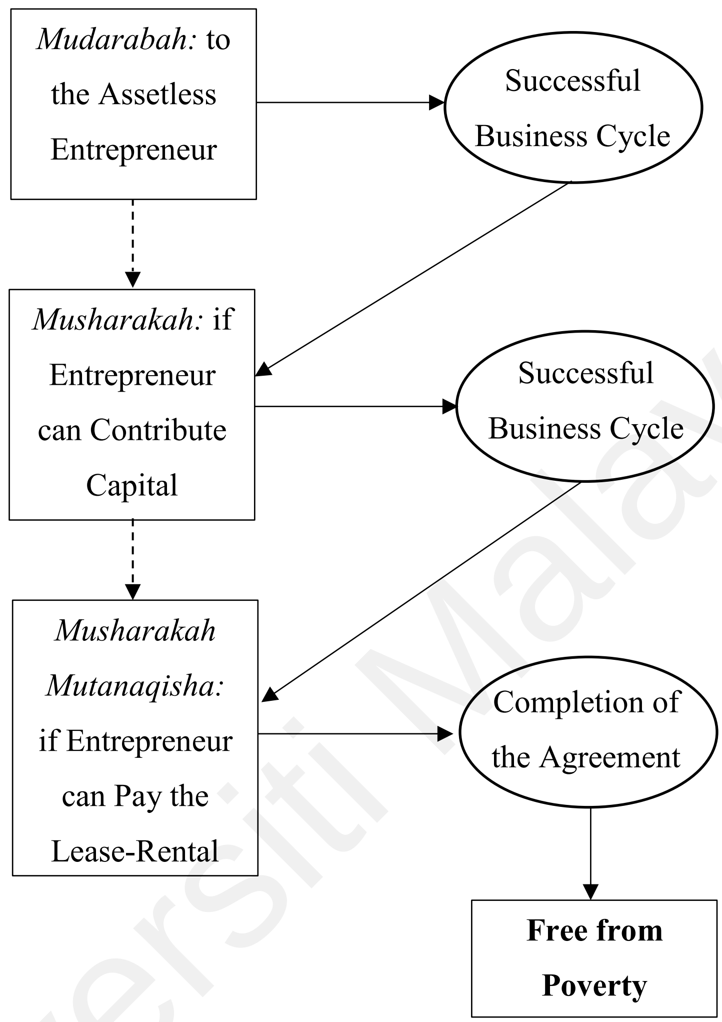


Figure 3.2: Poverty Alleviation by Using M&M

3.4 Operational Steps

A conceptual operational model of *mudarabah*, *musharakah* (M&M) including *musharakah mutanaqisah* is designed considering the underlying Shariah principle. The Shariah parameters that were suggested by Bank Negara Malaysia for the commercial Islamic banks are adopted to operationalize the model. It would be noted that there is no practice of M&M based microfinancing in Malaysia by any microfinance institution. Besides, there is no published Shariah rules to govern micro-equity financing. This scarcity pursues this researcher to adopt the suitable Shariah rules from Bank Negara Malaysia (BNM). It is worth mentioning, BNM is the regulatory authority in Malaysian banking industry. Hence, BNM possesses the strongest Shariah Advisory Committee (SAC) in Malaysia. So, the adopted Shariah rules would be acceptable in the context of Malaysia. Besides, Shariah rules are the divine commands. Due to the difference of the industrial segment, these rules mostly remain unchanged. However, all the Shariah rules in this study were selected considering the existing setup of microfinance.

To finance the entrepreneurial poor who do not have the capital and place to start a business, microfinance institution can offer the capital (financial capital or merchandise) and place (such as shop or outlet) to start a business. As an initiative, the microfinance institution (MFI) can introduce *mudarabah* scheme for the business capital while offering its own shop on a rental basis for conducting the business. In this case, rental of the shop will be paid as the operational cost for running the business. But there must be a provision that the *mudarib* can own the shop through *musharakah mutanaqisah* partnership (MMP) at a certain stage of the business.

After a period, the client can be involved in *musharakah* contract with participating certain portion of the business capital. Shifting a client from *mudarabah* contract to *musharakah* partnership would be possible only when the client can make savings after meeting all the household expenditures. In *musharakah* contract expectedly, capital contribution along with the managerial activities of the client will increase her income level. Besides, it will enhance trust as well as the relationship between the client and microfinance institution.

However, the microfinance institution (MFI) can extend *musharakah mutanaqisah* partnership (MMP) so that the client can own the shop after a certain period. At the stage of owning the shop (or later), if the client terminates the *musharakah* contract she will be entitled as the sole proprietor of the business. Thus, the cycle of M&M will be completed while the client will be considered as free from poverty.

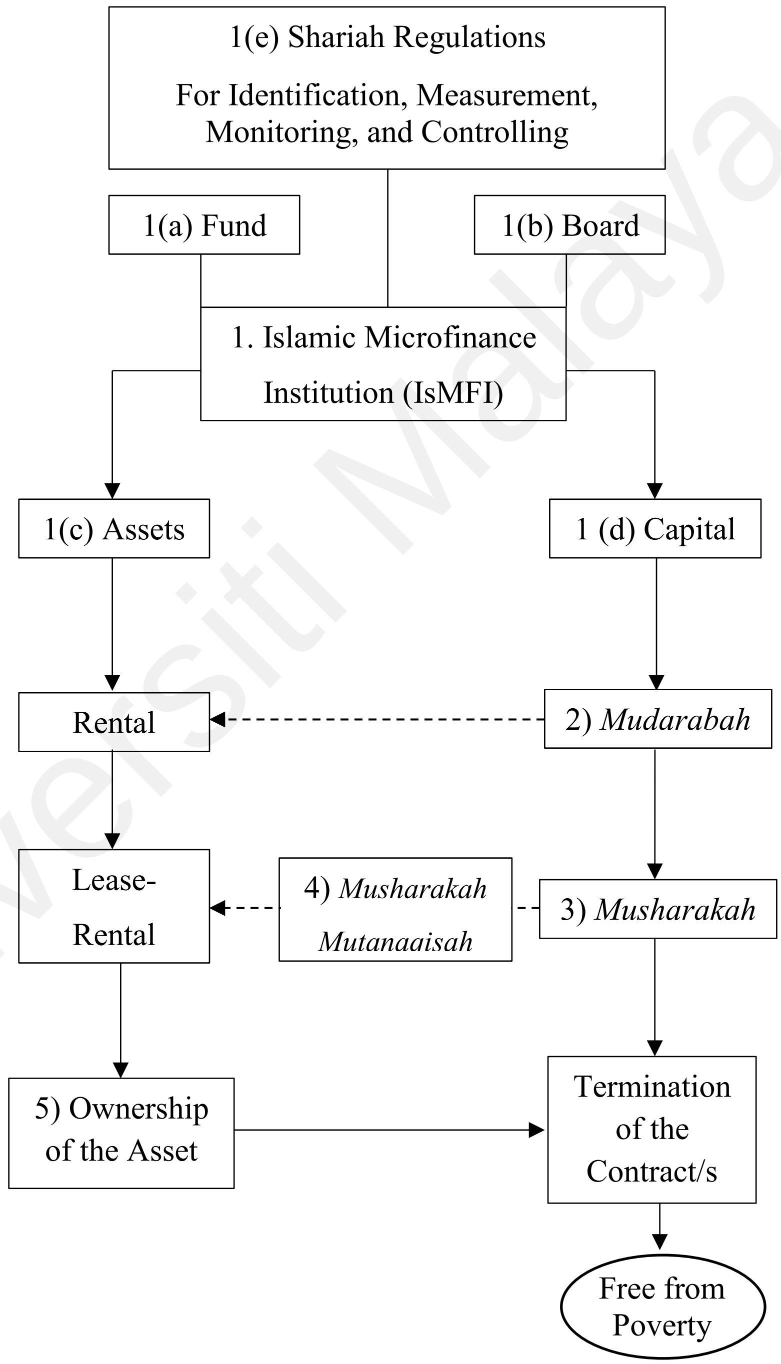


Figure 3.3: *Mudarabah, Musharakah* and *Musharakah Mutanaqisah* Financing

Figure 3.3 presents the operational steps of M&M financing. This model is elaborately discussed in the following sections.

3.4.1 Islamic Microfinance Institution (IsMFI)

According to Bank Negara Malaysia (BNM, 2007), Islamic finance institution should have a fund (1.a) for M&M financing as well as a regulatory board (1.b) to manage the fund. The regulatory board will follow the *shariah* parameters in order to regulate operational activities. The fund can be transformed into fixed assets (1.c), (such as the business outlet, types of machinery, equipment etc.) and venture capital (1.d). Financial institutions (MFIs) must have the capabilities to handle the equity investment risk, counterparty credit risk and liquidity risk. In this regard, Islamic microfinance institution (IsMFI) needs to have a comprehensive risk management infrastructure including management system, internal control, effective strategies, policy and procedure, risk valuation and exit mechanism. The materiality of the investment must be monitored by a dedicated committee which should be formed with the knowledgeable people. Besides, the valuation methods of profit and risk calculation and distribution need to be appropriately implemented upon agreement of the contracting parties. Risk managing and reporting process must include identifying, measuring, monitoring and controlling issues. There must be the exit strategies including extension and redemption conditions from the *mudarabah* and *musharakah* (M&M) contract. The proper assessment must be carried out to determine the position of the partners in term of investment, business prospect and turnaround. To minimise the investment risk financing institution may assign representatives to monitor the project (BNM, 2007).

3.4.2 Fund (1.a)

The Shariah law does not put any restriction on the sources of fund for *mudarabah* and *musharakah* (M&M) financing. But the fund must be generated from the Shariah-compliant sources while meeting the specific criteria, such as appropriateness, suitability and effective management of the fund (BNM, 2007). So, microfinance institution can build the fund from several sources such as an investor, capital market, commercial Islamic banks, government agencies etc.

3.4.3 Board (1.b)

According to Bank Negara Malaysia (BNM), four key issues need to be addressed in order to form a board; those are: 1) adequate resources as well as the qualified personnel with the necessary expertise and knowledge about the application and risk management of M&M financing, 2) board members to determine the materiality of the exposure, 3) effective steps to implement Shariah governance and 4) the procedure of appointment of the board representatives under the specified guideline of BNM.

3.4.4 Asset (1.c)

This study conceptualises that microfinance institution can allocate a portion of the fund for purchasing the asset. The purpose of purchasing the tangible asset is to practice *musharakah mutanaqisah* so that poor people can own the asset. During the contact of *mudarabah* and *musharakah*, the asset (e.g. outlet or equipment) can be taken under a rental agreement for the business operation. The rental will be counted as an operational cost that will be paid from the business. But after a certain period, client will be offered *musharakah mutanaqisah* financing so that they can get ownership of this asset. Hence, the lease-rental process will be initiated.

3.4.5 Capital (1.d)

This study also proposes that a part of the fund can be converted into capital. This capital (as a form of financial capital or goods) will be offered to the entrepreneurial poor under *mudarabah* and *musharakah* schemes. The assetless clients will get access to *mudarabah* financing by proving their entrepreneurial skills and good morals. After a certain period, they would be shifted to *musharakah* financing where they will contribute a portion of the business capital as well as managerial efforts. Besides, clients who have the businesses with inadequate capital can be eligible for *musharakah* financing scheme where the existing business will be regarded as a capital contribution of the client. IsMFI will add the necessary capital and thus becomes a partner of the business.

3.4.6 Shariah Principles (1.e)

Shariah principles synonymously regulatory parameters are the guidelines that the clients and the financing institution must follow to deal with any Islamic financial instrument. The legal guidelines of Islamic finance are the Shariah principles. These principles are basically developed based on the Qur'an, *Hadith* and *Ijtihad* (Derigs & Marzban, 2009). Since there is no specific Shariah regulatory for *mudarabah* and *musharakah* (M&M) financing as in the microfinance paradigm, this study proposes a regulatory framework based on the published Shariah parameters of Bank Negara Malaysia (BNM) (BNM, 2007, 2010, 2012, 2015). However, all the Shariah parameters in this study were selected to address four specific purposes: 1) identification, 2) measurement, 3) monitoring and 4) controlling. The selected parameters are mentioned below:

a. Identification

The Shariah based regulatory principles of identification, this study compiles some parameters based on the suggestions of the scholars as well as Bank Negara Malaysia as mentioned below.

Dezső & Loewenstein, 2012; ElGindi et al., (2009) suggested trustworthiness, good credit history, diligently repayment habit should be the prime conditions for recruiting a *mudarib*. Ahmad, (2016) emphasised on transparency and ElGindi et al., (2009) stretched on good morals while Rulindo & Mardhatillah, (2011) emphasized religiosity. Dezső & Loewenstein, (2012) gave importance to three factors, those are good reputation, good credit history and good ethics. But Bank Negara Malaysia BMN (2007, 2010) seems holistic by prioritising on the rules-orientation. That implies, a *mudarib* should be recruited based on her trustworthiness, good credit history, duly repayment habit, transparency, good morals and ethics, religiosity, good reputation and obedient to the organizational rules.

b. Measurement

For measurement purpose, this study replicates the Shariah guidelines introduced by Bank Negara Malaysia.

- The microfinance institution (MFI) (as a *rab-al-mal*) provides full capital and the client is responsible for managing the business (as a *mudarib*) (in *mudarabah*).
- Profit is distributed on an agreed ratio between the partners (in *mudarabah*).
- Both parties share the capital (MFI and me) as well as manage the business (in *musharakah*).

- The loss is measured according to the share of capital (in *musharakah*).
- Capital can be "financial-capital" or "goods" (in *mudarabah* and *musharakah*).
- By paying back the full price/ capital to the financing institution client can own the entire business (in *musharakah mutanaqisah*).
- Sharing the amount of the capital must be defined on the agreed basis (in *mudarabah* and *musharakah*).
- The amount of capital participation and profit sharing must be defined based on the agreement (in *musharakah*).
- Any loss for the misconduct of the *mudarib* must be carried by the *mudarib* (in *mudarabah*).
- Upon termination of the joint business agreement the total asset will be turned into cash and be distributed among the partners (in *musharakah*).
- Loss or gain comes from the share transfer, it must be distributed to the previous partner (partnership transfer) (in *mudarabah* and *musharakah*).
- If any loss occurred upon termination of partnership, the loss should be carried by the partners according to the proportion of their capital (in *musharakah*).
- If any loss of capital occurs during a venture is recognized as a capital impairment (in *mudarabah* and *musharakah*).

(BNM, 2007, 2010, 2012, 2015)

c. Monitoring

These parameters are chosen for monitoring a *mudarib* in *mudarabah* and *musharakah* (M&M) financing.

For monitoring purpose Bank Negara Malaysia introduced information disclosing and management participation approaches. The proposed regulatory of this study emphasises on:

- Disclosing the market information
- Disclosing the business information
- Revealing the production process
- Revealing production cost
- Revealing financial report
- Regular auditing
- Reveal the cost of marketing and promotion
- Joint management

(BNM, 2007, 2010, 2012, 2015)

d. Controlling

For controlling purpose, this study proposes joint management, third party's involvement in the management and employing the manager by the financing institution. Besides, it proposes a policy amendment that can be performed based on the mutual consent. Furthermore, there should be an exit strategy for business termination.

- Participation of the microfinance institution in business decision making.
- Microfinance institution may employ the manager to manage the business.
- Microfinance institution can employ the third party to manage the business.
- A business contract can be terminated at any time upon agreement.

- If the business encounters immense loss, partnership contract can be terminated.
- Business policy can be amended mutually.
- If the agreed time-period of business is over microfinance institution (MFI) can terminate the business.
- If the business becomes complicated, MFI can terminate the business.
- If a considerable amount of capital gets impaired MFI can terminate the business.
- If the mudarib dies MFI can terminate the business.

(BNM, 2007, 2010, 2012, 2015)

3.4.7 *Mudarabah* Financing

Mudarabah is a trust-based mutual partnership (depicted in Figure 3.4, below) where one party invests money or goods and another party manages a commercial enterprise (Ahmad & Ahmad, 2009; Hassan & Saleem, 2017). The investor or financing institution is called *rab-al-mal* and the client, who manages the business is called *mudarib*. In this contract, *rab-al-mal* is solely responsible for providing capital for a business enterprise but cannot perform the managerial activities (Obaidullah, 2015). On the other hand, *mudarib* is not permitted to invest any tangible resources or financial capital. Therefore, *mudarib's* loss is confined to her time and efforts that she pays for operating the business. But if the loss occurs due to *mudarib's* negligence or misconduct a share or the entire loss can be imposed on her. Besides, *mudarib* must practise the agreed business with the allocated capital unless *rab-al-mal* permits her to infuse debts on behalf of *rab-al-mal*. All the goods purchased by *mudarib* are solely owned by *rab-al-mal* while mudarib's earning is limited in the share of the sales-profit (Ahmad & Rafique, 2016; Azhar, 2005; Mansori et al., 2015; Tamkin, 1997; Usmani, 1999).

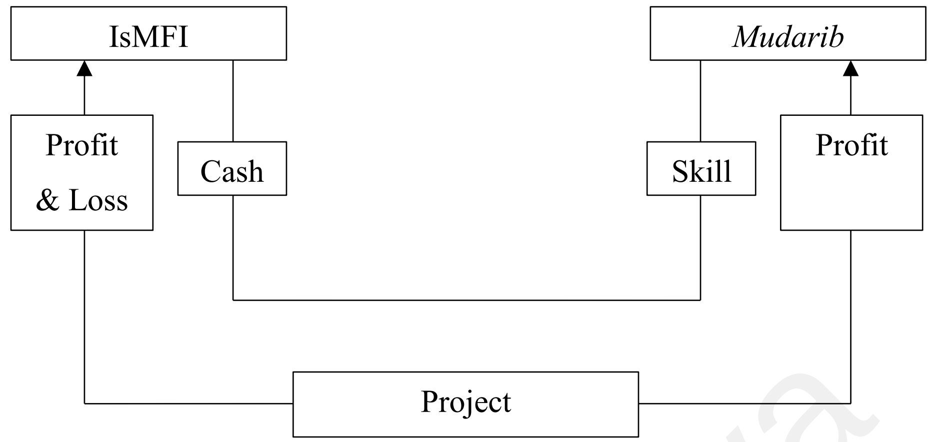


Figure 3.4: *Mudarabah* Contract

By following the Shariah rules as mentioned above an entrepreneurial poor who does not have any capital can be involved with the *mudarabah* scheme. After a successful completion of *mudarabah* scheme, a client can participate in *musharakah* scheme by means of capital participation. The basic design of *musharakah* contact is discussed below.

3.4.8 *Musharakah* Financing

Musharakah financing (Figure 3.5, below) links the capital provider with the client in a cooperative and evolving manner (Hassan & Saleem, 2017). Both parties combine the financial resources to undertake a venture where profit is shared between the parties in a pre-agreed ratio (Obaidullah, 2015). The ratio of profit and loss for each partner is to be counted on the proportion of the actual profit yielded by the business, not in proportion to the capital invested. In this case, offering a lump sum amount of profit is prohibited in Shariah. Besides, the duration of investment is defined for a certain period (Azhar, 2005; Usmani, 1999).

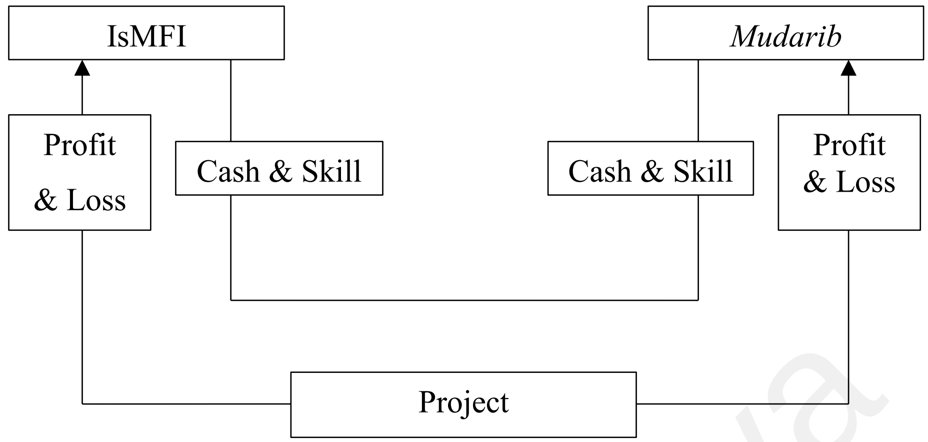


Figure 3.5: *Musharakah* Contract

Though the profit is shared based on a pre-agreed ratio loss allocation depends on the proportion of invested capital. Both parties can join in the management but it is not mandatory. That is why, profit sharing is to be defined on an agreement that might differ from the ratio of actual investment (Ahmad & Rafique, 2016). However, the proposed model of this study suggests that a client can involve with the *musharakah mutanaqisah* partnership (MMP) for asset acquisition in a certain stage of a *musharakah* scheme. That means the client will be dealing with two *musharakah* contract simultaneously. In one contract, the client will be a partner of the of the business and in another contract, she will be a lessee of the asset (e.g. the shop/ outlet). After a contractual period, the client will be an owner of the asset. The process of MMP is described below.

3.4.9 *Musharakah Mutanaqisah* Financing

Musharakah mutanaqisah (Figure 3.6, below) is a property acquisition financing where the client and the financing institution jointly acquire the property. But the financing institution leases its share to the client. The client as an owner-tenant acquires the property periodically. The client pays the rental (agreed redemption method) under *ijarah* (lease) and gradually achieve sole ownership of the property (BNM, 2007, 2015; Hasan, 2016).

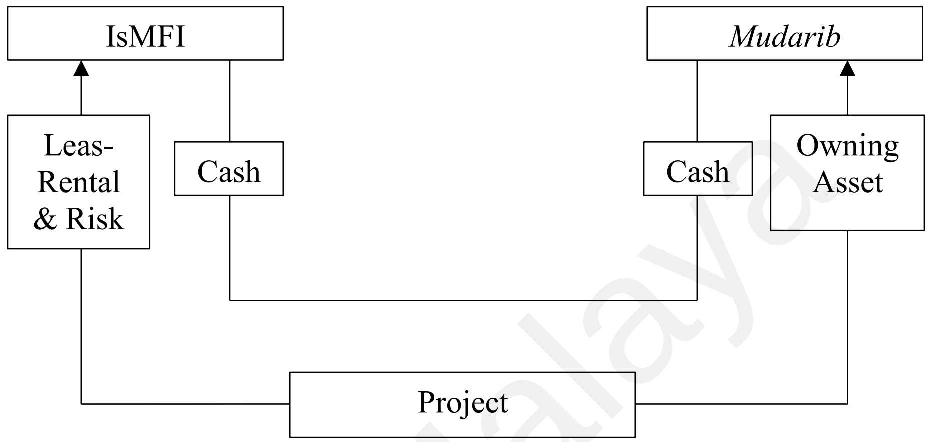


Figure 3.6: *Musharakah mutanaqisah*

Musharakah mutanaqisah partnership (MMP) consists of three contracts, such as 1) *musharakah*, 2) *ijarah* and 3) *bai*. At first, the customer enters into a partnership under the contract of *shirkat-al-milk* (joint ownership) with the financing institution and thus, they co-own the asset. In the second stage, the microfinance institution leases its share (in the asset) to the customer under the contract of *ijarah*. The customer gradually buys the share of the financing institution and eventually own the total asset (Meera et al., 2009). Islamic financing institution holds the ownership of the property during the lease period and bears all the liabilities including defects or damage of the property following the principal of *'al Ghorm bil Ghonm'* (no reward without risk) and '*al Kharaj bil Daman'* (any benefit must be accompanied with liability) (Meera et al., 2009).

In a nutshell, this model (Section 3.4) understandably can alleviate poverty in the most effective way while facilitating the opportunity to acquire assets by the poor. In this regard, the disadvantaged entrepreneurial poor can be the targeted clients for M&M financing. *Mudarabah* scheme can be offered as a start-up loan. Upon one or a few complete cycles of *mudarabah* scheme if the client can join *musharakah* scheme and diminishing *musharakah* scheme she can own the asset as well as the business. Thus, a poor can be unleashed from the trap poverty.

3.5 *Mudarib* Selection

Form the Institutional perspective, a client for M&M financing need to selected based on some specific criteria. Referring to chapter one section (Section1.2.5, Section 1.2.6, Section 1.2.7, and Section 1.2.9) this study conceptualises that a *mudarib* can be selected based on the three characteristics such as knowledge on M&M, religiosity, entrepreneurial skills and willingness to accept the Shariah rules.

3.6 Viability of M&M Financing

If π is the average operating income[32] in a *mudarabah* project and ρ is the percentage of profit-share of the capital provider (*rab-al-mal*); so, $\rho\pi$ is the share of profit for the capital provider (*rab-al-mal*) and $(1-\rho)\ \pi$ is the share for the entrepreneur (*mudarib*).

Let say, k denotes the total capital; so, the profit ratio is π/k. Therefore, the share of the profit for the capital provider (*rab-al-mal*) is $\rho\pi/k$ and for the entrepreneur (*mudarib*) is $(1-\rho)\ \pi/k$ [(Adopted from (Khan, 1987)].

[32] Residual income after entire operating costs

If (1-ρ) π = C (where C = amount of money needs for the household consumption) *mudarib* can pursue another *mudarabah* contract only. Because s/he is unable to contribute capital to the business without having any savings.

But if (1-ρ) π > C; that indicates, *mudarib* has savings and s/he may contribute capital to the business. So, s/he can engage with *musharakah* scheme by providing a certain portion of the capital.

If 's' is the amount of *mudarib*'s contributed capital and the total capital of *musharakah* contract is K, then $K = k_f + k_s$ (where k_f and k_s are the shares of capital contributed by the microfinance institution and client respectively). In this regard, if ρ is the market determinant, the percentage of expected return on investment, the $K\rho = \rho\,(k_f + k_s)$ [Kρ is the total earning from the business and μ is the percentage of the share for the microfinance institution. So, (1-μ) is the share for the client.]. Therefore, the earning for the microfinance institution *is* Kρμ while earning for the client is Kρ(1-μ).

If, Kρ (1-μ) ≥ C+ Ci; entrepreneur can involve with the diminishing *musharakah mutanaqisah* (diminishing *musharakah*). (Where C is the amount of household consumption and Ci is the portion of the lease-rental amount payable in each instalment). After a certain period when the total lease amount is paid, mudaribs can acquire the asset.

Furthermore, Baker & Hoping model (Baker & Hopkin, 1969) suggests that:

$$\frac{\Delta \mathrm{E}}{\mathrm{E}} = [\frac{D(\rho - \rho f) + \rho}{E}]\ (1\text{-c})$$

where ΔE = Increase of client's capital, E = Amount of Client's (*mudarib*) capital investment, D = amount of IsMFI's (*rab-al-mal*) capital investment, ρ = the rate of return on investment, ρ_f = the percentage of the share of *rab-al-mal*, c = rate of consumption of the client.

That means, if the percentage of earning of *mudarib* is higher than the consumption rate, c capital share of *mudarib* will be increased and that will enable her to own the asset by joining *musharakah mutanaqisah* contract. Similarly, the rate of return on the investment (ρ) and size of invested capital (D) will also positively effect on *mudaribs'* income as well as the ability to own the asset.

3.7 Implication of this Financing Model

Islamic finance is rooted in the profit and risk sharing (PLS) principle. The practice of *mudarabah* and *musharakah* (M&M) can manifest the main tenets of this financing system. Besides, M&M can bring greater benefits to the Islamic microfinance institutes as well as the clients in the long run. The integrated financial model (Figure 3.3) can assist the entrepreneurial poor to overcome poverty while acquiring tangible assets. These investments are secured since *mudarib* must operate the business in a specific place defined by the *rab-al-mal*. Microfinance institute can earn rental from the assets during the entire period of these financing schemes. Clients' investment in *musharakah* scheme can be complemented as the collateral or guarantee. Besides, once a *mudarib* is involved with the *musharakah* contract s/he is considerably proven capable of managing the business masterfully and trustworthy as well. Generally, the entrepreneurial poor can deal with the riskier businesses. So, under the M&M schemes, the risk-taking approach of both parties might yield greater profit in business. As a result, the business may produce better income. Hence, the profit share of the IsMFI could be higher than the amount that the conventional MFIs earn from the predefined interest. Thus, the financial gain of IsMFIs would be better than the interest-based conventional MFIs.

This conceptual financing model can be compared to the sustainable livelihoods (SL) approach to poverty alleviation (see Chapter 2, Section 2.4). This concept has recently been added to the poverty alleviation programmes especially in the practice of conventional microfinance. SL approach envisions income enhancement, increased wellbeing, reduced vulnerability, improved food security and more sustainable use of natural resources. For these purposes, SL emphasises the usages of human capital, natural capital, financial capital, physical capital, and social capital (DFID, 2001; Harvard Humanitarian Initiative, 2014). On the other side, in term of poverty alleviation, Islam envisions to scaleup five basic things such as knowledge, religiosity, offspring, wealth, and physical self (Hassan, 2010; Saladin & Ariffin, 2014). Islam prioritises on fulfilling the basic human needs by creating opportunities, equitable distribution of wealth (Akhtar & Arif, 2000). Islam stresses on the establishment of *Tawhid* (unity), universal brotherhood, trusteeship of resources, *khilafah* (vicegerent), simple lifestyle, and *aadalah* (justice) (Akhtar & Arif, 2000). Islam prioritises on the fulfilment of the basic needs, the creation of opportunities and equitable distribution of wealth (Akhtar & Arif, 2000). Hence it suggests to takes positive measures, preventive measures, and corrective measures (Sadeq, 1997; Sadeq, 2002). The Islamic way of poverty alleviation seems holistic as well as comprehensive.

Mudarabah and *musharakah* based poverty alleviation programme at first create business opportunities for the assetless poor and thus, can enhance income and wellbeing while reducing vulnerability. These financing instruments deal with the partnership business. Therefore, they bring about mutuality, cooperation, social relationship, and trust. In the same vein, *musharakah mutanaqisah* financing offers the opportunity to acquire the tangible asset. Asset ownership helps poor to resist further financial shock and vulnerability. This financing mechanism also usages human capital, natural capital, financial capital, physical capital, and social capital. Therefore, M&M based poverty alleviation programme can be considered as the sustainable livelihood approach to poverty alleviation.

3.8 Conclusion

The conceptual framework of M&M-based micro-equity financing explains three important things: 1) categorising poverty and selecting the appropriate group of people for M&M financing; 2) developing a comprehensive financial model comprising *mudarabah*, *musharakah* and *musharakah mutanaqisah*; 3) and discussing the operational process and the economic viability of M&M based financing. First, the poverty pyramid that identifies the entrepreneurial poor people can get access to M&M financing. Then, the conceptual financing models (Figure 3.2 and Figure 3.3) theoretically explain that *mudarabah*, *musharakah* and *musharakah mutanaqisah* financing can be offered to the entrepreneurial poor to scale up their economic condition while facilitating asset ownership. At the end, the viability of M&M financing is given through the economic explanation.

CHAPTER 4: METHODOLOGY

4.1 Introduction

This chapter presents the research methodology which was applied to carry out this study. Quantitative and qualitative methods were adopted to achieve the research objectives. As part of the quantitative method, a survey was conducted on the underprivileged entrepreneurial Muslim women in Selangor in Malaysia by using a structured questionnaire. Systematic steps were taken for data collection and data analyses. The findings of the quantitative study were validated and triangulated based on the experts' opinion. In that case, qualitative method was employed.

4.2 Methodological Epistemology

Epistemology is a technical term in philosophy that identifies the process of gaining knowledge (Maxwell, 2011). According to Schwandt (2007), epistemology is "the study of the nature of knowledge and justification" (p. 87). However, this research was carried out in a normative paradigm combining positivism and interpretivism approaches (Bryman, 1984). The combination of quantitative and qualitative methods was adopted to achieve the objectives. Since microfinance democratises credit to the mass people, and this study aims to understand if *mudarabah* and *musharakah* (M&M) can be offered as micro-equity finance so, the findings of this study need to be generalized. In that light, quantitative method seems to be the most appropriate technique. Besides, quantitative research searches for the facts and causes of human behaviour in a positivistic manner. In this regard, the researcher maintains objectivity while manipulating the external environment and observes the effects of the subjects (Arghode, 2012; Duffy, 1987; Stainback & Stainback, 1984). The researcher also perceives the facts from the outsiders' perspective by keeping a distance from the hypothetical objective as well as freeing from all biases (Arghode, 2012). Quantitative research assumes that there is a causative relationship between the variables. Based on that relationship it answers a set of research questions and justifies the research hypotheses (Arghode, 2012). In this regard, the survey method was chosen as the most appropriate technique to obtain high external validity. This technique can statistically present the findings generating more acceptable outcomes than other techniques (Wolf, 2016). The survey for this study was operationalised by administering a self-generated structured questionnaire.

On the other hand, the qualitative research explores the perspective of the participants in a natural setting (Arghode, 2012; Duffy, 1987; Stainback & Stainback, 1984). Participants perception is taken to gauge the situation as well as generate knowledge based on the theoretical explanation (Arghode, 2012). By means of qualitative method, this study conducted methodological triangulation to enhance the validity and reliability of the findings of the quantitative method. In this regard, the selected respondents were profoundly interviewed through an open-ended questionnaire. Thus, the epistemology of methodology is constructed for this study.

4.3 Research Design

This study was designed as a mixed method research combining quantitative and qualitative techniques. Quantitative method was adopted to explore the research questions with external validity and generalisability (Wolf, 2016). Nevertheless, to make the findings decisive and reliable, the triangulation technique was applied (Duffy, 1987; Flick, 2007). Notably, in quantitative research, the researcher focuses on the accumulation of facts and causes of behaviour believing that the gathered facts are unchanged. Hence, the researcher structures the situation by defining the variables while employing a specific measure to collect information on the specific variables. The procedures of the quantitative research are meticulously structured and designed to justify the presumed hypotheses. To ensure the reliability and validity of the result, quantitative research focuses on the reliability and consistency of the data. This method deals with the objective data that exist apart from the feelings and thoughts of individuals. The data are generally collected under the controlled condition and typically expressed in number (Duffy, 1987; Stainback & Stainback, 1984). But in the qualitative approach, the researcher is concerned about the dynamic nature of reality. He/she attempts to gain the holistic or complete view of what is being studied. Qualitative research generally goes through the flexible procedure while being oriented to exploration and discovery. Flexibility allows the investigator to comprehend the fact. (Duffy, 1987; Stainback & Stainback, 1984). Qualitative research deals with the subjective data that exist within the mind of the individuals and commonly expressed verbally through languages. Qualitative data are collected within the context of their natural occurrence without interference. Researcher interprets the data narratively in a logical manner. In qualitative research, the researcher concentrates on presenting the holistic view of the subject which is under investigation (Duffy, 1987; Stainback & Stainback, 1984).

As a part of the quantitative method, a survey was carried out in Selangor. A self-generated structured questionnaire was administered to the female members (*sahabat*) of *Amanah Ikhtiar Malaysia* (AIM), which is the major microfinance institution in Malaysia. Disproportionate stratified random sampling technique was applied. A total of 450 questionnaires (including a pilot test) were distributed among the entrepreneurial Muslim women. Three branches of AIM those are in Gombak, Selayang and Cheras in Selangor district were selected to conduct the survey. The questionnaires were distributed in a random fashion upon receiving verbal consent from the respondents.

4.4 Conceptual Research Framework

This study conceptualises that initially the clients for M&M financing can be selected based on their product-knowledge, religiosity, entrepreneurial skills and willingness to accept the Shariah principles. Besides, based on the published literature (see Chapter 1, Section 1.4.3 and Section 1.6.1), this study hypothesises that if the Shariah regulatory of *mudarabah* and *musharakah* (M&M) positively impacts on *mudarib*s' entrepreneurship, *mudaribs* will accept M&M financial instruments. According to a previous study, Shariah law has the significant positive impact on the growth of Islamic banking (Grassa & Gazdar, 2014). Similarly, a recent study revealed that the regulation of Islamic finance positively impacts on the clients' entrepreneurship (Fleuter, 2016). But the acceptance of Shariah law somewhat depends on the level of religiosity and knowledge (product knowledge) of the clients. Several studies affirmed that religiosity and knowledge influence *mudaribs* to be involved with the Islamic finance (Adhikari & Agrawal, 2016; Amaliah et al., 2015; Amin, 2010; Chen et al., 2016; Johan & Putit, 2016; Rulindo & Mardhatillah, 2011; Tepe et al., 2016). Presumably, M&M financing can be offered to those *mudarib*s, who are concerned about this financing instruments, maintain religious life and can accept the underlying Shariah principles. Therefore, it is important to investigate the level of clients' knowledge, religiosity and willingness to accept the Shariah rules. It can be assumed that knowledge and religiosity work like the intermediating parameters (discussed in Chapter 1, Section 1.2.5 and Section 1.2.6). So, the mediating impacts of knowledge and religiosity on the relationship between Shariah regulatory and entrepreneurship need to be measured. Furthermore, education has a significant impact on the *mudaribs'* performance with the microfinance (Atmadja et al., 2016) while, income and savings are the important determinants of clients borrowing behaviour (Rokhim et al., 2016). Business experience also influence in making borrowing decision (Levie & Autio, 2013). Therefore, education, income, savings and business experience can be chosen as the moderating variables (see Chapter 1, Section 1.2.9). So, their effect of on the relationship between Shariah principles and entrepreneurship should be measured too. A comprehensive research framework is graphically presented below (Figure 4.1).

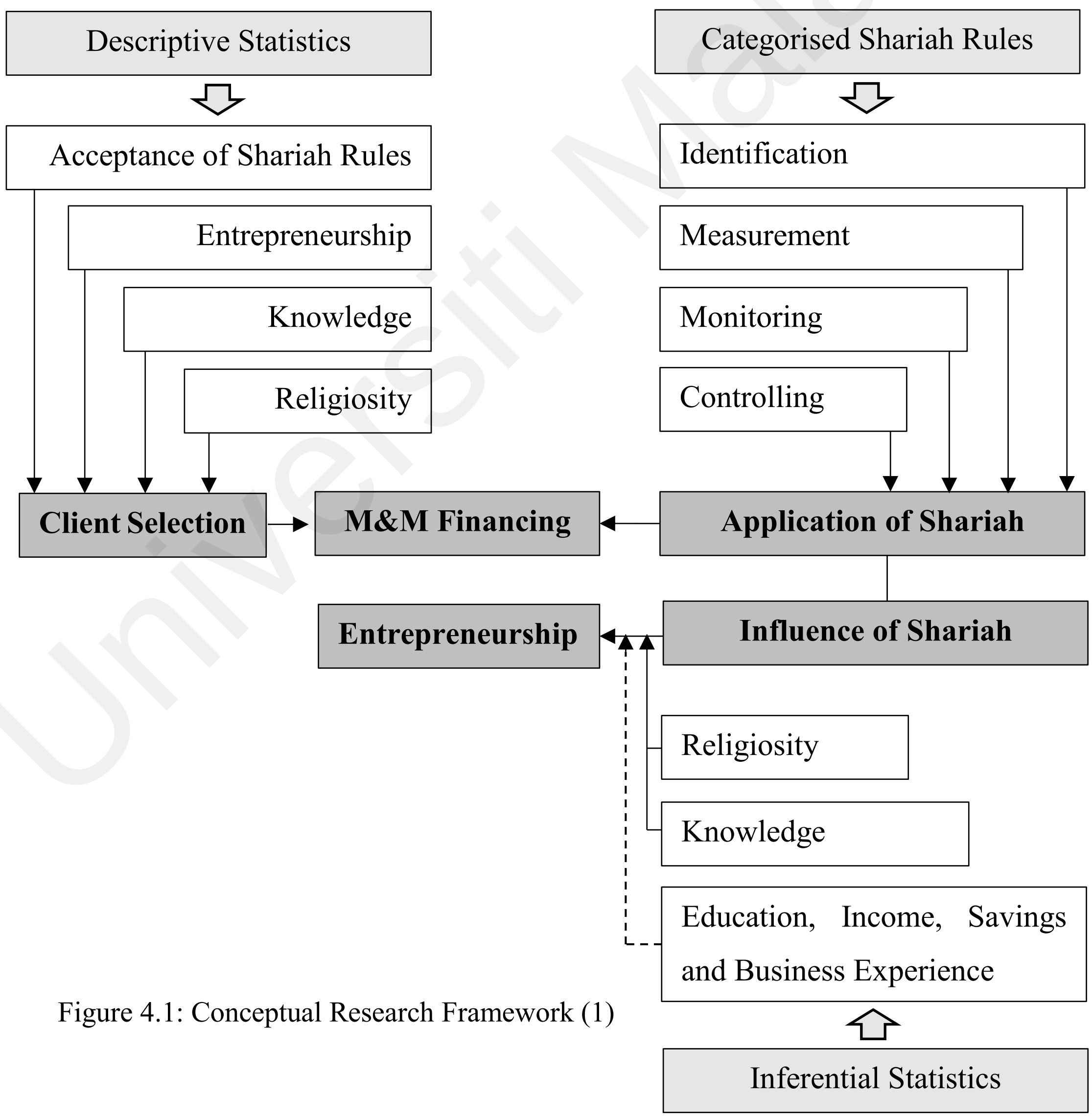


Figure 4.1: Conceptual Research Framework (1)

Figure 4.1 demonstrates the clients selection process of M&M finance based on their knowledge, religiosity, entrepreneurial skills and willingness to accept the Shariah principles. To operationalize this financing system the Shariah principles are categorised into four segments to address four specific purposes; those are identification, measurement, monitoring, and controlling (see Chapter 1, Section 1.2). To conduct the psychometric analyses, this model shows the relationship of the Shariah principles on entrepreneurship while assessing the mediating and moderating effects of some demographic variables. Thus, the conceptual research framework (1) has been designed for this study. Furthermore, to demonstrate the causal relationship among the variables and develop the hypotheses 'conceptual research framework (2)' has been developed. This framework includes the triangulation process as well.

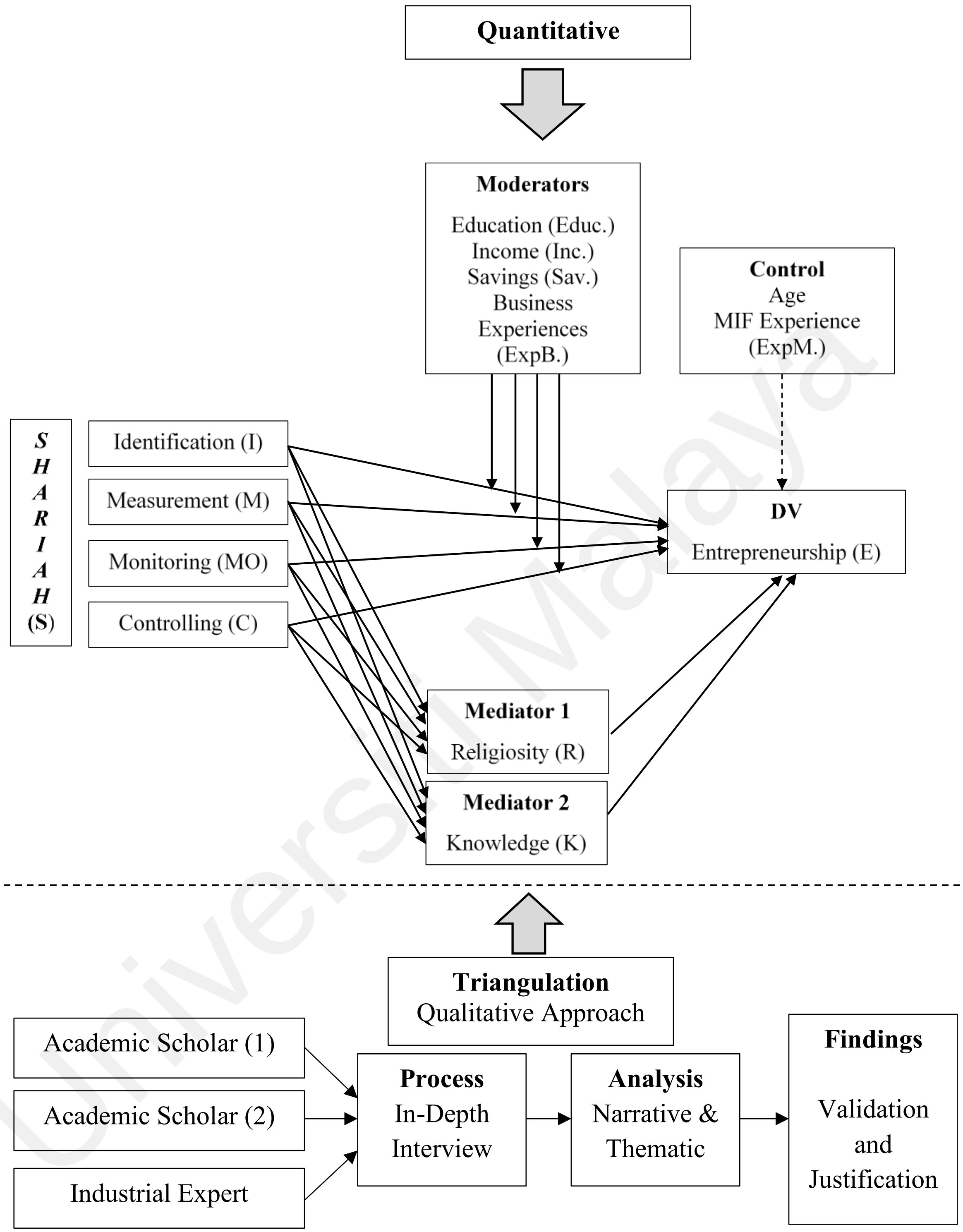


Figure 4.2: Operational Research Framework (2)

Figure 4.2 depicts the relationship between the Shariah principles and entrepreneurship and the impacts of the mediating and moderating variables. Shariah regulatory parameters for identification (I), measurement (M), monitoring, and controlling (C) are independent variables (IVs) and entrepreneurship (E) is the dependent variable (DV). Knowledge (K) and religiosity (R) are considered as the mediators. Furthermore, four other variables namely, education (Educ.) income (Inc.), $saving$s (Sav.), and business experience (ExpB) are chosen as the moderators. Age and microfinance experience (ExpM) are chosen as the control variables. Notably, control variable refers to the variable that is not of primary interest. This kind of variable constitute extraneous factor and its influence remains controlled or eliminated (Jason, Pole, & Susan, 2010). Since, the data for this study were collected from the members of a microfinance institution namely, *Amanah Ikhtiar Malaysia* (AIM), the variable, 'microfinance experience (ExpM)' was chosen as a controlled variable. Similarly, according to the microfinance practice, any poor individual can access a loan scheme from18 years of age (puberty age) to as long she is physically and mentally active. Therefore, the influence of age (age) is decided to be ignored. Hence, age is considered as another controlled variable. So, the effects of these two variables are not measured.

A qualitative study was carried out in order to triangulate (methodological triangulation) the findings of the quantitative study (Bekhet & Zauszniewski, 2012). In this regard, in-depth interviews were taken of three experts by using a semi-structured questionnaire. This questionnaire was constructed in the light of the research objectives. Thus, this study developed its conceptual research framework.

4.5 Research Objectives (ROs)

Based on the existing theory and relevant literature, this study formulated six research objectives. The objectives are recollected below:

RO 1: To investigate the extents of poor women's knowledge of mudarabah and musharakah (M&M) financing, religiosity and entrepreneurial qualities.

RO 2: To investigate poor women entrepreneurs' willingness to accept the Shariah principles of mudarabah and musharakah (M&M) financing defined for Islamic microfinance.

RO 3: To analyse the impact of Shariah principles of mudarabah and musharakah (M&M) financing on the entrepreneurship of poor women who are involved with the microfinance programme.

RO 4: To analyse the mediating effect of religiosity on the relationship between Shariah principles of mudarabah and musharakah (M&M) financing and the entrepreneurship of poor women who are involved with the microfinance programme.

RO 5: To analyse the mediating effect of knowledge on the relationship between Shariah principles of mudarabah and musharakah (M&M) financing and the entrepreneurship of poor women who are involved with the microfinance programme.

RO 6: To analyse the moderating effects of education, income, savings and business experience on the relationship between Shariah principles of mudarabah and musharakah (M&M) financing and the entrepreneurship of poor women who are involved with the microfinance programme.

4.6 Research Questions (RQs)

These objectives can be achieved by answering the research questions as mentioned below:

4.6.1 Research Question 1

RQ 1: *What are the extents of poor women entrepreneurs' knowledge, religiosity, and entrepreneurship?*

Research Question (1) can be divided into three sub-questions, such as:

RQ 1 (a): What is the extent of poor women entrepreneurs' knowledge?

RQ 1 (b): What is the extent of poor women entrepreneurs' religiosity?

RQ 1 (c): What is the extent of poor women entrepreneurs' entrepreneurial skills?

4.6.2 Research Question 2

RQ 2: *To what extent do poor women entrepreneurs accept Shariah principles of mudarabah and musharakah (M&M) financing?*

Research Question (2) can be divided into four sub-questions, such as:

RQ 2 (a): To what extent do poor women entrepreneurs accept the Shariah principles of identification?

RQ 2 (b): To what extent do poor women entrepreneurs accept the Shariah principles of measurement?

RQ 2 (c): To what extent do poor women entrepreneurs accept the Shariah principles of monitoring?

RQ 2 (d): To what extent do poor women entrepreneurs accept the Shariah principles of controlling?

4.6.3 Research Question 3

RQ 3: *How do Shariah principles of mudarabah and musharakah (M&M) impact on poor women's entrepreneurship?*

Research question 3 can be divided into four sub-questions as mentioned below:

RQ 3 (a): How do the Shariah principles of identification impact on poor women's entrepreneurship?

RQ 3 (b): How do the Shariah principles of measurement impact on poor women's entrepreneurship?

RQ 3 (c): How do the Shariah principles of monitoring impact on poor women's entrepreneurship?

RQ 3 (d): How do the Shariah principles of controlling impact on poor women's entrepreneurship?

4.6.4 Research Question 4

RQ 4: *How does religiosity mediate the relationship between Shariah principles of mudarabah and musharakah (M&M) and entrepreneurship of poor women?*

Research Question (4) can be divided into four sub-questions, such as:

RQ 4 (a): How does religiosity mediate the relationship between Shariah principles of identification and entrepreneurship of poor women?

RQ 4 (b): How does religiosity mediate the relationship between Shariah principles of measurement and entrepreneurship of poor women?

RQ 4 (c): How does religiosity mediate the relationship between Shariah principles of monitoring and entrepreneurship of poor women?

RQ 4 (d): How does religiosity mediate the relationship between Shariah principles of controlling and entrepreneurship of poor women?

4.6.5 Research Question 5

RQ 5: *How does knowledge mediate the relationship between Shariah principles of mudarabah and musharakah (M&M) and entrepreneurship of poor women?*

Research Question (5) can be divided into four sub-questions, such as:

RQ 5 (a): How does knowledge mediate the relationship between Shariah principles of identification and entrepreneurship of poor women?

RQ 5 (b): How does knowledge mediate the relationship between Shariah principles of measurement and entrepreneurship of poor women?

RQ 5 (c): How does knowledge mediate the relationship between Shariah principles of monitoring and entrepreneurship of poor women?

RQ 5 (d): How does knowledge mediate the relationship between Shariah principles of controlling and entrepreneurship of poor women?

4.6.6 Research Question 6

RQ 6: *How do education, income, savings, and business experience moderate the relationship between Shariah principles of mudarabah and musharakah (M&M) and entrepreneurship of poor women?*

Research Question (6) can be divided into four sub-questions as below:

RQ 6 (a): How does education moderate the relationship between Shariah principles and entrepreneurship of poor women?

RQ 6 (b): How does income moderate the relationship between Shariah principles and entrepreneurship of poor women?

RQ 6 (c): How does savings moderate the relationship between Shariah principles and entrepreneurship of poor women?

RQ 6 (d): How does business experience moderate the relationship between Shariah principles and entrepreneurship of poor women?

Furthermore, each sub-question can be divided into another four sub-sub-questions, such as:

i) Sub-sub Questions of RQ 6 (a)

RQ 6 (a) 1: How does education moderate the relationship between Shariah principles of identification and entrepreneurship of poor women?

RQ 6 (a) 2: How does education moderate the relationship between Shariah principles of measurement and entrepreneurship of poor women?

RQ 6 (a) 3: How does education moderate the relationship between Shariah principles of monitoring and entrepreneurship of poor women?

RQ 6 (a) 4: How does education moderate the relationship between Shariah principles of controlling and entrepreneurship of poor women?

ii) Sub-sub Questions of RQ 6 (b)

RQ 6 (b) 1: How does income moderate the relationship between Shariah principles of identification and entrepreneurship of poor women?

RQ 6 (b) 2: How does income moderate the relationship between Shariah principles of measurement and entrepreneurship of poor women?

RQ 6 (b) 3: How does income moderate the relationship between Shariah principles of monitoring and entrepreneurship of poor women?

RQ 6 (b) 4: How does income moderate the relationship between Shariah principles of controlling and entrepreneurship of poor women?

iii) Sub-sub Questions of RQ 6 (c)

RQ 6 (c) 1: How does savings moderate the relationship between Shariah principles of identification and entrepreneurship of poor women?

RQ 6 (c) 2: How does savings moderate the relationship between Shariah principles of measurement and entrepreneurship of poor women?

RQ 6 (c) 3: How does savings moderate the relationship between Shariah principles of monitoring and entrepreneurship of poor women?

RQ 6 (c) 4: How does savings moderate the relationship between Shariah principles of controlling and entrepreneurship of poor women?

iv) Sub-sub Questions of RQ 6 (d)

RQ 6 (d) 1: How does business experience moderate the relationship between Shariah principles of identification and entrepreneurship of poor women?

RQ 6 (d) 2: How does business experience moderate the relationship between Shariah principles of measurement and entrepreneurship of poor women?

RQ 6 (d) 3: How does business experience moderate the relationship between Shariah principles of monitoring and entrepreneurship of poor women?

RQ 6 (d) 4: How does business experience moderate the relationship between Shariah principles of controlling and entrepreneurship of poor women?

4.7 Research Hypotheses (RHs)

Based on the discussion in Chapter (1), (Section 1.2.5, Section1.2.6, Section 1.2.8, and Section 1.2.9) four hypotheses were developed. All the hypotheses were divided in to sub-hypotheses in order for deeper understanding. The hypotheses are graphically presented below.

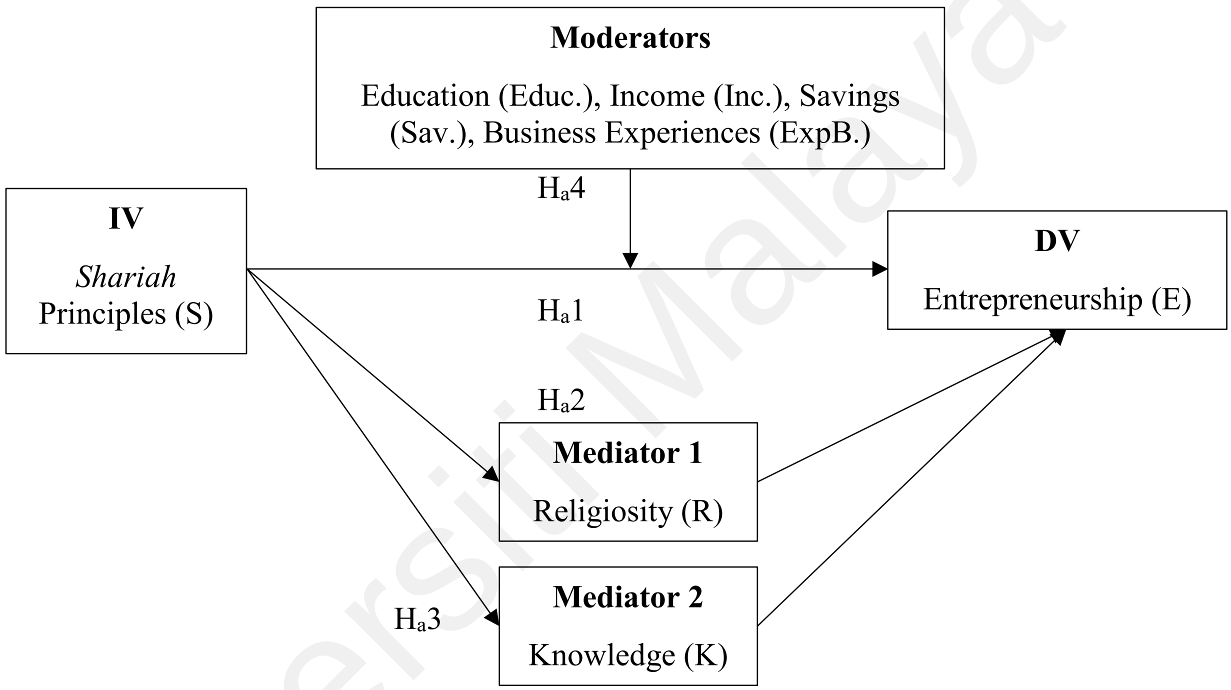


Figure 4.3. Hypotheses Model (Simple)

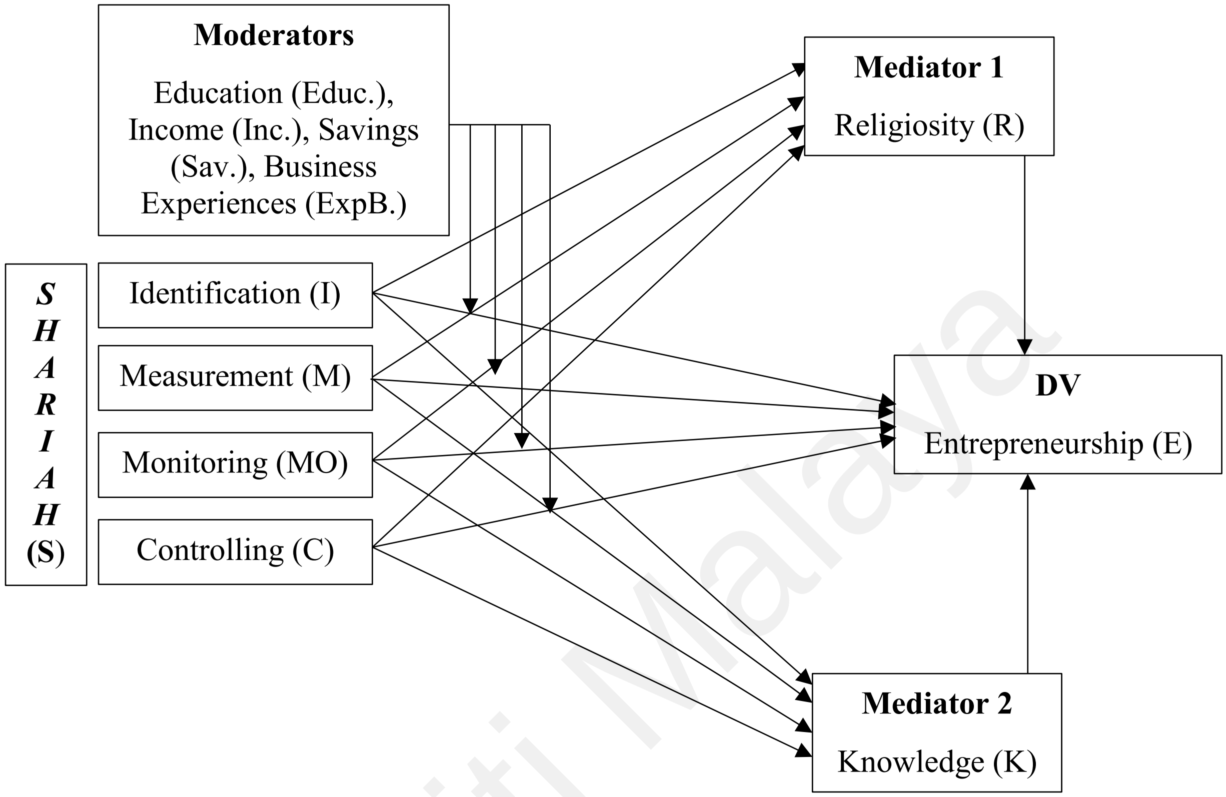


Figure 4.4. Hypotheses Model (Comprehensive)

4.7.1 Research Hypothesis 1

1. *H_a: Shariah principles of mudarabah and musharakah (M&M) financing have a significant positive impact on poor women's entrepreneurship.*

Hypothesis 1. H_a can be divided into four sub-hypotheses, such as

1.H_a (a): Shariah principles of identification have a significant positive impact on poor women's entrepreneurship.

1.H_a (b): Shariah principles of measurement have a significant positive impact on poor women's entrepreneurship.

1.H_a (c): Shariah principles of monitoring have a significant positive impact on poor women's entrepreneurship.

1.H_a (d): Shariah principles of controlling have a significant positive impact on poor women's entrepreneurship.

4.7.2 Research Hypothesis 2

2. *H_a: Religiosity has a significant mediating impact on the relationship between Shariah principles of mudarabah and musharakah (M&M) financing and poor women's entrepreneurship.*

Hypothesis 2. H_a can be divided into four sub-hypotheses, such as

2.H_a (a): Religiosity has a significant mediating impact on the relationship between Shariah principles of identification and poor women's entrepreneurship.

2.H_a (b): Religiosity has a significant mediating impact on the relationship between Shariah principles of measurement and poor women's entrepreneurship.

2.H_a (c): Religiosity has a significant mediating impact on the relationship between Shariah principles of monitoring and poor women's entrepreneurship.

2.H_a (d): Religiosity has a significant mediating impact on the relationship between Shariah principles of controlling and poor women's entrepreneurship.

4.7.3 Research Hypothesis 3

3. *H_a: Knowledge has a significant mediating impact on the relationship between Shariah principles of mudarabah and musharakah (M&M) financing and poor women's entrepreneurship.*

Hypothesis 3. H_a can be divided into four sub-hypotheses, such as

3.H_a (a): Knowledge has a significant mediating impact on the relationship between Shariah principles of identification and poor women's entrepreneurship.

3.H_a (b): Knowledge has a significant mediating impact on the relationship between Shariah principles of measurement and poor women's entrepreneurship.

3.H_a (c): Knowledge has a significant mediating impact on the relationship between Shariah principles of monitoring and poor women's entrepreneurship.

3.H_a (d): Knowledge has a significant mediating impact on the relationship between Shariah principles of controlling and poor women's entrepreneurship.

4.7.4 Research Hypothesis 4

4. *H_a: Education, income, savings, and business experience have significant moderating effects on the relationship between Shariah principles of mudarabah and musharakah (M&M) financing and poor women's entrepreneurship.*

Hypothesis 4. H_a can be divided in four sub-hypotheses, such as:

4. H_a (a): Education has a significant moderating effect on the relationship between Shariah principles of M&M and poor women's entrepreneurship.

4. H_a (b): Income has a significant moderating effect on the relationship between Shariah principles of M&M and poor women's entrepreneurship.

4. H_a (c): Savings has a significant moderating effect on the relationship between Shariah principles of M&M and poor women's entrepreneurship.

4. H_a (d): Business experience has a significant moderating effect on the relationship between Shariah principles of M&M and poor women's entrepreneurship.

Each sub-hypothesis can be divided into another four sub-sub-hypotheses, such as:

i) Sub-sub-Hypotheses of 4. Ha (a)

4. H_a (a). 1: Education has a significant moderating effect on the relationship between Shariah principles of identification and poor women's entrepreneurship.

4. H_a (a). 2: Education has a significant moderating effect on the relationship between Shariah principles of measurement and poor women's entrepreneurship.

4. H_a (a). 3: Education has a significant moderating effect on the relationship between Shariah principles of monitoring and poor women's entrepreneurship.

4. H_a (a). 4: Education has a significant moderating effect on the relationship between Shariah principles of controlling and poor women's entrepreneurship.

ii) Sub-sub-Hypotheses of 4. Ha (b)

4. H_a (b). 1: Income has a significant moderating effect on the relationship between Shariah principles of identification and poor women's entrepreneurship.

4. H_a (b). 2: Income has a significant moderating effect on the relationship between Shariah principles of measurement and poor women's entrepreneurship.

4. H_a (b). 3: Income has a significant moderating effect on the relationship between Shariah principles of monitoring and poor women's entrepreneurship.

4. H_a (b). 4: Income has a significant moderating effect on the relationship between Shariah principles of controlling and poor women's entrepreneurship.

iii) Sub-sub-Hypotheses of 4. Ha (c)

4. H_a (c). 1: Savings has a significant moderating effect on the relationship between Shariah principles of identification and poor women's entrepreneurship.

4. H_a (c). 2: Savings has a significant moderating effect on the relationship between Shariah principles of measurement and poor women's entrepreneurship.

4. H_a (c). 3: Savings has a significant moderating effect on the relationship between Shariah principles of monitoring and poor women's entrepreneurship.

4. H_a (c). 4: Savings has a significant moderating effect on the relationship between Shariah principles of controlling and poor women's entrepreneurship.

iv) Sub-sub-Hypotheses of 4. Ha (d)

4. H_a (d). 1: Business experience has a significant moderating effect on the relationship between Shariah principles of identification and poor women's entrepreneurship.

4. H_a (d). 2: Business experience has a significant moderating effect on the relationship between Shariah principles of measurement and poor women's entrepreneurship.

4. H_a (d). 3: Business experience has a significant moderating effect on the relationship between Shariah principles of monitoring and poor women's entrepreneurship.

4. H_a (d). 4: Business experience has a significant moderating effect on the relationship between Shariah principles of controlling and poor women's entrepreneurship.

4.8 Simple Mediator Model

This section presents the mediating effects in the pictorial and equational forms.

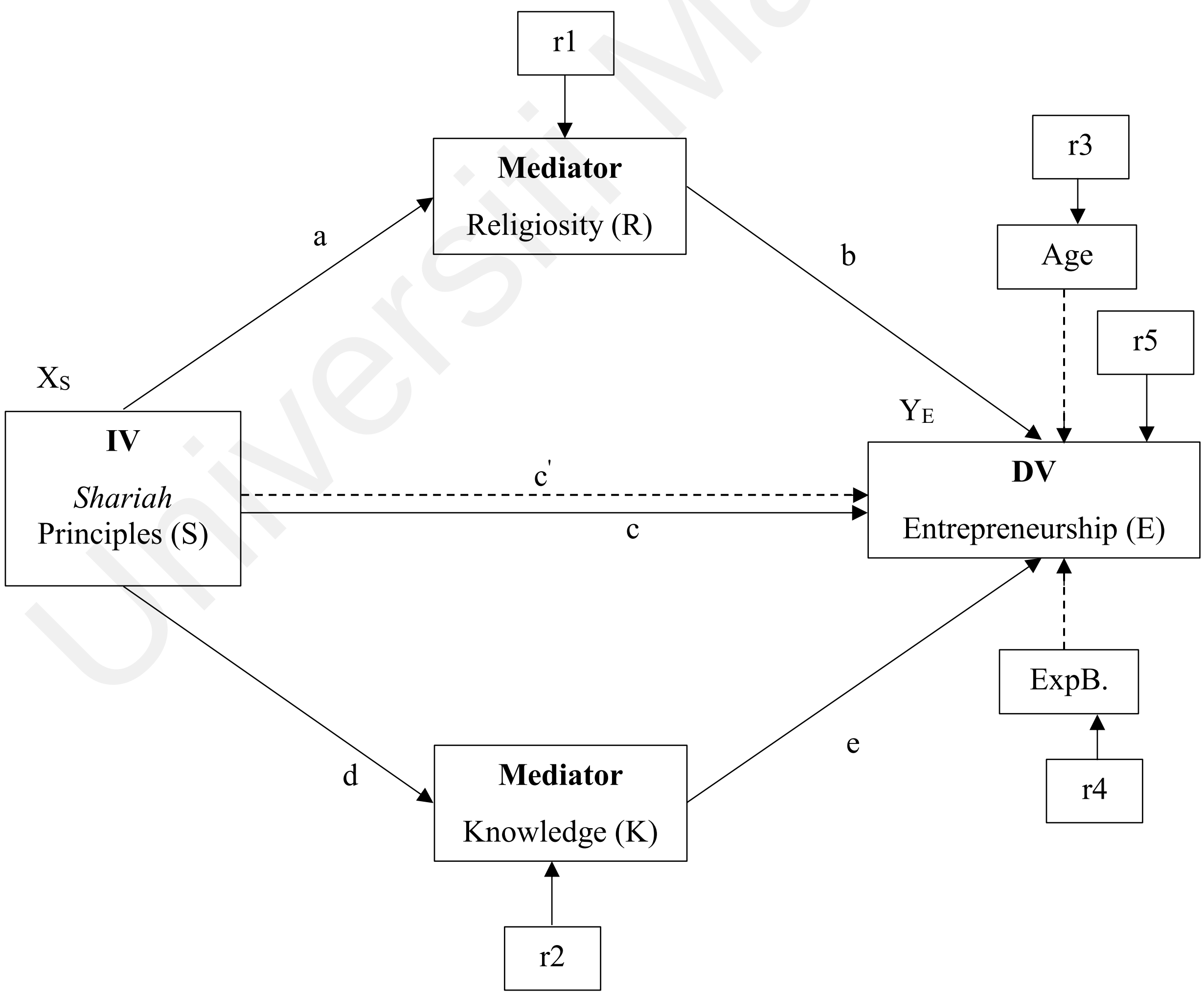


Figure 4.5: Mediation Model

The functions of moderator and mediator need to be assessed from conceptual, strategic and statistical viewpoints (Baron & Kenny, 1986). In chapter (1) (Section 1.4.4, 1.4.5, and Section 1.4.6) mediators and moderators are conceptually defined with the support of the existing theories and empirical studies. The following sections are presenting them from statistical viewpoints.

4.9 Rules of Mediation

According to (Little, Card, Bovaird, Preacher, & Crandall, 2012), if the independent variable (X) is significant to the mediating variable (M) and M is significant to the dependent variable (Y) and if the relationship of X to Y diminishes due to the presence of M, there is a full mediation (Figure 4.6).

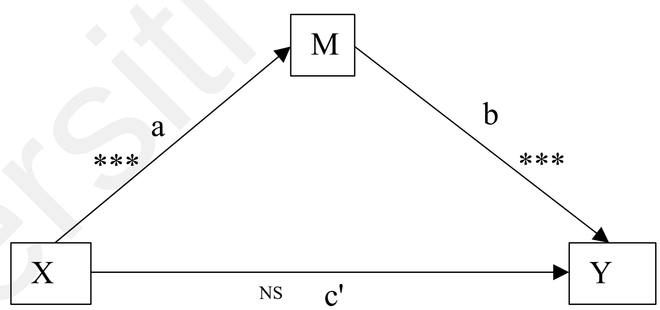


Figure 4.6: Full Mediation

If the direct effect of the mediating variable (M) accounts for a significant amount of variance in the dependent variable (Y) but c′ is found significant or if c′ is significant but diferes in sign from the product ‘a’ and ‘b’ (one is a positive effect while another is a negative effect), there a partial mediation exists (Figure 4.7).

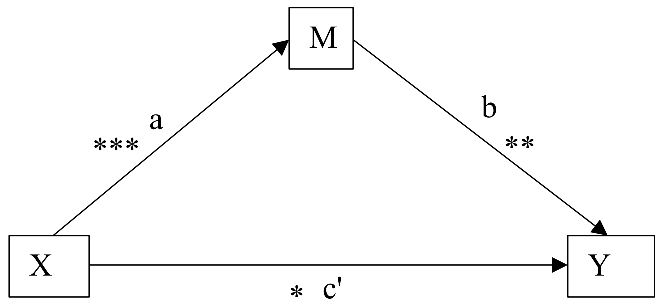


Figure 4.7: Partial Mediation

But if X is significant to Y while being significant to M but if M is not significant to Y, that means there is no mediation (Figure 4.8).

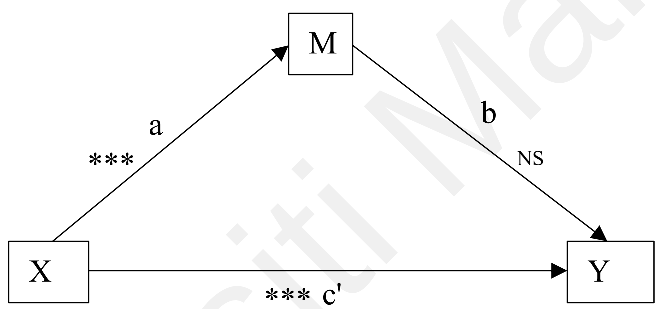


Figure 4.8: No Mediation

If the independent variable (X) is significant to the mediating variable (M) and M is significant to the dependent variable (Y) and if the relationship of X to Y is also significant in the presence of M, there is a mediating impact called inconsistent mediation (Figure 4.9).

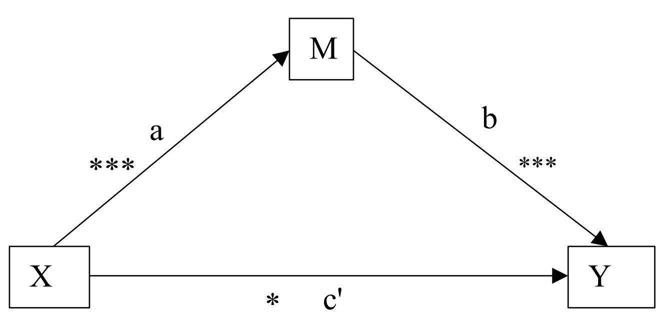


Figure 4.9: Inconsistent Mediation

4.10 Mediation Equations

All the regression equations of mediation are formulated according to David MacKinnon (2012).

i) The ffects of religiosity (R) and knowledge (K)

$$Y_E = i_1 + c'X_S + bM_R + eM_K + r_5$$

ii) The effect of Shariah (S) on religiosity (R)

$$M_R = i_2 + aX_S + r_1$$

iii) The effect of Shariah (S) on knowledge (K)

$$M_{K=} i_3 + dX_S + r_2$$

4.10.1 Total Effect

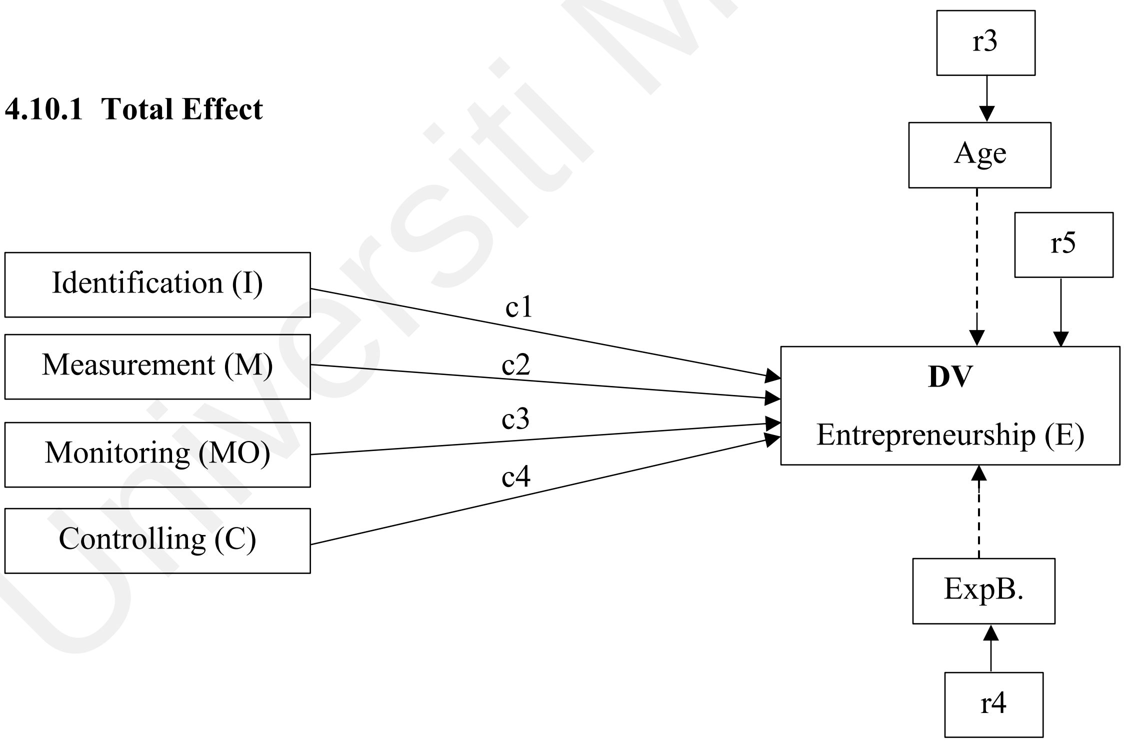


Figure 4.10: Total Effect

i) The efect of identificatin (I) on entrepreneurship (E)

$$Y_E = i_4 + c_1 X_I + r_5$$

ii) The efect of measurement (M) on entrepreneurship (E)

$$Y_E = i_5 + c_2 X_M + r_5$$

iii) The efect of monitoring (MO) on entrepreneurship (E)

$$Y_E = i_6 + c_3 X_{MO} + r_5$$

vi) The efect of identificatin (C) on entrepreneurship (E)

$$Y_E = i_7 + c_4 X_C + r_5$$

4.10.2 Comprehensive Mediation Model

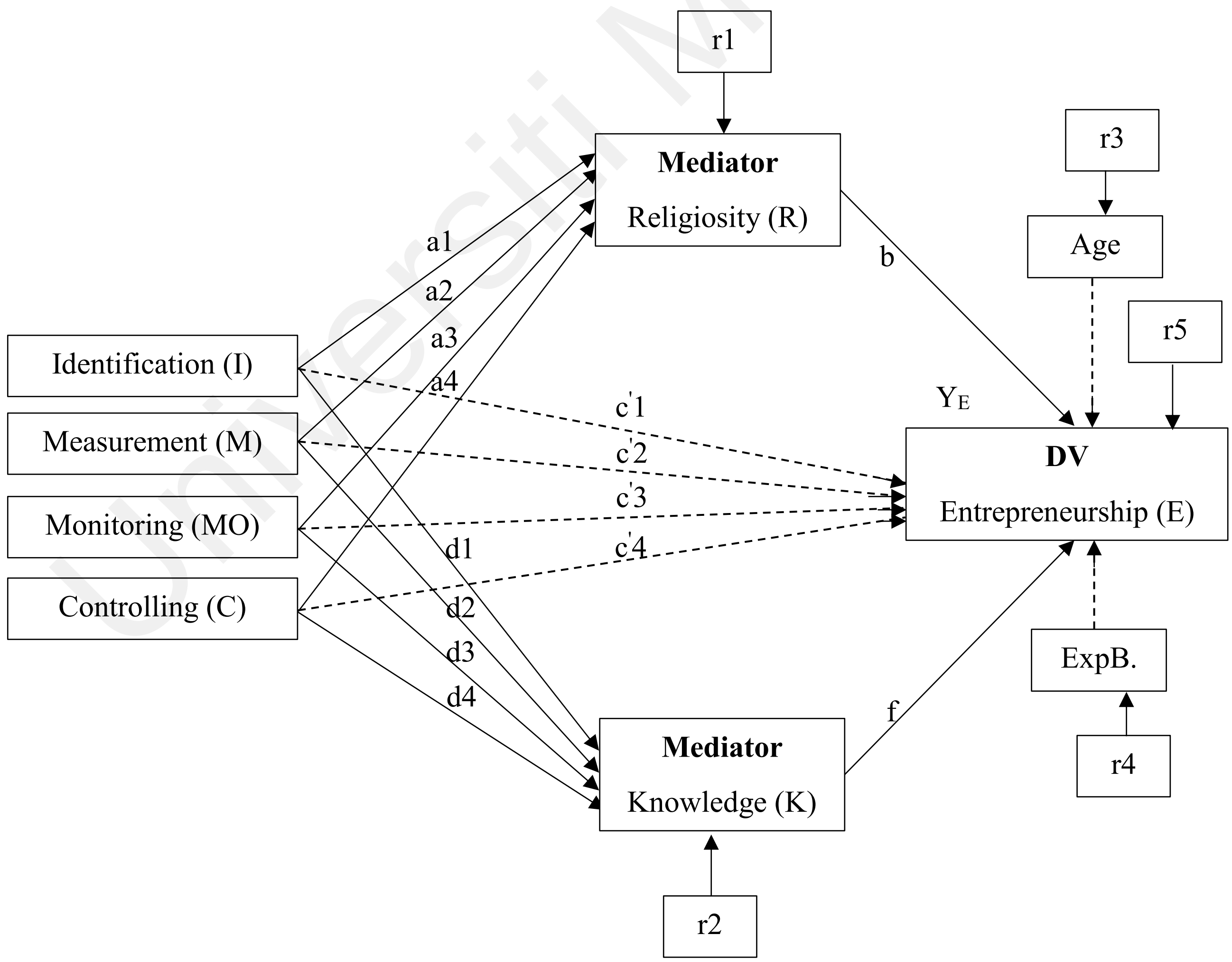


Figure 4.11: Comprehensive Mediation Model

99.4.2 (a): Mediation Model: Religiosity (R) on Identification (I) and Entrepreneurship (E)

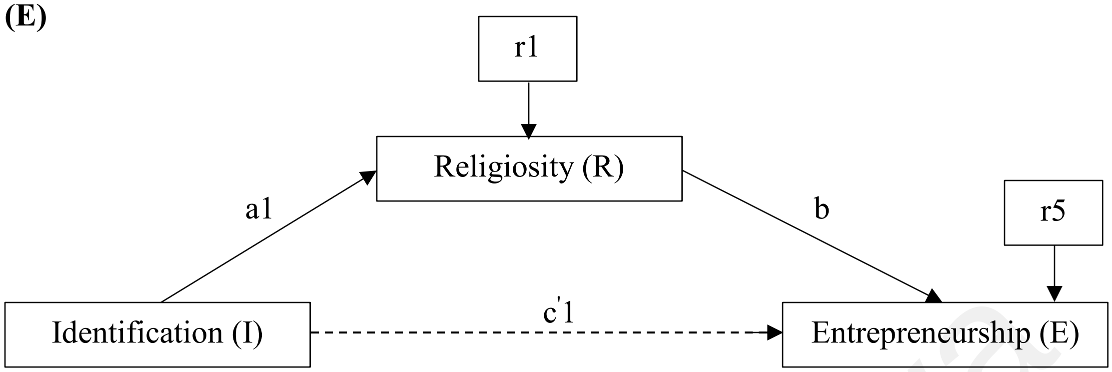


Figure 4.12: R on I&E

i) The effect of indentifiction (I) and religiosisty (R) on entrepreneurship (E)

$$Y_E = i_8 + c'_1 X_I + bM_R + r_5$$

ii) The effect of indentification (I) on religiosity (R)

$$M_R = i_9 + a_1 X_I + r_1$$

9.4.2 (b): Mediation Model: Religiosity (R) on Measurement (M) and Entrepreneurship (E)

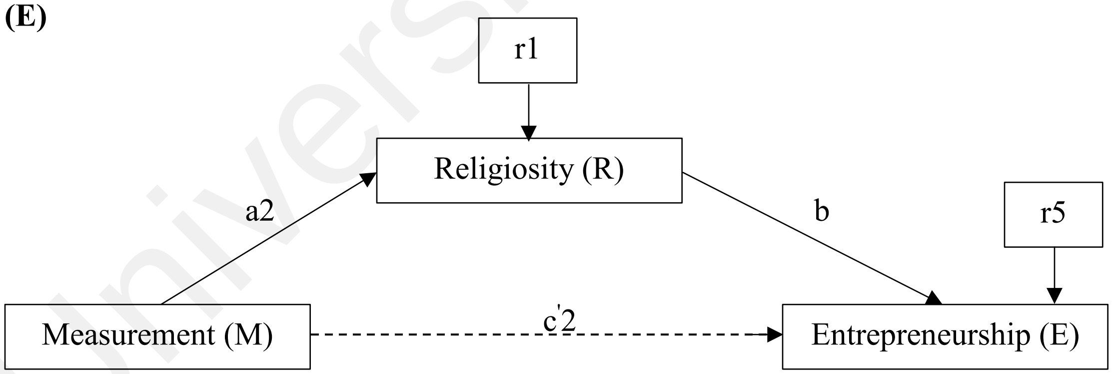


Figure 4.13: R on M&E

i) The effect of measurement (M) and reliogiosity (R) on entreprneurship (E)

$$Y_E = i_{10} + c'_2 X_M + bM_R + r_5$$

ii) The effect of measurement (M) on religiosity (R)

$$M_R = i_{11} + a_2 X_M + r_1$$

9.4.2 (c): Mediation Model: Religiosity (R) on Monitoring (MO) and Entrepreneurship (E)

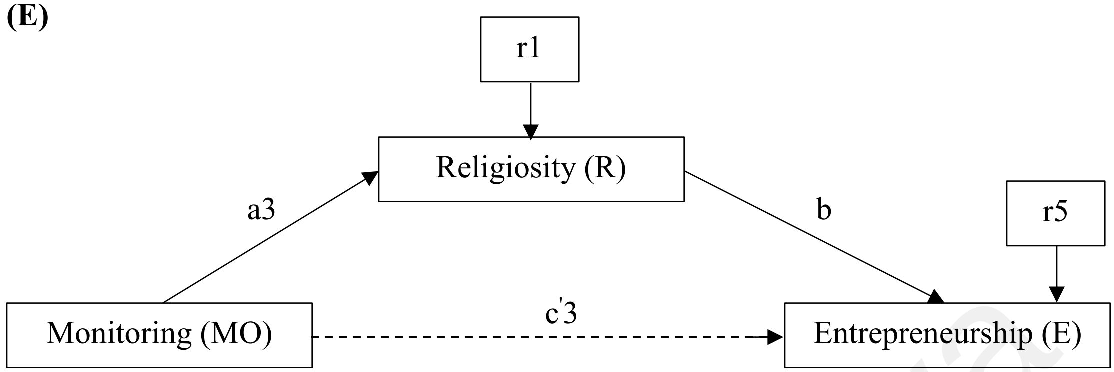


Figure 4.14: R on MO & E

i) The effect of monitoring (MO) and religiosity (R) on entrepreneurship (E)

$$Y_E = i_{12} + c'_3 X_{MO} + bM_R + r_5$$

ii) The effect of monitoring (MO) on religiosity (R)

$$M_R = i_{13} + a_3 X_{MO} + r_1$$

9.4.2 (d): Mediation Model: Religiosity (R) on Ctrolling (C) and Entrepreneurship (E)

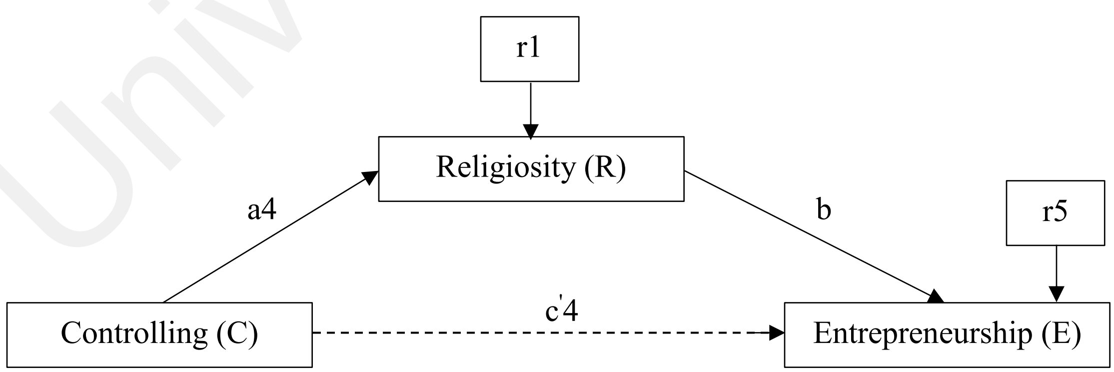


Figure 4.15: R on C & E

i) The effect of conrolling (C) and religiosity (R) on entreprenurship (E)

$$Y_E = i_{14} + c'_4 X_C + bM_R + r_5$$

ii) The effects of controllin (C) on religiosity (R)

$M_R = i_{15} + a_4X_C + r_1$

9.4.2 (e): Mediation Model: Knowledge (K) on Identification (I) and Entrepreneurship (E)

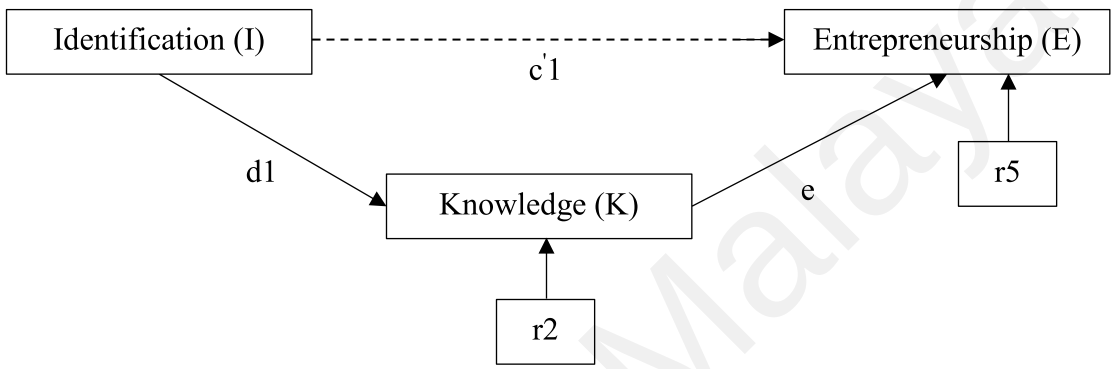


Figure 4.16: K on I & E

i) The effect of indentificatin (I) and knowledge (K) on entrepreneurship (E)

$Y_E = i_{16} + c'_1X_I + eM_k + r_5$

ii) The effect of indnetification (I) on knowledge (K)

$M_K = i_{17} + d_1X_I + r_2$

9.4.2 (f): Mediation Model: Knowledge (K) on Measurement (M) and Entrepreneurship (E)

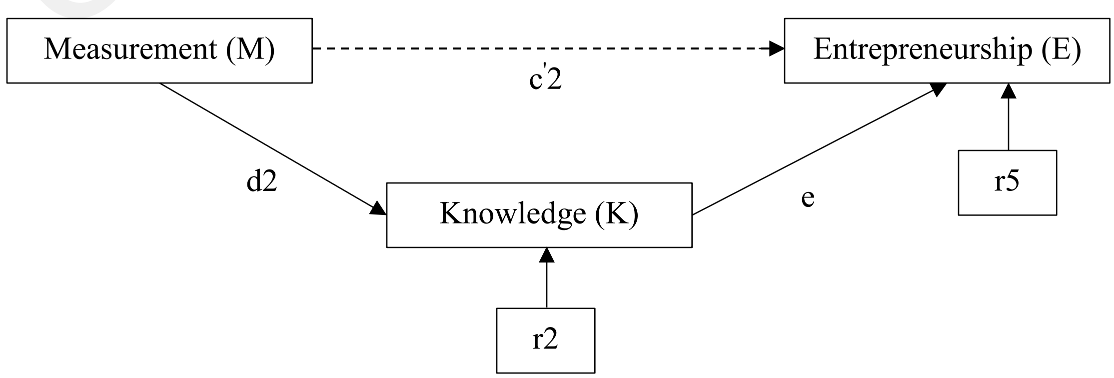


Figure 4.17: K on M & E

i) The effect of measument (M) and knowledge (K) on entreprneurship (E)

$$Y_E = i_{18} + c'_2X_M + eM_k + r_5$$

ii) The effect of measurement (M) on knowledge (K)

$$M_K = i_{19} + d_2X_M + r_2$$

9.4.2 (g): Mediation Model: Knowledge (K) on Monitoring (MO) and Entrepreneurship (E)

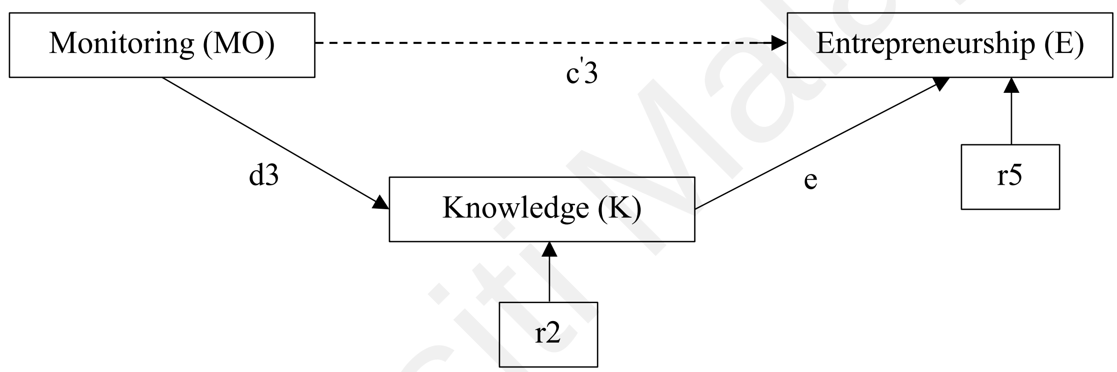


Figure 4.18: K on MO & E

i) The effect of monitorig (MO) and knowledge (K) on entreprenurship (E)

$$Y_E = i_{20} + c'_3X_{MO} + eM_k + r_5$$

ii) The effect of monioring (MO) on knowledge (K)

$$M_K = i_{21} + d_3X_{MO} + r_2$$

9.4.2 (h): Mediation Model: Knowledge (K) on Controlling (C) and Entrepreneurship (E)

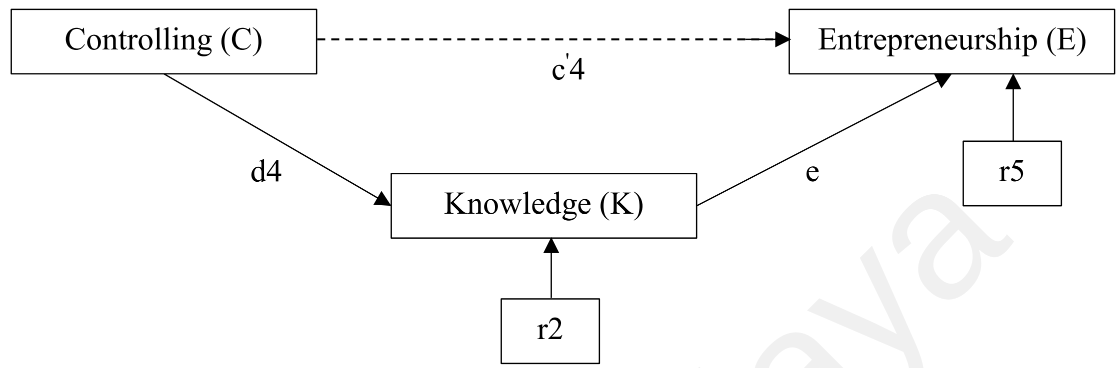


Figure 4.19: K on C & E

i) The effect of controlling (C) and knowledge (K) on entreprneurship (E)

$$Y_E = i_{22} + c'_4 X_C + eM_k + r_5$$

ii) The effect of controlling (C) on knowledge (K)

$$M_K = i_{23} + d_4 X_C + r_2$$

4.11 Moderation Equations

The moderation analysis is mainly carried out to assess the effects of the variables. The main part of moderation is to measure the influence of different values of M' (moderating variable) on the relationship between X (independent variable) and Y (dependent variable). It determines the effect of X on Y for a given value of M'. Generally, moderating effect is indicated by the interaction of X and M in explaining Y (Kenny, 2015b). The most common framework for experimenting the effect of a moderator is the path diagram in both analytic and descriptive procedures (Baron & Kenny, 1986). The paths and the statistical presentations of the moderators (education, income, savings, and business experience) are as below.

4.11.1 Education (Educ.)

Equation (i): Education (Educ.) $\longrightarrow$ Identification (I) $\longrightarrow$ Entrepreneurship (E)

$$Y_E = i_1 + aX_I + bM'_{Educ.} + cX_I\, bM'_{Educ.} + r_5$$

Equation (ii): Education (Educ.) $\longrightarrow$ Measurement (M) $\longrightarrow$ Entrepreneurship (E)

$$Y_E = i_2 + aX_M + bM'_{Educ.} + cX_M\, bM'_{Educ.} + r_5$$

Equation (iii): Education (Educ.) $\longrightarrow$ Monitoring (MO) $\longrightarrow$ Entrepreneurship (E)

$$Y_E = i_3 + aX_{MO} + bM'_{Educ.} + cX_{MO}\, bM'_{Educ.} + r_5$$

Equation iv): Education (Educ.) $\longrightarrow$ Controlling (C) $\longrightarrow$ Entrepreneurship (E)

$$Y_E = i_4 + aX_C + bM'_{Educ.} + cX_C\, bM'_{Educ.} + r_5$$

4.11.2 Income (Inc.)

Equation (v): Income (Inc.) $\longrightarrow$ Identification (I) $\longrightarrow$ Entrepreneurship (E)

$$Y_E = i_5 + aX_I + bM'_{Inc.} + cX_I\, bM'_{Inc.} + r_5$$

Equation (vi): Income (Inc.) $\longrightarrow$ Measurement (M) $\longrightarrow$ Entrepreneurship (E)

$$Y_E = i_6 + aX_M + bM'_{Inc.} + cX_M\, bM'_{Inc.} + r_5$$

Equation (vii): Income (Inc.) $\longrightarrow$ Monitoring (MO) $\longrightarrow$ Entrepreneurship (E)

$$Y_E = i_7 + aX_{MO} + bM'_{Inc.} + cX_{MO}\, bM'_{Inc.} + r_5$$

Equation (viii): Income (Inc.) $\longrightarrow$ Controlling (C) $\longrightarrow$ Entrepreneurship (E)

$$Y_E = i_8 + aX_C + bM'_{Inc.} + cX_C\, bM'_{Inc.} + r_5$$

4.12 Savings (Sav.)

Equation (ix): Savings (Sav.) $\longrightarrow$ Identification (I) $\longrightarrow$ Entrepreneurship (E)

$$Y_E = i_9 + aX_I + bM'_{Sav.} + cX_I\, bM'_{Sav.} + r_5$$

Equation (x): Savings (Sav.) $\longrightarrow$ Measurement (M) $\longrightarrow$ Entrepreneurship (E)

$$Y_E = i_{10} + aX_M + bM'_{Sav.} + cX_M\, bM'_{Sav.} + r_5$$

Equation (xi): Savings (Sav.) $\longrightarrow$ Monitoring (MO) $\longrightarrow$ Entrepreneurship (E)

$$Y_E = i_{11} + aX_{MO} + bM'_{Sav.} + cX_{MO}\, bM'_{Save.} + r_5$$

Equation (xii): Savings (Sav.) $\longrightarrow$ Controlling (C) $\longrightarrow$ Entrepreneurship (E)

$$Y_E = i_{12} + aX_C + bM'_{Sav.} + cX_C\, bM'_{Sav.} + r_5$$

4.12.1 Business Experience (ExpB.)

Equation (xiii): Business Experience (ExpB.) $\longrightarrow$ Identification (I) $\longrightarrow$ Entrepreneurship (E)

$$Y_E = i_{13} + aX_I + bM'_{ExpB.} + cX_I\, bM'_{ExpB.} + r_5$$

Equation (xiv): Business Experience (ExpB.) $\longrightarrow$ Measurement (M) $\longrightarrow$ Entrepreneurship (E)

$$Y_E = i_{14} + aX_M + bM'_{ExpB.} + cX_M\, bM'_{ExpB.} + r_5$$

Equation (xv): Business Experience (ExpB.) $\longrightarrow$ Monitoring(MO) $\longrightarrow$ Entrepreneurship (E)

$$Y_E = i_{15} + aX_{MO} + bM'_{ExpB.} + cX_{MO}\, bM'_{ExpB.} + r_5$$

Equation (xvi): Business Experience (ExpB.) $\longrightarrow$ Controlling (C) $\longrightarrow$ Entrepreneurship (E)

$$Y_E = i_{16} + aX_C + bM'_{ExpB.} + cX_C\, bM'_{ExpB.} + r_5$$

4.13 The Pilot Test

A pilot test is generally conducted as a pre-test for the survey. It is one of the most critical aspects of a successful survey operation especially, for obtaining good data. The objectives of a pilot test are to point out the potential problems and to address them prior to conduct the production survey. Thus, a pilot test can help avoid non-sampling measurement errors that are usually made by the interviewers, respondents or the questionnaire. A pilot test also surfaces information about the comprehensiveness of the questions, sensitivity, difficulty and nonresponse bias. However, a pilot test should replicate the same procedure of the production survey considering 50-100 samples or cases. These samples can be the non-random convenient sample. But the sample should be similar in characteristics to the production survey (Lavrakas, 2008). A pilot test generally follows the steps as 1) conducting informal observation and note taking, 2) determining the duration, 3) selecting respondents and identifying the main barriers, 4) identifying survey location, 5) developing the first draft of data sheet, 6) analysing and assessing the data, 7) revising the data, 8) retesting, and 9) finalizing upon modification (Bailey & Burch, 2002).

A pilot test for this study was conducted in a centre in Gombak in the mid of 2014. Four issues were taken into consideration in the pilot test, those are: 1) sample size, 2) sample composition, 3) initial item's reliability, and 4) defining scale (Netemeyer, 2003). A total of 50 female members of Amanah Ikhtiar Malaysia (AIM) had participated in that survey. All the respondents were engaged with business as their primary or secondary occupation[33]. The findings of the pilot-test study suggested to rearranging the questionnaire. Some respondents exhibited reluctance to reveal their sources of income. Therefore, the 'source of income' section was deleted from the questionnaire. Initially, different types of scaling such as '*Likert*-scale' and 'score' and 'multiple choice questions' were used in the questionnaire. This method seemed to create complication in data analyses. Then, similar scaling (*Likert*-scale) was introduced for measuring all the structured items. Some items that seemed ambiguous and slightly sensitive[34] to the respondents were removed from the questionnaire. Furthermore, lingual simplicity and clarity in questioning were ensured so that respondents can easily understand the real meaning of the questions. At the initial stage of checking validity and reliability of data, the values of Cronbach's Alpha (α) found lower than the minimum cut-off point and the data were highly *skewed* as well as *kurtosed*. Besides, the result of statistical analysis poses the multicollinearity problem. All the above issues suggested the questionnaire had to be rigorously revised and reformed while the sample size

[33] To become a member of AIM, having a business is a precondition.
[34] Because some of the respondents reported that they had felt discomfort to answer some of the questions

should be increased. Upon necessary modification, the questionnaire was finalised with the suggestions of the academic supervisor and the experts.

4.14 Population and Sampling

Population refers to a group of people who are the focus of a study and to who, the results are intended to generalize. In defining the population, a researcher should pay keen attention to the appropriacy of the sampling frame in order to avoid exclusion bias (Boslaugh, 2008). For this study, Muslim entrepreneurial poor women who have experience with the microfinance were chosen as the population. To reach this group of people, female Muslim members (*sahabat*) of Amanah Ikhtiar Malaysia (AIM) were chosen.

4.14.1 Reason for Choosing AIM

The M&M based proposed financing model of this study is built on the existing microfinance platform. Therefore, this study seeks for the respondents who have experience with the microfinance. In Malaysia, there are five microfinance institutions, such as 1) *Tabung Ekonomi Kumpulan Usahawan National* (National Entrepreneurs Economic Group Fund, TEKUN), 2) Agrobank, 3) *Lembaga Kemajuan Ikan* Malaysia (Malaysian Fisheries Development Board, LKIM), 4) *Yayasan Basmi Kemiskinan* (Poverty Eradication Foundation, YBK) and 5) *Amanah Ikhtiar Malaysia* (AIM) (Abdullah Al Mamun et al., 2012). The members of Amanah Ikhtiar Malaysia (AIM) was chosen as population for this study because AIM is the only microfinance institution proving financial services to the rural poor who are basically running the small business for their livelihood. Most of the borrowers of AIM are women (AIM, 2017; Saad, 2012a). So, the rationales of choosing AIM are: 1) easy to reach the right respondents; 2) respondents have knowledge on microfinance; 3) AIM has the nationwide operation; and 4) the members of AIM are somehow engaged with the business.

4.14.2 Sample Size

The sample size for this study was defined considering three propositions: 1) for the factor analysis, the recommended sample size is 300 respondents. 2) In order to obtain the generalizable result from structural equation modelling (SEM) the suggested size of the sample is 200 (Kenny, 2015a). Another popular sample size defining criterion introduced by Krejcie Morgan (1970) as a sample size table suggests the number of samples for this study should be 379 (according to the size of the population [35]).

Kerjcie & Morgan's sampling equation:

$S = X^2 NP (1 - P) \div d^2 (N - 1) + X^2 P (1 - P)$

S = Size of the Sample

X^2 = The value of Chi-square (in the table) for 1 degree of freedom at 3.841 confidence level

N = Size of the population

P = The proportion of the Population

d = The degree of accuracy that is expressed as a proportion (.05) (Krejcie & Morgan, 1970)

[35] The number of borrowers of Amanah Ikhtiar Malaysia (AIM) in Selangor is 26,647 (Roslan-Abas, 2016)

In Selangor, the total number of borrowers of Amanah Ikhtiar Malaysia (AIM) is 26,647[36] while in Selayang it is 1,980; in Gombak 1,839; and in Cheras 1,755 (Roslan, 2016). According to the number of the borrowers in Selangor, the appropriate size is about 379 respondents. So, this study could fulfil about 87% of Krejcie Morgan's sampling frame by reaching (n) 330 successful respondents but this number of samples fulfils the criteria suggested by David A. Canny (2015).

4.15 Survey Location and Data Collection

For data collection, 10 centres under Gomak, Selayang, and Cheras branches of *Amanah Ikhtiar Malaysia* (AIM) were surveyed by using a structured-questionnaire. It is noteworthy, all the locations for data collection were selected by the authority of AIM. Questionnaires were distributed to the selected centres in the presence of the loan officers. Respondents were requested to return the questionnaire on a later date to the respective officers. Once the questionnaires were submitted to the respective loan officer this researcher collected the questionnaires from the respective branches. However, data collection was continued for about six months (last quarter of 2014 to the first quarter of 2015). As a result, 400 questionnaires were collected (excluding the Pilot Test) from the respondents. Upon a careful visual inspection, 352 questionnaires were primarily selected for the statistical analysis. But in the process of data screening, another 22 questionnaires were dropped out because of lacking consistency and validity. At the end, 330 questionnaires were accepted for the final statistical analysis.

[36] Selangor and Kuala Lumpur are combined

4.16 Instrumentation, Validity and Reliability

Instrumentation refers to the tools or means by which data are collected and measured (Salkind, 2010a). In this regard, four instruments were used in this study such as 1) questionnaire, 2) SPSS (version 20) software, 3) AMOS (version 21) software and 4) Microsoft Excel 2016 software. The items in the questionnaire were quantified by using a seven-point *Likert*-scale, ranging from 1 to 7 scores that refer to: Strongly Disagree =1, Disagree= 2, Tend to Disagree =3, Neutral = 4, Tend to Agree = 5, Agree = 6, and Strongly Agree = 7 (Sapsford, 2007). Exploratory factor analysis and reliability analysis were carried out to determine the dimensionality of the data. Reliability of the scale was ensured based on the significant level of *Cronbach's coefficient alpha*[37] (Ellahi & Bokhari, 2013; Pallant, 2005). The external validity or representativeness of the outcomes was defined by combining the statistical and theoretical inferences (Thietart & Wauchope, 2001). At the end, the questionnaire was further justified by taking experts'[38] opinion.

4.17 Questionnaire Designing Steps

The survey questionnaire for this study was designed by following three steps. At first, a long narrative questionnaire was developed based on the existing theories and literature. Shariah principles ware chosen from the published Shariah parameters prescribed by Bank Negara and Malaysia (BNM) and prominent Shariah scholars. Since there is no specific Shariah regulatory developed for the Islamic microfinance paradigm in Malaysia select Shariah parameters were keep aligned with the microfinance setup based on this

[37] Notably, a Cronbach's alpha coefficient closer to 1.0 shows greater internal consistency of the items in the scale. A common rule of thumb for Cronbach's alpha is ''>0.9 Excellent, > 0.8 Good, > 0.7 Acceptable, > 0.6 Questionable, > 0.5 Poor, and <0.5 Unacceptable" (George & Mallery, 2016).

[38] Associate Professor Dr. Rubi binti Ahmad, Professor Dr. Fumitaka Furuoka, and Dr. Abdul Hamid bin Abdullah had offered their insightful opinions to improve the questionnaire

researcher's discretion. Besides, the questionings in the questionnaire were formulated in a possible simple manner so that ordinary people could easily understand. A pilot test study was conducted at the second step. Considering the outcomes of the statistical analyses and the opinion of the respondents the questionnaire was modified. The validity, reliability and internal consistency of the questionnaire were examined by conducting a validity test namely, Cronbach Alpha (α). In this process, some items were newly installed while some were reduced. In the third stage, experts' opinions were taken to finalize the questionnaire (Brace, 2008). Then, the questionnaire was operationalised to carry out a survey on the selected population.

4.18 The Questionnaire

A survey questionnaire was developed (Appendix M) based on the previous literature. Specific Shariah parameters of *mudarabah* and *musharakah* (M&M) financing for identification, measurement, monitoring and controlling were chosen from the published Shariah parameters prescribed by Bank Negara Malaysia (BNM) in 2007, 2010 and 2012. This questionnaire was reconstructed and revised after conducting a pilot test on 50 respondents in a centre under Gombak branch of Amanah Ikhtiar Malaysia (AIM). Based on the primary findings, instrumental clarity, comprehensiveness of the wording and validity of the underlying factors were examined. Findings from the pilot test were taken as the basic lesson for constructing the final questionnaire (Ellahi & Bokhari, 2013). The final questionnaire was designed with three different sections. Section (1) was created to obtain the information about the respondents' demography, income, savings and business experience; section (2) to measure the level of the enterprising skills of the respondents by using a scorecard. This card was designed with four basic questions related to their business experiences or expertise. Section (3a) was designed to assess respondents' willingness to accept the Shariah principles of *mudarabah* and *musharakah* (M&M). Section (3b), (3c), and (3d) were constructed to assess the level of respondents' religiosity, knowledge and entrepreneurship respectively. The questionnaire was translated from English to *Bahasa* Malaysia so that respondents can easily understand the contents.

4.18.1 Section 1: Socio-Demographic Information

At first, this section asks the name of the respondent for ensuring authentication. Though it was an optional term. Then, it looks for the information about the current loan-scheme, age, ethnicity, marital status, education and occupation.

4.18.2 Section 2: Four Basic Questions

This section comprises four specific questions for stratification by defining the entrepreneurial poor. Notably, Amanah Ikhtiar Malaysia (AIM) frequently asks these questions to every new member during her first loan-interview session.[39]

1. What is your main occupation?
2. Is your business profitable?
3. Do you have any previous experience of doing business?
4. Did you undergo any training to gain enterprising skills?

[39] The questions were noted while meeting with the research and development officer, Mr Roslan Abas, Pegawai, Unit Penyelidikan dan Inovasi (UPI), Amanah Ikhtiar Malaysia (AIM)

4.18.3 Section 3 (a): *Shariah* Principles

Table 4.1: Questionnaire Designing and Itemization

This section of the questionnaire has been created backed by the existing literature and theories and the selected *shariah* parameters of Bank Negara Malaysia (BNM) that are discussed in Chapter 2, (Section 2.13, Section 2.14) *mudarabah* and musharakah (M&M) and Chapter 3 (Section 3.4.6)

NO	Items	Observed Variables
(For Identification)		
To what extent do you agree or disagree with the statement as mentioned below?		
1	Keeping trust is very important in borrowing money from a microfinance institution.	Trustworthiness Source: (Dezső & Loewenstein, 2012; ElGindi et al., 2009)
2	Borrower should maintain transparency to the financer in all kinds of business dealings.	Transparency Source: (Sanep Ahmad, 2016)
3	Good moral is important to get borrowings from a microfinance institution.	Good Morals Source: (ElGindi et al., 2009)
4	A borrower should maintain her religious life.	Religiosity (Rulindo & Mardhatillah, 2011)
5	Borrowers should maintain good ethics.	Good Ethics (Dezső & Loewenstein, 2012)
6	Borrower should have good social reputation.	Good Reputation
7	Borrower should have good credit history for getting further borrowings.	Good Credit History (Dezső & Loewenstein, 2012)
8	Borrower should pay back the loan on time.	Diligently Repayment (Dezső & Loewenstein, 2012)
9	Borrower should follow all the rules and regulations of the microfinance institution (MFI).	Rules Orientation (BNM, 2007, 2012)
(For Measurement)		
I'm willing to accept a business proposal under the terms and conditions as below		
10	If the microfinance institution (MFI) provides full capital and I am responsible for managing the business.	Managing Business (BNM, 2007, 2012)

11	If the profit is distributed on an agreed ratio between me and the MFI.	Profit Sharing (BNM, 2007,2010, 2012)
12	If the microfinance institution provides a portion of the capital and we (MFI and me) are responsible for managing the business.	Capital Sharing and Managing (BNM, 2007,2010)
13	If loss is measured according to the share of capital.	Loss Sharing (BNM, 2007, 2010)
14	If the capital-participation is “financial-capital” or “goods”.	Goods or Financial Capital (BNM, 2007, 2010, 2012)
15	If I can pay back the price of total capital to the financer I can own the entire business.	Having Ownership (BNM, 2007,2010)
16	If the share amount of the capital is on agreed basis.	Agreed Amount of Capital (BNM, 2007, 2010)
17	If we can revise the capital and profit sharing on mutual agreement.	Recapitalization (BNM, 2007, 2010)
18	If the business encounters any loss for any misconduct total liability must be carried by the responsible partner.	Sharing Loss as Penalty (BNM, 2007)
19	If upon termination of the joint business agreement, the total asset will be turned into cash and be distributed among the partners.	Liquidation upon Termination (BNM, 2007, 2010, 2012)
20	If any loss or gain comes from the share transfer, it must be distributed to the previous partner.	Loss or Gain to the Ex-Partner in Share Transfer (BNM, 2007, 2010, 2012)
21	If any loss occurred upon termination of partnership, the loss should be carried by the partners according to the proportion of their capital.	Proportionally Loss Sharing upon Termination (BNM, 2010)
22	If any loss of capital in the course of venture is recognized as capital impairment.	Loss of Capital Means Capital Impairment (BNM, 2010)
(For Monitoring)		
23	If the microfinance institution asks to disclose the market information.	Revealing Market Information (BNM, 2007, 2010, 2012)
24	If the microfinance institution asks to disclose the business information.	Revealing Business Information (BNM, 2007, 2010, 2012)
25	If the microfinance institution wants to join in the management.	Joint Management (BNM, 2010)

26	If the microfinance institution wants it, I should provide true financial report.	Revealing Financial Report (BNM, 2007)
27	If the microfinance institution audits my business from time to time.	Regular Audit (BNM, 2007)
28	If the microfinance institution asks to reveal the production process.	Revealing Production Process (BNM, 2007)
29	If the microfinance institution asks to reveal production cost.	Revealing Production Cost (BNM, 2007)
30	If the microfinance institution asks to reveal the cost for marketing and promotion.	Revealing Marketing and Promotional Cost (BNM, 2007)
(For Controlling)		
31	If microfinance institution becomes a partner of my business I will allow it to take business decision.	Joint Decision Making (BNM, 2010)
32	If microfinance institution employs a manager to manage the business, I will accept.	Management Employed by the MFI (BNM, 2010)
33	I agree if the business is managed by a third party.	Third-Party Management (BNM, 2010)
34	Business contract can be terminated at any time upon mutual agreement.	Business Termination upon Mutual Agreement (BNM, 2010)
35	If the business encounters immense loss, we may terminate the partnership contract.	Business Termination if Loss (BNM, 2010)
36	Whenever necessary I shall amend the business policy mutually with the microfinance institution.	Mutually Business Policy Amendment (BNM, 2010)
37	If the agreed time-period of business is over microfinance institution (MFI) can terminate the business.	Business Termination if the Contractual Period is Over (BNM, 2010)
38	If the business becomes complicated, MFI can terminate the business.	Business Termination if it is Complicated (BNM, 2010)
39	If a considerable amount of capital gets impaired MFI can terminate the business.	Business Termination if Capital Impaired (BNM, 2010)

40	If the borrower dies MFI can terminate the business.	Business Termination upon Borrower's Demise (BNM, 2010)

4.18.4 Section 3 (b): Religiosity

This section of the questionnaire has been created backed by the existing literature and theories that are discussed in Chapter 2, Section: Religiosity (2.18).		
	Items	Observed Variables
41	I believe in the lesson of *Kalima Shahadah.*	Believing *Shahadah* (Krauss et al., 2007)
42	I say prayer 5 times every day.	Mandatory Prayer (Krauss et al., 2007)
43	I fast in the month of Ramadan.	Mandatory Fasting (Krauss et al.,2007)
44	I wish to perform *Haj.*	Aspiration/ performing Haj (Krauss et al.,2007)
45	I will pay *zakat* when I have enough wealth.	Paying *zakat* (Krauss et al.,2007)
46	I give *sadakah* whenever I get opportunity.	Paying *Sadakah* (Krauss et al.,2007)
47	I recite or listen to the Holy *Qur'an*.	Reciting *Qur'an* (Krauss et al.,2007)
48	I join religious meetings.	Joining Religious Meeting (Krauss et al.,2007)
49	I always speak the truth.	Truthfulness (Krauss et al.,2007)
50	Religious beliefs influence all my dealings with everyone.	Religious Behaviour (Krauss et al.,2007)
51	I always perform my duty as a Muslim to Allah (SWT)	(Krauss et al.,2007)
52	Allah (SWT) shapes my life	(Krauss et al.,2007)
53	I have found it essential to have faith	(Krauss et al.,2007)
54	Religion drives me to the truth	(Krauss et al.,2007)

55	Religion is important to my life.	(Krauss et al.,2007)
56	I am afraid of committing sin.	(Krauss et al.,2007)

4.18.5 Section 3 (c): Knowledge

This section of the questionnaire has been created backed by the existing literature and theories that are discussed in Chapter 2 (Sections: 2.13 & 2.14)		
	Items	Observed Variables
57	I am familiar with an Islamic microfinance scheme named *Mudarabah.*	Knowing the Name *of Mudarabah*
58	I am familiar with an Islamic microfinance scheme that shares profit and bears risk.	Familiar with Profit and Loss Sharing
59	I am familiar with an Islamic microfinance scheme that does not demand collateral for giving loan.	No Collateral
60	I am familiar with an Islamic microfinance scheme that is appropriate for doing business only.	Materiality of M&M
61	I am familiar with an Islamic microfinance scheme that allows me only to manage a business.	Mudarabah means Managing Business
62	I am familiar with an Islamic microfinance scheme that shares a part of profit only.	*Mudarabah:* Sharing Profit
63	I am familiar with an Islamic microfinance scheme that bears total loss.	*Mudarabah*: Financer Bears the Loss
64	I am familiar with an Islamic microfinancing scheme named *Musharakah.*	Familiar with the Term *Musharakah*
65	I am familiar with an Islamic microfinance scheme where I need to share both profit and loss.	*Musharakah:* Profit and Loss Sharing
66	I am familiar with an Islamic microfinance scheme where the financer also participates in the management.	Financer as in Management
67	I'm familiar with a microfinancing scheme where I need to share loss according to share of my capital	Loss and capital ration
68	I am familiar with an Islamic microfinance scheme where I must compensate for any damage or loss of the business, according to the ratio of my capital-participation.	Compensation for Damage
69	Upon full payment of the capital I can solely own the business.	Having Full Ownership

70	Islamic microfinance is a *Shariah* compliant finance.	Shariah Complaint
71	Islamic finance was practised by *Rasulullah* (PBUH)	Origin of M&M
72	Islamic microfinance is a profit sharing and risk bearing system.	Profit and Loss Sharing
73	Interest/ *riba* means paying a predefined fixed return.	Knowledge on *Riba*
74	Interest/ *riba* is prohibited by *Shariah* law.	Prohibition of *Riba*
75	Interest/ *riba* is sinful.	Riba is Sinful
76	Islamic microfinance does not permit riba/ interest.	IsMF is *riba* Free
77	Interest cannot be given to anybody.	Prohibition of Interest
78*	Islamic schemes of Amanah Ikhtiar Malaysia (AIM) are more affordable than other schemes.	Affordable System
79	Involvement with the Islamic microfinance can help me to lead a religious life.	Religion and Source of Capital
80	Involvement with the Islamic microfinance can assure me *halal* income.	*Halal* concern

4.18.6 Section 3 (d): Entrepreneurship

This section of the questionnaire has been created backed by the existing literature and theories that are discussed in Chapter 2 (Section: 2.19) section 'Entrepreneurship'

	Items	Observed Variables
81	I am a creative thinker.	Creative Thinker (Ruiz et al., 2016)
82	I am an enthusiastic worker.	Enthusiastic (Ruiz et al., 2016)
83	I like to identify things that need to be done.	Proactive (Martin & Javalgi, 2016; Santos et al., 2012)
84	I like to think of new ways of doing my works.	Innovative (Martin & Javalgi, 2016; Santos et al., 2012)
85	I am a positive thinker.	Positive Thinker (Ruiz et al., 2016)
86	I can adapt myself with changes.	Adaption to the Change/ Risk Taking (Martin & Javalgi, 2016; Ruiz et al., 2016; Santos et al., 2012)
87	I can organize according to the needs.	Organizing (Martin & Javalgi, 2016; Ruiz et al., 2016; Santos et al., 2012)
88	I can make proper decision.	Decision Making (Santos et al., 2012)
89	I am good at solving problems.	Problem Solving (Santos et al., 2012)
90	I like to work out what needs to be done.	Diligent

91	I enjoy presenting in public and can make interesting presentations.	Presentation Skill (Santos et al., 2012
92	I can negotiate with others.	Negotiation Skill (Martin & Javalgi, 2016; Ruiz et al., 2016; Santos et al., 2012)
93	I enjoy working in a group.	Team Work (Ruiz et al., 2016, ; Santos et al., 2012)
94	I am good at assessing ideas.	Idea Assessment (Martin & Javalgi, 2016; Ruiz et al., 2016; Santos et al., 2012)
95	I know how to evaluate the results of my work.	Evaluation (Martin & Javalgi, 2016; Ruiz et al., 2016; Santos et al., 2012)
96	I can calculate cost and budget for my products.	Cost Budgeting (Martin & Javalgi, 2016; Ruiz et al., 2016; Santos et al., 2012)
97	I can make financial plan for my business.	Financial Planning (Martin & Javalgi, 2016; Ruiz et al., 2016; Santos et al., 2012)
98	I like to experiment with my new business ideas.	Experimentation (Santos et al., 2012)

4.19 Data Analysis

Data were analysed by means of descriptive and inferential statistics. Respondents' demographic information was analysed by using the descriptive statistics. Besides, the central tendency of data was assessed by mean and median while the shape or spread of the distribution was presented by using the box plots. The dispersion was given as the min, max, standard deviation and variance (Cramer, 2004a). On the other hand, the inferential statistics was applied to interpret the relationship between the explanatory variables (Cramer, 2004a). In this regard, exploratory factor analysis (EFA) was carried out to reduce the less significant items based on the pattern matrix table (Buchanan, Valentine, & Schulenberg, 2014). Then, confirmatory factor analysis (CFA) was conducted to examine the presence of the common method bias as well as assess the convergent validity and discriminant validity (Conway, Fu, Monks, Alfes, & Bailey, 2015). A structural equation model (SEM) was built upon multivariate assumptions, linearity and multicollinearity tests. Based on the outputs of SEM the causal effects of the explanatory variables were explained.

4.20 Reporting Fit Indices

The fitness of a model with the data indicates the solution of a set of equations (Hox & Bechger, 1998). However, to produce a comprehensive report as well as explain the different aspects of the model-fit, this study followed the ‘multiple indicators multiple independent causes (MIMIC)’ model of structural equation modelling (SEM) (Ardasheva, 2016). In this regard, four specific fit indices were followed, such as 1) absolute fit index (chi-square test), 2) goodness of fit index (GFI, AGFI) root mean square residual (RMR), root mean square error of approximation (RMSEA), 3) incremental fit index (NFI, TLI and CFI), and 4) parsimonious fit index (PFI) (Hooper, Coughlan, & Mullen, 2008). A brief description of the fit indices is presented below.

4.20.1 Chi-Squire Goodness of Fit (CHIN)

Chi-square test is also called as the discrepancy function, Chi-square goodness of fit, or likelihood ratio Chi-square. Notably, the Chi-square in AMOS is displayed as CMIN (Moss, 2016). This test explains the fitness of a model by assessing the magnitude of the discrepancy between the sample and the fitted covariance matrices (Hu & Bentler, 1999). A non-significant Chi-square indicates a good model fit (Barrett, 2007). But Chi-square test can be affected by the sample size and the size of the correlations between the variables in the model. The higher the correlation the poorer the fit. On the other hand, this test assumes multivariate normality (Hooper et al., 2008). So, when the data are not normally distributed, especially in the distribution with the kurtosis Chi-square test demonstrates poor fit (Kenny, 2015a; Moss, 2016). Furthermore, a complex model with many variables can create discrepancies in the outcomes. Besides, the sample size influences the model. The large sample size sometimes negatively affects the model and leads it to be rejected (Moss, 2016). Considering all the sensitivities of Chi-square test, some other fit indexes, such as root mean square error of approximation (RMSEA), and root mean square residual (RMR) were used to explain the data (Schermelleh, Moosbrugger, & Müller, 2003).

4.20.2 Goodness-of-Fit (GFI) Statistic

The static range of GFI is 0 to 1. The cut-off point of .90 is widely accepted. But the higher value of this fit index indicates the better fit of a model. In the case of small sample size with low factor loading, the suggested score of GFI is .95[40] (Shevlin & Miles, 1998).

4.20.3 Adjusted Goodness-of-Fit (AGFI) Statistic

The values of the Adjusted Goodness-of-Fit (AGFI) Statistic range from 0 to 1. A good fitting model achieves a value > .90. Notably, the value of the AGFI generally increases with the increase of sample size (Kline, 2005).

[40] GFI poses a downward bias in case of larger degree of freedom compared to the sample size (Sharma, Mukherjee, Kumar, & Dillon, 2005).

4.20.4 Root Mean Square Residual (RMR)

The value of RMR index ranges from 0 to 1. But a better fitting model generally obtains less than .05 (Byrne, 2010). However, some literatures suggest to accept the value up to .08 (Hu & Bentler, 1999).

4.20.5 Root Mean Square Error of Approximation (RMSEA)

Any values RMSEA fit index between 0.05 to 0.08 are considered fair. A value between 0.08 to 0.10 indicates a mediocre fit and a value below 0.08 indicates a good fit (Robert, MacCallum, Browne, & Sugawara, 1996). Some researchers suggest that the upper limit of RMSEA should not exceed 0.07 (Steiger, 2007). However, the lower the value of RMSEA is considered the better the model fits (Kenny, 2015a).

4.20.6 Comparative Fit Index (CFI)

CFI values range between 0 and 1.0. A value closer to 1.0 indicates good fit. Though the cut-off point 0.90 can be accepted but a value higher than 0.90 is recommended to define a good fit (Hu & Bentler, 1999).

4.20.7 Parsimony Fit Indices (PFI)

The Parsimony Goodness-of-Fit Index (PGFI) is calculated based on the GFI by adjusting the degrees of freedom. The value of PGFI may reach up to .50 if the value of the Goodness of Fit Index (GFI)' becomes more than .90 (Mulaik et al., 1989).

4.20.8 p of Close Fit (PCLOSE)

This fit index measures the model's fitness based on a null hypothesis that the value of RMSEA is equal to .05 that indicates a close-fitting model. The alternative hypothesis is RAMSEA is greater than .05. In this regard, if p is not statistically significant that implies the fit of the model is 'close'. Thus, this index defines a close-fitting model (Kenny, 2015a).

4.20.9 Normed Fit Index (NFI)

This fit index defined a model as the best model by considering a Chi-square of zero. On the other hand, the worst model is defined by the Chi-square null model. The cut-off value of NFI .90 and above. Model with the value below .90 is considered as a poorly fitting model (Kenny, 2015a).

4.20.10 Tucker Lewis Index (TLI)

Tucker Lewis Index (TLI) is synonymously called as the non-normed fit index. The cut-off point of TLI is .90 to .95 (Kenny, 2015a).

4.21 Bootstrap

The bootstrap takes repeated samples from the data that represent the sample distribution. This technique can explore the empirical variations that may exist in the results. Thus, bootstrapping can even provide an attractive way of dealing with non-normal distribution if the sample size is fair (Loehlin, 1998). Since this the quantitative data of this study did not meet the criteria of the normal distribution bootstrapping can ensure the accuracy of the findings.

4.22 Triangulation

Triangulation helps confirm, reinforce or reject the findings. It also facilitates validation of data by means of cross verification. It tests the consistency of the findings obtaining through different instruments. There are four types of triangulation such as 1) data triangulation, 2) investigator triangulation, 3) theory triangulation, and 4) methodological triangulation. Data triangulation involves time, persons, and space. Investigator triangulation deals with several researchers in an investigation. Theory triangulation uses more than one theoretical scheme to interpret the phenomenon. Methodological triangulation collects data from more than one source such as questionnaire, interview, documents, and observation (Kennedy, 2009). Methodological triangulation is preferred due to its high credibility involving multiple methods. This method observes the phenomenon from different perspectives (Flick, 2007). There are two forms of methodological triangulation, such as within method and between method. Within method, triangulation is used to study the multidimensional phenomena. The researcher takes one method that includes several strategies (such as different types of scales) to examine the data. This method yields high reliability and quality of data. On the other side, the between-method or across-method is more concerned about convergent validity. In this technique, data are collected through more than one method to investigate if there is a convergence in the findings. This technique contributes richness and validity of the findings elaborate the findings of another type (Duffy, 1987; Flick, 2007). In this regard, qualitative and quantitative methods work iteratively to drive the better understanding of the phenomena under a study. The large research community considers that qualitative techniques are the most appropriate to provide the richness of the outcomes of the quantitative method (Rossman & Wilson, 1985).

4.23 Qualitative Research Design

The qualitative study is mainly for the purpose of exploring the inner meaning of a certain phenomenon (Kaae & Traulsen, 2015). This study adopted the qualitative research method with the view to triangulate the findings of the quantitative approach. However, the purposive sampling technique is mostly recommended for the qualitative study (Patton, 2002). Hence, respondents for this study were chosen based on their job position, academic excellence, experiences and distinct expertise (Anderson, 2010), especially in Islamic finance. Every interview was taken as a case. Thus, the multiple case study method was applied for analysing the data. Notably, multiple case study is mainly designed for examining a bundle of cases. The main focus of this technique is to explore certain problems, policies, strengths or relationship between or among the social phenomena (Mills, 2010; Stake, 2013).

The data were analysed and interpreted combining the narrative and thematic approaches. The narrative technique helps avoid any ambiguity to demonstrate the findings (P. Atkinson, 2010; Czarniawska, 2001). This approach goes through an iterative process of collecting data, analysing, synthesising and reanalysing (Bold, 2012). In the same vein, the thematic approach was included to interpret the data. This approach looks for more reliability (Guest, MacQueen, & Namey, 2012). It defines the themes from the narrative results then, investigates the relationship between the contexts (Bold, 2012). It analyses the data in a systematic way by involving themes, coding and classifying the data. It combines the thematic structures based on the commonalities, relationship or exploratory principles (Mills, 2010).

In the case of multiple study method, the sample size 3-5 is considered sufficient (Daniel, 2012; Rapley, 2014). Under this light, two academic scholars and one industrial expert were interviewed. An open-ended questionnaire was used to collect the data. The questionnaire was designed to explore the viability of *mudarabah* and *musharakah* (M&M) based microfinancing model (described in Chapter 3, Section 3.3,). This issue was discussed in the form of a general overview and expected outcomes. Besides, regarding the application of *musharakah mutanaqisah* interviewees were asked questions about its implications and importance. Simultaneously, regarding the issues of clients' selection such as religiosity, knowledge, and entrepreneurial skills came into the conversation in a detailed manner. Respondents were asked about their views on the importance of clients' academic education, income, savings, and business experiences. Furthermore, the possible effects of the Shariah principles on clients' entrepreneurial exercise were asked with the greater emphasize. At the end of the interview session, respondents' suggestions were sought in order to make a decisive conclusion of this study.

Each above-mentioned issue was considered as a theme. From the narrative statement given by the respondents was suitably implanted in each theme. The commonalities and differences were determined by analysing each statement. At the end, the overall findings of the qualitative studies were compared to the findings of the quantitative findings. Thus, the triangulation technique justified 1) the M&M based micro-equity financing system; 2) client recruitment based on their religiosity, knowledge, and entrepreneurial skills; 3) the importance of clients' education, income, savings and business experience, 4) the impact of Shariah principles on entrepreneurship, and 5) at the end experts' suggestions help make a decisive conclusion on the applicability of M&M based microfinancing to the entrepreneurial poor.

4.24 Amanah Ikhtiar Malaysia (AIM)

Since this study chose the member of Amanah Ikhtiar Malaysia (AIM) as its population a brief introduction about AIM is given below.

Amanah Ikhtiar Malaysia (AIM), a replication of Grameen Bank (GB) of Bangladesh, is the largest microfinance institution (MFI) in Malaysia. This organization started its operation on 17 September 1987 upon a successful pilot test study that was conducted in 1986. AIM is a mission-oriented microfinancing institution (MFI) has been pursuing its operation in order to scale up the economic condition of the poor Malaysian (AIM, 2017)). There are 156 AIM branches all over Malaysia (Tammili et al., 2017). The main objectives of AIM are to reduce poverty by providing microcredit to the low-income Malaysian and to enhance entrepreneurship by extending financial support and training (Saad, 2011). Alike Grameen Bank (GB), AIM practises group-based landing method. Every member must join a group (voluntarily selected) in a specific centre. Each group comprises 5 members. A combination of 2 to 12 groups can form a centre. Immediate after joining AIM, members must undergo a 5 days' mandatory skill-enhancement training. This organization offers 7 loan-schemes, such as 1) *i-Mesra*, 2) *i-Srikandi*, 3) *i-Wibawa* (economy loan schemes), 4) *i-Sejahtera* (housing / multipurpose loan), 5) *i-Bestari* (education loan), 6) *i-Penyayanga* (recovery loan) and 7) *i-Emas*.

Table 4.2: AIM's Loan Structures

No	**Schemes**	**Amount**	**Tenure (Weeks)**
Economy			
1	*i-Mesra*	RM 1000-2000	12, 25, 35, 50
		RM 3000-1000 (Maximum)	12, 25, 35, 50, 75, 100, 125, 150
2	*i-Srikandi*	RM 1000-2000	12, 25, 35, 50
3	*i-Wibawa*	RM 5,000 (Maximum)	12, 25
		Lain-lain	
4	*i-Sejahtera*	RM 1000-2000	12, 25, 35, 50
		RM 3000-10,000 (Maximum)	12, 25, 35, 50, 75, 100
5	*i-Bestari*	RM 1000-2000	12, 25, 35, 50
		RM 3000-5000 (Maximum)	12, 25, 35, 50, 75, 100
6	*i-Penyayang*	RM 1000-2000	12, 25, 35, 50
		RM 3000-5000 (Maximum)	12, 25, 35, 50, 75, 100
7	*i-Emas*	2000 (Maximum)	12, 25, 35, 50

Source: AIM (2018a)

Any Malaysian over 18 years old and of a household income below RM3,855 is eligible for AIM's credit-programme. It is noteworthy, in the recent years AIM has launched Islamic microfinance (IsMF) on a limited scale. In that case, this institution is providing *qard* -based interest-free micro-loan. The total number of borrowers of AIM in all over Malaysia as of September 2018 is 383, 659, number of branches 134, total amount of disbursed money RM 19,439,030,761. Targeted to disbursed money in 2018 RM 2.573 billion and the rate of recovery 98.08%. As a recognition of the successful operation of Islamic microfinance AIM received the 'Best Islamic Microfinance Institution 2016' at the Global Islamic Finance Award (GIFA) (AIM, 2018b). In Selangor and Kuala Lumpur, the number of borrowers is 26,647[41] (Roslan, 2016). About 99% of the borrowers of AIM are women (Saad, 2011). The loan is interest-free and structured on Islamic principles. AIM charges 10% of the top of the lending amount for meeting its operational expenses. It also imposes 2% of each loan as the compulsory saving (Samer et al., 2015).

4.25 Conclusion

In a nutshell, to achieve the research objectives, this study adopted quantitative and qualitative methods. The quantitative data were analysed through the multivariate procedures, such as factor analysis and regression analysis. In this regard, structural equation modelling (SEM) was chosen as the most appropriate technique (Hox & Bechger, 1998; Khine, 2013; Schumacker & Lomax, 2010). Chi-square which is a distribution-free non-parametric test was performed as the primary fit test. This index permits multiple group studies as well as dichotomous independent variables (McHugh, 2013). But Chi-square statistics requires multivariate normality (Hooper et al., 2008). Non-normal data (especially high kurtosis) can inflate its value and negatively affects the model fit. In this case (in the case of non-normal data), Kenny (2015a) suggested the incremental and comparative fit indices. Since, this study deals with a complex model with more than 200 data while unsatisfying the multivariate normality assumption, some other measurement indices such as GFI, AGFI, RMR, CFI, NFI, TLI, RMSEA and PCLOSE are considered for this study to

[41] Selangor and Kuala Lumpur are combined

interpret the data. Thus, the entire report of the quantitative approach is presented in this chapter.

On the other side, the qualitative data were analysed by means of narrative and thematic approaches (Atkinson, 2010; Czarniawska, 2001). In this regard, every interview was taken as a case. The responses of the interviewees were narratively explained. Then, their statements were transcribed and arranged thematically. Each issue of the discussion was framed as a theme (Bold, 2012). All the statements were intertwined based on the commonalities as well as isolating the different opinions. The key points were coded and presented in a structured manner (Mills, 2010). Thus, this research was designed.

CHAPTER 5: DATA ANALYSES

5.1 Introduction

This study combinedly used quantitative and qualitative research methods (mixed methods) to achieve its objectives. A survey was carried out as part of the quantitative method. A total of 330 (n) complete questionnaire were collected from the equal number of members of a microfinance institution namely, Amanah Ikhtiar Malaysia (AIM). On the other side, in-depth interviews with three academic and industrial experts on Islamic finance and Shariah were taken to collect qualitative data. This chapter elaborately presents the outputs of the data analyses. The quantitative data were analysed by means of statistical interference. While the narrative technique was utilized to interpret the qualitative data. In the quantitative technique, exploratory factor analysis (EFA) was carried out to reduce the non-significant observed variables as well as to create a pattern matrix table (Buchanan et al., 2014). Besides, the dimensionality of the pattern matrix was reduced by consolidating the highly correlated variables within a group (Field, 2000). As a result, latent variables that are called 'factors' were formed with the inter-correlated observed variables. Then, confirmatory factor analysis (CFA) was conducted to build a *configural model*[42] with the factors. The invariance test was carried out while the validity of the moderating variables was measured. Other supportive analyses such as common method variance (CMV)[43], final measurement model fit, and impute composites were accomplished. At the end, a structural equation model (SEM) was built following the multivariate assumptions, linearity and multicollinearity tests. The

[42] A model without invariance is called *configural model* which is a reasonable model too (Kenny, 2011a).
[43] Common Method Variance (CLV) could be appeared since singular source is used (single questionnaire to one the same population) for dependent and independent variables. [Podsakoff et al (2003) and MacKenzie and Podsakoff (2012) in (Eichhorn, 2014)]

mediating effects were examined by employing the bootstrapping[44] technique (Kahn, 2014). At the end, multi-group moderating effects were examined by creating multiple models including the selected socio-demographic variables. On the other hand, the results of the qualitative study were presented in a narrative and thematic manner. Every interview of the Islamic microfinance expert was taken as a case. The responses of the interviewees were narratively explained. Then, their statements were transcribed and arranged thematically.

5.2 Data Screening

The self-reported survey data were collected for this study with the view to reaching a large number of samples by costing minimum time, efforts, and money. But self-reporting is a fallible source of data (Schwarz, 1999). The participants may not complete the survey questionnaire thoughtfully and effortfully. To identify the low-quality response patterns the application of certain data screening techniques are important. Furthermore, data screening technique helps to comprehend the interrelationship of the variables as well as generates good result and interpretation. It also helps to satisfy the multivariate assumptions (Saidin, 2014). There are three general screening techniques: direct, archival and statistical (DeSimone, Harms, & DeSimone, 2015). In this study, the data screening technique was employed from the beginning of the survey which was on the basis of empirical consideration called pilot test (DeSimone et al., 2015). It also adopted the statistical screening method to detect aberrant response patterns. In this regard, the descriptive statistics such as mean, standard deviation, skewness, and kurtosis were carried out (DeSimone et al., 2015). Initially, the Questionnaires

[44] Bootstrapping is a non-parametric approach that works based on the resampling technique with replacement, which is done many times. In this process the indirect effect is computed while sampling distribution is empirically generated. By means of this distribution a confidence interval, a *p* value and standard error can be computed. A confidence interval is checked while determining if zero is the interval. If zero is not in the interval that implies the indirect effect is different from zero (Kenny, 2018).

with 20% missing values were accepted. The questionnaires with 'unengaged data' were rejected. Questionnaires that obtained a value of standard deviation ranging from 0 to .5 were rejected because, respondents preferred the same value of the *Likert*-scale for almost every question (lengthy strings or invariant responses where respondents choose too many consecutive identical responses). According to the design of the questionnaire for this study, this kind of answer is unacceptable. But the questionnaires with the high standard deviation, >1.5 that means that the respondents chose the extreme values of the *Likert*-scale (the highest or the lowest value) were not rejected (Gaskin, 2016). Notably, a total of 73 out of 330 questionnaires (more than 20% of the total sample size of this study) scored such extreme values. Consequently, the kurtosis of the ordinal data became high and didn't meet the normality assumption (Appendix A).

5.3 Outliers

Detecting outlier is another aspect of data screening. It can identify the extreme cases that might contribute a significant negative effect on the analysis (Hair, Black, Babin, & Anderson, 2010). In multivariate analysis identification and treatment of outliers are important. In this study, univariate outliers were checked by detecting the cases with larger *z*-score values (Saidin, 2014). Hence, the outliers for age, education, income, saving, business experience, and microfinance experience checked by using box-plot and the defective issues were resolved carefully. Questionnaires with confusing data were rejected. A few outliers were reasonably corrected by replacing the nearby mean values (Gaskin, 2016).

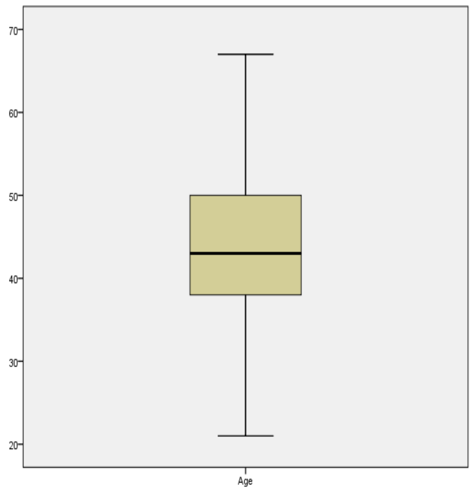


Figure 5.1: Outlier of Age

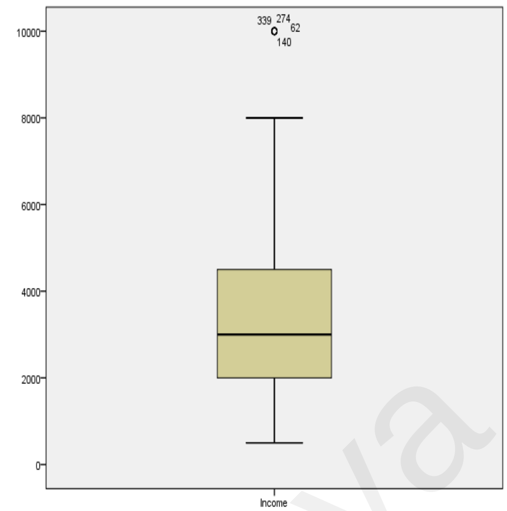
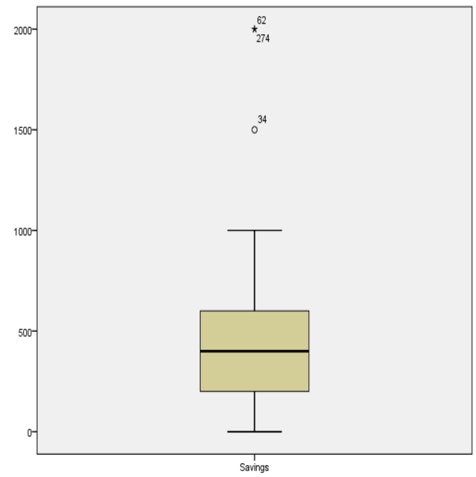


Figure 5.2 Outlier of Income

Figure 5.1 (above) suggests that there is no outlier in age. That implies, by age, the total sample group are in the 'interquartile range' of the boxplot (within the inner fence). So, the data are normally distributed. Figure 5.2 (above) demonstrates that only 4 subjects (1.12% of total respondents) are beyond the 'interquartile range'. The statistical rule of thumb allows only 0.8% of the total data beyond the inner fence to be normally distributed (Dawson, 2011). That means, there is a mild outlier in the income group.



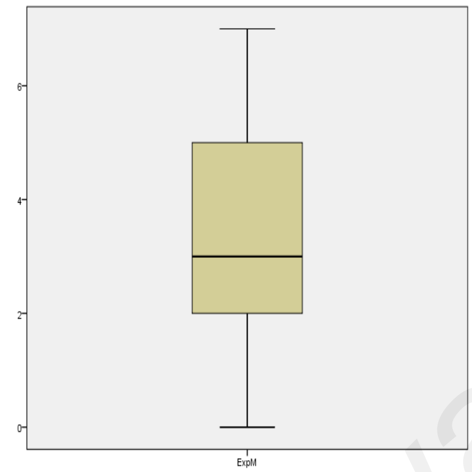
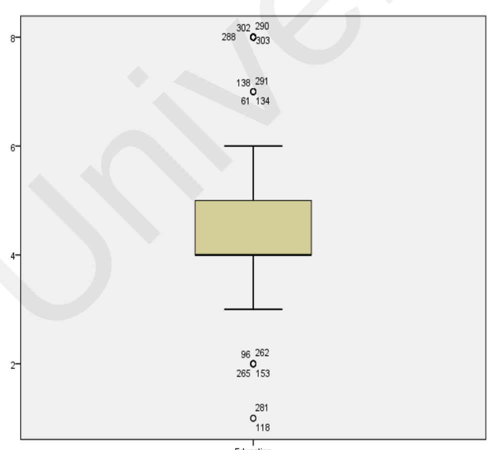


Figure 5.3: Outlier of Savings

Figure 5.4: Outlier of MFI Experience

Figure 5.3 (above) demonstrates that only 3 respondents of the ‘saving group’ (0.9% of total respondents) are beyond the ‘interquartile range of the boxplot that is slightly higher than the recommended range [the recommended range is 0.8% (Dawson, 2011)]. It could be considered almost normally distributed. Figure 5.4 (above) does not exhibit any outlier that means the data of ‘MFI Experience’ are normally distributed.



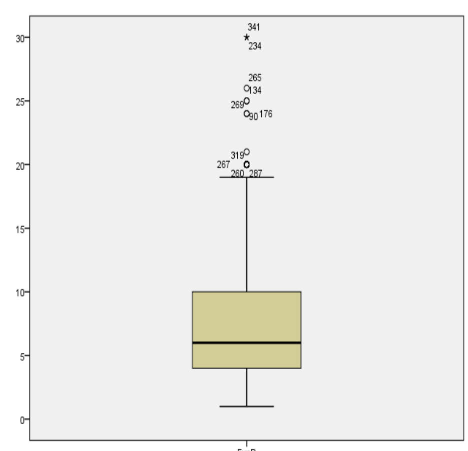


Figure 5.5: Outlier of Education

Figure 5.6: Outlier of Business Experience

Figure 5.5 (above) suggests that 4.24 % (14 respondents) of the total respondents are beyond the upper 'outer fence'. That indicates, 'education' group has a moderate outlier. Overall, there is no extreme outlier in any type of grouping of the respondents. Figure 5.6 (above) suggests that 3.3% (11 respondents) of the total respondents are beyond the upper 'outer fence' of the boxplot. That implies 'business experience' group has a moderate outlier.

5.4 Skewness and Kurtosis

To measure the asymmetry of a distribution of a variable skewness is used while to assess the 'peakedness' of the distribution kurtosis is used. Zero value of the skew indicates the normal or symmetric distribution. Any non-normal distribution can be positive or negatively skewed. On the other side, kurtosis value also should be zero for a perfectly normal distribution. An excessively positive that means high pick kurtosis is called leptokurtic distribution and an excessively negative (flat-topped curve) is called platykurtic distribution (Kim, 2013). The reports on Skewness and Kurtosis are presented below.

5.4.1 Skewness (Age, Experience, Income, and Savings)

Table 5.1: Skewness of the Continuous Variables

Skewness

		Age	ExpM.	ExpB.	Inc.	Sav.
N	**Valid**	330	330	330	330	330
	Missing	0	0	0	0	0
Mean		43.38	3.27	7.84	3583.32	389.93
Median		43.38	3.00	6.50	3000.00	389.93
Skewness		.004	.087	1.226	1.277	1.617

** ExpM: Experience of Microfinance; ExpB: Experience of Business; Inc: Income; Sav: Savings

5.4.2 Kurtosis

Table (a1), (a2), (a3), (a4), (a5), (a6), and (a7) in Appendix (A) suggest that the ordinal data are non-normal due to the high value of kurtosis.

5.5 Socio Demographic Information

A total of 330 complete questionnaires retrieved from the equal number of respondents were finally used for the statistical analyses. Among the respondents, 19.1% (ages 18-35 years, n= 63) were young adults; 72.1% (ages 36-55 years, n= 238) were middle-aged adults, and the rest 8.8% (aged older than 55 years, n= 29) were older adults. Most of the respondents were married (79.3%, n= 270); only 3.9% (n= 13) were single (never married); 7.3% (n= 24) were widowed; 6.1% were divorced, and .9% (n= 3) were separated. Most of the respondents were actively involved with the business activities (66.9%, n= 221); other 15.8% of them were housewives[45]. About 7.3 % of the respondents were earning salaries (formal job[46] under the payroll), and 10% were engaged with the other types of income generating activities[47].

The evidence of absolute poverty was almost absent (only .6%); 21.1% (n= 40) of the respondents were found poor; 38.5% (n= 127) respondents had low income; and 48.8% (n= 161) were middle earners[48]. All most all the respondents had academic literacy. Only two

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[45] They are somehow engaged with the business activities too. Because having a business is the precondition of being a member of AIM. Besides, this study applied the stratification process to choose the respondents with business experiences or knowledge.
[46] Cashier, Nurse, Manager, Clark, School bus driver, Cook, Baker, Shop Assistant, Retiree, School Teacher, Supervisor Sales assistant, Admin Assistant, and Sideline Manager
[47] Tailor, Consultant, House Agent, Wedding Planner, Dealer, Promoter, SPA Therapist, Designer, Craftsman Financial Advisor, Contract Driver
[48] Income below 700: Absolute poor, 751-1700: poor, 1701-2500: Low income, 2501-5550: Middle income (EPU, 2016; Sabri & Zakaria, 2015).

respondents reported that they had never gone to school and six others reported that they had had informal learning while six of them had the elementary education. About 69.4% (n=229) of them had SPM certificate, and 8.2% (n=27) achieved STPM. Besides, 7% (n=23) got the bachelor degree and 1.5% (n=5) had the post-graduate degree and the rest 32 respondents took 'Form 3' and diploma courses.

Table 5.2: Demographic Information

Factors	**Groups**	**Percentage (%)**	**Number (n)**
Age	Young	19.1	63
	Middle	72.1	238
	Senior	8.8	29
Marital Status	Married	79.3	270
	Single	3.9	13
	Widowed	7.3	24
	Divorced	6.1	20
	Separated	.9	3
Occupation	Business	66.9	221
	Housewife	15.8	52
	Salaried Job	7.3	24
	Informal Job	10	33
Economic Condition	Absolute Poor	.6	2
	Poor	21.1	40
	Low income	38.5	127
	Middle income	48.8	161

Factors	Groups	Percentage (%)	Number (n)
Education	Illiterate	.6	2
	Informal Learning	1.8	6
	Elementary	1.8	6
	SPM	69.4	229
	STPM	8.2	27
	Bachelor	7	23
	Postgrad	1.5	5
	Form 3 and Diploma	9.7	32

Notably, AIM only selects *Sahabat* (member) with household income below RM3,855 and per capita income below RM828 per month as prescribed by the poverty line index (PLI). (Tammili et al., 2017). Besides, low and middle-income groups are considered as relative- poor (Nair & Sagaran, 2015). The data for this study were collected from Gombak, Cheras and Selayang in Selangor state. This state is economically more flourished comparing to other states in Malaysia. Therefore, participants in this study with average household income RM 3583 (Table 5.1) should be considered as poor.

5.6 Exploratory Factor Analyses (EFA)

Exploratory factor analysis (EFA) is generally used for dimension reduction as well as to explore the psychometric properties of the instrument or scale. EFA examines all the pairwise relationship between individual variables and helps create latent factors from the observes variables (Osborne, 2015). This study created the factors by using EFA accounting the correlation among the observed variables (MacCallum, 2009). Since all the observed variables were selected based on the theories, the factors were constructed with the correlated items. Maximum likelihood and oblique rotation (*promax*) method were chosen for the factor analysis. Seven factors (latent variables): 1) identification (I), 2) measurement (M), 3) monitoring (MO), 4) controlling (C) 5) religiosity (R), 6) knowledge (K), and 7) entrepreneurship (E) were created based on the pattern matrix table (Brown, 2009). It is noteworthy, ‘no missing values’ is a prerequisite of structural equation modelling (SEM). Therefore, all the missing values (no more than 20%) were replaced with the nearby values of the medians (Allison, 2003). As a result, the equal number of cases (n=330) appear for every variable.

5.6.1 Kaiser-Myer- Olkin (KMO)

KMO test suggests the strength of the relationship among the variables in a correlation matrix. Value of this statistics ranges from 0 to 1 but, the value more than .70 is considered significant for conducting a factor analysis (Vogt, 2005). KMO demonstrates the size of partial correlations compared to the original (zero-order) correlations. If the variables share the common factor(s), then the partial correlations become small and the KMO remains close to 1.0. Hence, KMO value greater than 0.8. means the partial correlation among the variables under the common factor is small (IBM, 2011).

Table 5.3: KMO and Bartlett's Test

KMO & Bartlett's Tests		
Kaiser-Meyer-Olkin (Measure of Sampling Adequacy)		.899
	Chi-Square (Approx.)	11944.836
Bartlett's Test of Sphericity	Degree of freedom	1275
	p	<0.001

Table 5.3 displays the Kaiser-Meyer-Olkin (KMO) Measure of Sampling Adequacy statistics summary. The KMO statistic is .892 which is highly significant [commonly recommended value is ≥ .6 (Neill, 2008)]. The 'Bartlett's Test of Sphericity' is also significant [$\chi 2$ (11944.836) = 1275, $p < .05$] meaning the null hypothesis, 'the correlation matrix is an identity matrix[49]' is rejected. Therefore, the elements (items) of the underlying factors are not identical.

Communalities table (Appendix: C) demonstrates the extraction values (proportion of each variable's variance) of the variables. Variables with high communality values are considered better representing the common factor. Most of the observed variables in this study scored higher than .5 that means items underlying the factor are well representing (Young & Pearce, 2013).

In the table 'Total Variance Explained" (Appendix: D) the column 'Total' demonstrates the eigenvalues where the first factor accounts for the highest variance (12.54) (it has the highest eigenvalue), and respectively the second, third, fourth, fifth, sixth, and seventh, factor account for 5.58, 5.09, 3.49, 2.72, 1.85, and 1.60. The 'percentage of variance' column

[49] An identity matrix is a matrix in which all the diagonal elements are 1 and all off-diagonal elements are 0.

presents the percentage of total variance accounted for each factor. In that column, the first factor accounts for 24.59, second factor 10.95, third factor 9.98, fourth factor 6.86, fifth factor 5.33, sixth factor 3.64 and the seventh factor 3.14. 'Cumulative %' column displays the cumulative percentage of the variance that accounts for the current and all preceding factors. For instance, the seventh-row displays a value of 64.52% meaning that the first seven factors together are accounted for 64.52% of the total variance. 'Extraction Sums of Squared Loadings' column displays the number of rows in this panel of the table correspond to the number of factors retained. In this research, seven factors are retained. 'Rotation Sums of Squared Loadings' column in this table presents the distribution of the variance. The values for the first factor are 8.90, second factor 8.74, third factor 7.00, fourth factor 6.77, fifth factor 4.13, sixth factor 5.04, and for the seventh is 3.59.

5.6.2 Scree Plot

Scree plot is a plot that demonstrates the eigenvalues in a descending order. The eigenvalues high up on the plot are considered as the significant factors for further analysis (Vogt, 2005).

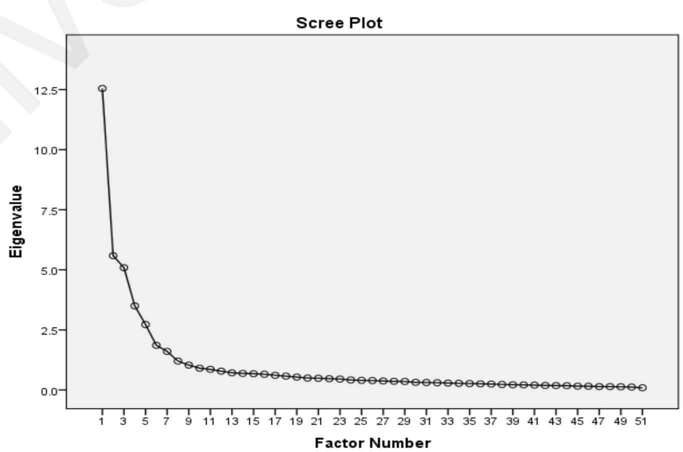

Figure 5.7: Scree Plot

The scree plot (Figure 5.7) depicts the eigenvalue against the number of the factors. These values in the first seven columns are immediately above. From the eighth factor, the line of the plot goes almost horizontally. That implies rest of the factors account for smaller variances.

5.6.3 Goodness of Fit Test

According to the Goodness-of-fit Test statistics (Table 5.4, below), the overall model was statistically fitted ($\chi 2=2137.054$, p <0.001).

Table 5.4: Goodness-of-fit Test

Goodness-of-fit Test		
Chi-Square	Df	P value
2137.054	939	<.001

5.6.4 Factor Correlation Matrix

Factor Correlation Matrix (Table 5.5) displays all the factors are positively correlated with less than 0.5 values. That implies the variables are intercorrelated but not too highly correlated to pose multicollinearity or singularity problem (Field, 2000). In this regard, the result 'Bartlett's Test of Sphericity' can be recollected. Table 5.3 displays, 'Bartlett's Test of Sphericity' is significant [$\chi 2$ (11944.836) = 1275, p < .0001]. That implies, the null hypothesis, 'the correlation matrix is an identity matrix' is rejected (Field, 2000).

Table 5.5: Factor Correlation Matrix

NO	Factors	I	M	MO	C	R	K	E
1	Identification (I)	1.000						
2	Measurement (M)	.472	1.000					
3	Monitoring (MO)	.219	.347	1.000				
4	Controlling (C)	.311	.265	.179	1.000			
5	Religiosity (R)	.092	.076	.280	.240	1.000		
6	Knowledge (K)	.127	.183	.266	.426	.479	1.000	
7	Entrepreneurship (E)	.273	.052	.032	.375	.053	.124	1.000

Extraction Method: Maximum Likelihood.

Rotation Method: Promax with Kaiser Normalization.

5.6.5 Reliability

Cronbach's alpha (α) measures the intercorrelation of the items in a common factor while estimating the proportion of the variance. It also measures the reliability and internal constancy of the items (Bonett & Wright, 2015). Like other reliability coefficients it ranges from 0 to 1.0 (Vogt, 2005). The greater value of Alpha suggests the better coherence and reliability. A value for Alpha of .70 can confirm the scale is reliable while a value <.70 suggests either the underlying items are inconsistent or the scale to be modified (Lavrakas, 2008). In this light, Table 5.6 suggests that Cronbach's Alpha of each factor is highly significant. So, all the factors (latent variables) are reliable and the items (observed variables) belong to the latent variables are consistent (George & Mallery, 2016).

Table 5.6: Reliability Statistics

NO	Factor	Cronbach's Alpha	N of Item
1	Identification (I)	.903	3
2	Measurement (M)	.899	8
3	Monitoring (MO)	.893	4
4	Controlling (C)	.840	4
5	Religiosity (R)	.930	11
6	Knowledge (K)	.914	10
7	Entrepreneurship (E)	.929	11

5.7 Summary of EFA

The results of EFA suggest that the Kaiser-Meyer-Olkin (KMO) Measure of Sampling Adequacy is significant (which is .899). Communality extraction value of each item is higher than .3 while 59.46% variance is explained. So, the extracted items (observed variables) achieve high adequacy. Besides, all the items (observed variables) are highly loaded in their designated factors (latent variables). The loading values of the individual items are more than .5 and the average loading is higher than .7. No cross loading is observed in the pattern matrix table and factor correlation is not higher than .7. At the end, all seven factors are found reliable and the underlying items are consistent according to the values of Cronbach's Alpha (α). Notably, the values of α for the factors are: identification (I) .903, measurement (M) .899, monitoring (MO) .893, controlling (C) .840, religiosity (R) .930, knowledge (K) .914 and entrepreneurship (E) .929.

5.8 Confirmatory Factor Analysis (CFA)

At this stage, all the variables of are pictorially modelled (by using a software, AMOS) based on their causal relationship (Byrne, 2010). This model leads to build a path model and a confirmatory factor model. Then, the validity and reliability of the observed variables were measured (Schumacker & Lomax, 2010). In this regard, three specific statistical analyses were carried out: (1) tests of goodness of fit of the measurement model, (2) tests of goodness of fit of the structural model and model modifications, and (3) parameter estimation (Ardasheva, 2016).

5.9 Structural Equation Modelling (SEM)

The structural equation modelling (SEM) approach tests the hypotheses on the causal relationship between the independent (IV) and dependent variables (DV). This approach begins with the measurement model building followed by re-specified model building, invariant test, common method variance, validity and reliability tests, multivariate assumption and multicollinearity test (Gaskin, 2016). The step by step process of building a structural equation model (SEM) is described below.

5.10 Measurement Model Building

Based on the pattern matrix table (Appendix E) a measurement model has been built (by using AMOS, version 21). This model leads to conducting a confirmatory factor analysis (CFA), testing hypotheses and determining the consistency of the model with the observed data.

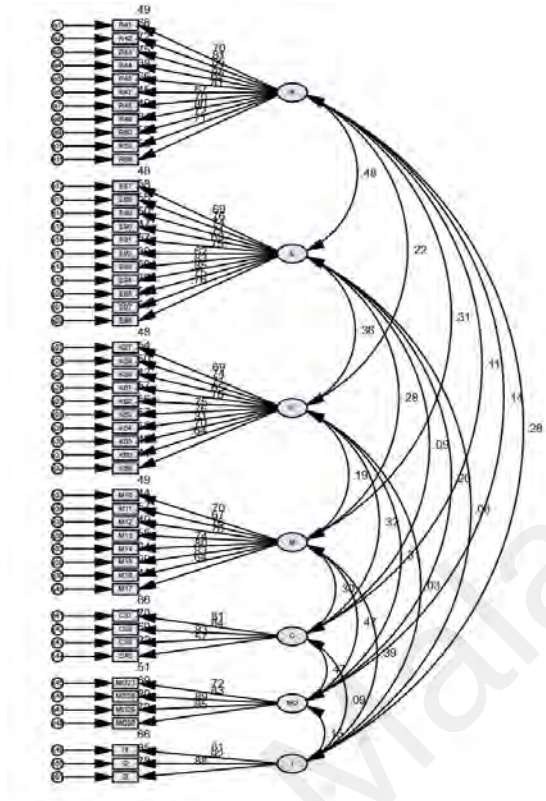

Figure 5.8: Measurement Model

The above-mentioned model (Figure 5.8) is a measurement model which is created as an initiative for the confirmatory factor analysis (CFA) and determining the relationship between the latent variables and their measures. The model fit indices demonstrate that CHIN/DF:2.461 is significant at $p < 0.001$. The value of root mean square residual (RMR) is .095 which is slightly higher than the recommended value (.05-.08). Good of fit index (GFI) is .727 and adjusted goodness of fit index (AGFI) is .699 are below the cut-off points (recommended GFI >.95 and AGFI >.90). The value of the comparative fit index (CFI) is .845 which is close to the cut-off point (recommended >.90). The value of root means square error of approximation (RMSEA) is .067 (which is greater than the threshold <.05) and PCLOSE is .000 (at the optimum level of significance). The values of CFI, RMSEA and PCLOSE suggest that this model is somewhat fitted with the data. But the output of chi-square, RMR, GFI and AGFI suggest that this model might have some specification errors. Therefore, further modification is needed prior to conducting the confirmatory factor analysis (CFA).

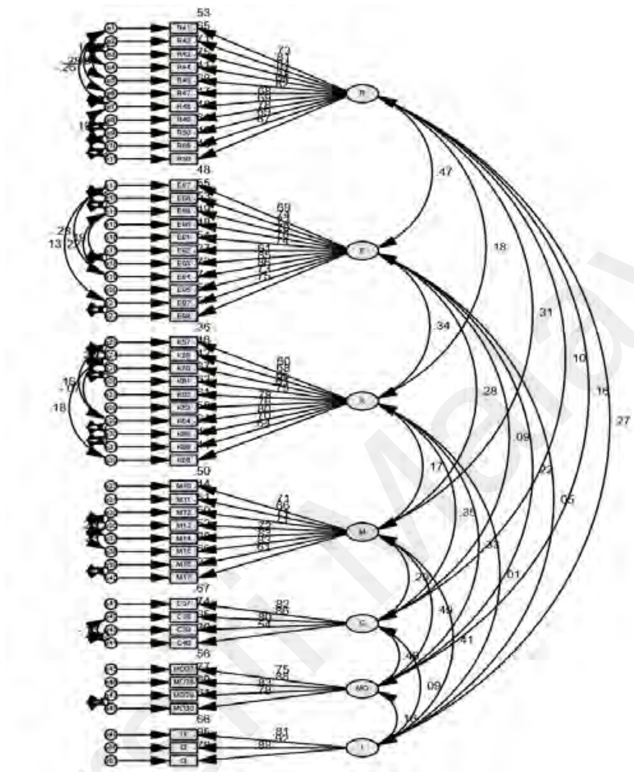

Figure 5.9: Modified Measurement Model

The above-mentioned model (Figure 5.9) is a modified measurement model, the second step for the confirmatory factor analysis (CFA) and determining the relationship between the latent variables and their measures. The model fit indices demonstrate that CHIN/DF:1.754 is significant at $p < 0.001$. The value of root mean square residual (RMR) is .091 which is slightly higher than the recommended value (.05-.08). Good of fit index (GFI) is .804 and adjusted goodness of fit index (AGFI) is .778 are below the cut-off points (recommended GFI >.95 and AGFI >.90). The value of comparative fit index (CFI) is .922 which is significant (recommended >.90). The value of root mean square error of approximation (RMSEA) is .048 (which is below the threshold <.05) and PCLOSE is .846 (recommended >.05). Based on the values of CFI, RMSEA and PCLOSE the model is close fitting with the data. It can also be assumed that this model might have the specification errors. Therefore, further modification is needed to conduct confirmatory factor analysis (CFA).

The standardised regression weights (β)/ factor loadings (Appendix F) of the observed variables of the Modified Measurement Model (Figure 5.9) demonstrates that some items such as M11, M17, C40 R45, R48, R49, R55, R56, K57, K58, K59, K61, K68, E87, E91, E93, have <.7 standard regression weights (loading factor). Notably, this study considers the factor loading of the variables more than 0.7 can better represent the observed variables while contributing higher statistical significance (Gaskin, 2016; Statistics Solutions, 2013). After removing the observed variables with the value of factor loading, β <.7, another model is created as below:

5.11 Re-Specified Measurement Model

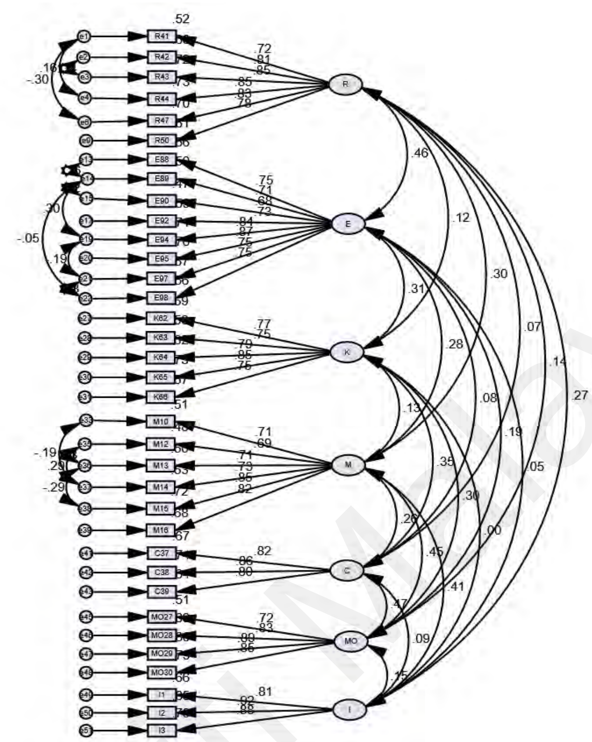

Figure 5.10: Re-specified Model

The model above (Figure 5.10) is created upon reducing the observed variables that carry factor loading value, β <.7. This model is called the re-specified model. However, the model fit indices demonstrate that CHIN/DF: 1.693 is significant at $p < 0.05$. The value of root mean square residual (RMR) is .075 which is within the recommended value (.05-.08). Good of fit index (GFI) is .869 and adjusted goodness of fit index (AGFI) is .843 are near to the cut-off points (recommended GFI >.95 and AGFI >.90). The value of comparative fit index (CFI) is .952 which is significant (recommended >.90). Furthermore, Tucker Lewis index (TLI) is .952, which is significant and normed fit index (NFI) is .890, which is near to significant.

Root mean square error of approximation RMSEA is <.05 (.046) and PCLOSE is >.05 (.904). These two indices are also significant. So, the model can be considered as a well fitted-model.

Table 5.7: Factor Ladings (Re-Specified Model)

No	Observed Variables	P	Loading Factor
1	R41: Belief on *Shahadah*	<0.001	.720
2	R42: Mandatory Prayer	<0.001	.812
3	R43: Mandatory Fasting	<0.001	.849
4	R44: Aspiration to *Haj*	<0.001	.855
5	R47: Reciting *Qur'an*	<0.001	.834
6	R50: Religious Behaviour	<0.001	.783
7	E88: Decision Making	<0.001	.745
8	E89: Problem Solving	<0.001	.707
9	E90: Diligent	<0.001	.689
10	E92: Negotiation Skill	<0.001	.731
11	E94: Idea Generating	<0.001	.844
12	E95: Business Evaluation	<0.001	.870
13	E97: Financial Planning	<0.001	.754
14	E98: Experimentation	<0.001	.751
15	K62: *Mudarabah:* Sharing Profit	<0.001	.766
16	K63: *Mudarabah:* Financer Bears the Losses	<0.001	.746
17	K64: Familiar with the Term Musharakah	<0.001	.786

No	Observed Variables	P	Loading Factor
18	K65: *Musharakah:* Profit and Loss Sharing	<0.001	.853
19	K66: Financer is in Management	<0.001	.753
20	M10: Managing Business	<0.001	.711
21	M12: Capital Sharing	<0.001	.693
22	M13: Loss Sharing	<0.001	.708
23	M14: Goods and Financial Capital	<0.001	.730
24	M15: Having Ownership	<0.001	.849
25	M16: Agreed Amount of Capital	<0.001	.824
26	C37: Business Termination if the Contractual Period is Over	<0.001	.817
27	C38: Business Termination if it is Complicated	<0.001	.863
28	C39: Business Termination if the Capital is Impaired.	<0.001	.803
29	MO27: Regular Audit	<0.001	.717
30	MO28: Revealing Production Process	<0.001	.832
31	MO29: Revealing Production Cost	<0.001	.893
32	MO30: Revealing M&P Cost	<0.001	.852
33	I1: Trustworthiness	<0.001	.814
34	I2: Transparency	<0.001	.924
35	I3: Good Morals	<0.001	.882

All the items in the Table 5.7 are with >.7 standard regression weights (M12 and E90 with the values close to .7). That implies items are statistically significant with high factor loadings. Therefore, these observed variables can be considered well representing the underlying latent factors.

5.12 Common Method Variance (CMV)

Since this study adopted survey by using a questionnaire to a specific group of people (which is called single method survey), there could some measurement errors and systematic biases (Podsakoff, MacKenzie, & Podsakoff, 2003). A common method variance (CMV)' test was conducted (

Figure 5.11, below) in order to identify the measurement errors and bias that can affect the overall result (Fuller, Simmering, Atinc, Atinc, & Babin, 2016; Podsakoff et al., 2003). This test examines whether a single factor can explain most of the variances (Fuller et al., 2016; Hair et al., 2010).

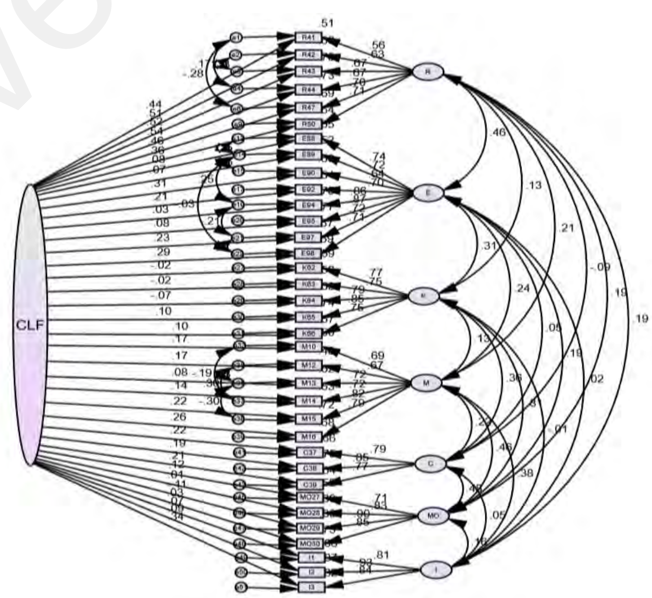

Figure 5.11: Common Method Variance

The table 'Common Method Variance' (Appendix H) demonstrates that only a few items are significant with CLF (low loading and high standard errors). This implies common method bias is slightly present in this model.

5.13 Construct Validity

The construct validity was measured to check reliability and the traits of the correlations among the variables.

5.13.1 Convergent Validity

Convergent validity can show the extent to which a measure is related to other measures in the same construct (Cramer & Howitt, 2004). The convergent validity measurement is considered stronger and independent method for assessing construct validity. It differs from the reliability measure that works only with the correlation (Salkind, 2010a).

Table 5.8: Convergent Validity Measurement

	CR	AVE	MSV	ASV	α
MO	0.895	0.682	0.217	0.098	.893
R	0.920	0.656	0.209	0.070	.930
E	0.917	0.582	0.209	0.071	.929
K	0.887	0.611	0.125	0.058	.914
M	0.888	0.570	0.200	0.104	.899
C	0.867	0.686	0.217	0.072	.840
I	0.907	0.765	0.171	0.046	.903

** MO: Monitoring, R: Religiosity, E: Entrepreneurship, K: Knowledge,

M: Measurement, C: Controlling, and I: Identification

Table 5.8 demonstrates that composite reliability (CR) for all items is higher than .8 which is higher than then the minimum threshold, .7. Besides, the values of average variance extraction (AVE) are greater than .5 while the values of maximum shared variance (MSV) and average shared variance (ASV) are lower than average variance extraction (AVE) (Hair et al., 2010). Besides, all the values of Cronbach Alpha (α) are > .8 (George & Mallery, 2016). So, all the factors have achieved reliability and convergent validity.

5.13.2 Discriminant Validity

Discriminant validity shows the degree of distinction of two conceptually similar concepts. This validity is achieved if the correlations of the variables measuring different traits are low (Salkind, 2010b).

Table 5.9: Discriminant Validity Measurement

	MO	R	E	K	M	C	I
MO	**0.826**						
R	0.144	**0.810**					
E	0.186	0.457	**0.763**				
K	0.305	0.125	0.312	**0.782**			
M	0.447	0.305	0.277	0.132	**0.755**		
C	0.466	0.075	0.083	0.354	0.263	**0.828**	
I	0.152	0.271	0.052	-.004	0.413	0.092	**0.875**

** MO: Monitoring, R: Religiosity, E: Entrepreneurship, K: Knowledge, M: Measurement, C: Controlling, and I: Identification

Table 5.9 suggests that AVE for each construct is more than each of the squared correlation between constructs (Hair et al., 2010). That implies the correlations of the variables measuring different traits are low. Therefore, discriminant validity is adequate for all the constructs.

5.14 Multivariate Assumptions

Linearity and collinearity were tested for multivariate assumption. The results are stated below:

5.14.1 Linearity Tests

Linearity tests were conducted on the composite data to determine if there any linear relationship exists between the independent (Identification, Measurement, Monitoring, and Controlling) and dependent variables (Entrepreneurship). The same analysis was carried out between the mediating variables (Religiosity and Knowledge) and the dependent variable (Entrepreneurship).

Appendix (I) demonstrates that entrepreneurship (E) and religiosity (R) are linearly related [F value is significant at $p < .05$. Table (a)]. Entrepreneurship (E) and knowledge (K) are linearly related [F value is significant at $p < .05$. Table (b)]. Entrepreneurship (E) and Identification (I) are not linearly related [F value is not significant at $p < .05$ ($p = .869$). Table (c)]. Entrepreneurship and Measurement are linearly related as the F value is significant at $p < .05$. Table (d)]. Entrepreneurship (E) and monitoring (M) have a linear relationship [F value is significant at $p < .05$. Table (e)]. Entrepreneurship (E) and Controlling (C) have no linear relationship [F value is not significant at $p < .05$. Table (f)]. Religiosity (R) and identification (I) have a linear relationship [F value is significant at $p < .05$. Table (g)]. Religiosity (R) and measurement (M) have a linear relationship [F value is significant at $p < .05$. Table (h)]. Religiosity (R) and monitoring (MO) have a linear relationship [F value is significant at p

<.05. Table (i)]. Religiosity (R) and controlling (C) have a linear relationship [F value is significant at p <.05. Table (j)]. Knowledge (K) and identification (I) do not have a linear relationship [F value is not significant at p <.05. Table (k)]. Knowledge (K) and measurement (M) have a linear relationship [F value is significant at p <.05. Table (l)]. Knowledge (K) and monitoring (MO) have a linear relationship [F value is significant at p <.05. Table (m)]. Knowledge (K) and controlling (C) have a linear relationship [F value is significant at p <.05. Table (n)].

5.14.2 Multicollinearity Tests

The 'Multicollinearity Test' table (Appendix J) demonstrates that all the values of the variance inflation factors (VIF) are more than 1 but less than 2. According to the rule of thumb, if the VIF is 1 there is no multicollinearity. But if it is more than 1, there is a moderate multicollinearity among the variables. Furthermore, VIF between 5-10 is considered critical due to the high correlation. If VIF is above 10 then the highly correlated predictor needs to be removed from the model (Akinwande, Dikko, & Samson, 2015). However, the VIF of this model suggests that the moderate correlation exists among the predictors and but none of them is critical. So, no variable needs to be excluded from the model. Therefore, this model can be retained for further analyses. The correlation coefficients among all the variables were less than 0.85. That means there is no critical multicollinearity among variables.

Based on the findings of confirmatory factor analysis (CFA) and upon all the validity and reliability tests, research question (1) and research question (2) can be answered.

5.15 Answer to the Research Question (1) and Research Question (2)

Confirmatory factor analysis demonstrates that all the items of the underlying factors are reliable, and valid. Therefore, based on the Table 5.7 (pg.219) the research question (1) and research question (2) are answered below.

5.15.1 Answers to the research Question 1

RQ1: *What are the extents of poor women entrepreneurs' knowledge, religiosity, and entrepreneurship?*

This question can be devided in to three sub-questions:

RQ 1 (a): *What is the extent of poor women entrepreneurs' knowledge?*

Significant items (at $p < .05$) that represent *mudarib*s' knowledge on M&M are mentioned below:

K62: In *mudarabah* contract financer shares only a portion of the profit; K63: In *mudarabah* contract financer bears the total losses; K64: Familiar with the term *musharakah*; K65: In *musharakah* client shares both profit and loss; and K66: In *musharakah* contract financer can participate in the management.

Table 5.10: Result Summary of *Mudaribs*' Knowledge on M&M

No	Factor Loadings: Standardized Regression Weights (β)		
		P	**β**
1	K62: *Mudarabah:* Sharing Profit	< 0.001	.766
2	K63: *Mudarabah:* Financer Bears the Losses	<0.001	.746
3	K64: Familiar with the Term Musharakah	<0.001	.786
4	K65: *Musharakah:* Profit and Loss Sharing	<0.001	.853
5	K66: Financer is in Management	<0.001	.753

RQ1 (b): *What is the extent of poor women entrepreneurs' religiosity?*

Significant items that demonstrate religiosity are mentioned below:

R41: Belief in the lesson of *Shahadah*. R42: Pray five mandatory prayer a day. R43: Keep mandatory fasting in the month of Ramadan. R44: Cherished an aspiration to perform *Haj*. R47: Reciting or listen *Qur'an*. And R50: Deal with other people following the Islamic behavioural manner.

Table 5.11: Result Summary of Religiosity

No	Factor Loadings: Standardized Regression Weights (β)		
		P	**β**
1	R41: Belief on *Shahadah*	<0.001	.720
2	R42: Mandatory Prayer	<0.001	.812
3	R43: Mandatory Fasting	<0.001	.849
4	R44: Aspiration to *Haj*	<0.001	.855
5	R47: Reciting *Qur'an*	<0.001	.834
6	R50: Religious Behaviour	<0.001	.783

RQ1 (c): *What is the extent of poor women entrepreneurs' entrepreneurial skills?*

Significant items that demonstrate entrepreneurship are mentioned below:

E88: Positive thinker. E89: Ability to solve problems. E90: Diligent. E92: Negotiation skill, E94: Ability to assess idea, E95: Ability to evaluate business. E97: Ability to make financial planning for the business. And E98: Do experimentation.

Table 5.12: Result Summary of Entrepreneurship

No	Factor Loadings: Standardized Regression Weights (β)		
		P	**β**
1	E88: Positive Thinker	<0.001	.745
2	E89: Problem Solver	<0.001	.707
3	E90: Diligent	<0.001	.683
4	E92: Negotiation Skill	<0.001	.731
5	E94: Idea Assessment	<0.001	.844
6	E95: Business Evaluation	<0.001	.870
7	E97: Financial Planning	<0.001	.754
8	E98: Experimentation	<0.001	.751

5.15.2 Answers to the research Question 2.

Based on the factor loading (standerdized regression weights, β) in Table 5.7 (pg.219) research questions (2) is answred below.

RQ2: *To what extent do poor women entrepreneurs accept Shariah principles of mudarabah and musharakah (M&M) financing?*

This research question can be divided into four sub-questions as below.

RQ 2 (a): *To what extent do poor women entrepreneurs accept the Shariah principles of identification?*

Significant Shariah principles of ‘identification’ are mentioned below:

I1: Trustworthiness, I2: Transparency, and I3: Good Morals.

Table 5.13: Result Summary of Identification

No	**Factor Loadings: Standardized Regression Weights (β)**		
		P	**B**
1	I1: Trustworthiness	<0.001	.814
2	I2: Transparency	<0.001	.924
3	I3: Good Morals	<0.001	.882

RQ 2 (b): *To what extent do poor women entrepreneurs accept the Shariah principles of measurement?*

Significant Shariah principles of ‘measurement’ are mentioned below:

M10: *Mudarib* is solely responsible for managing the business capital (in *mudarabah*). M12: Microfinance institution provides a portion of the capital and join the business management with the *mudarib*. M13: Loss is calculated according the proportion of capital sharing. M14: Money or goods can be regarded as capital. 15: *Mudarib* can gain ownership by paying back the price and M16: Amount of capital sharing depends on the mutual-agreement.

Table 5.14: Result Summary of Measurement

No	Factor Loadings: Standardized Regression Weights (β)		
		P	**B**
1	M10: Manging Business Capital	<0.001	.711
2	M12: Capital and management Shared by MFI	<0.001	.693
3	M13: Loss Sharing Proportion to the Capital Participation	<0.001	.708
4	M14: Money and Goods Regarded Capital	<0.001	.730
5	M15: Having Sole Ownership	<0.001	.849
6	M16: Both Parties Invest Agreed Amount of Capital	<0.001	.824

RQ 2 (c): *To what extent do poor women entrepreneurs accept the Shariah principles of monitoring?*

Significant Shariah principles of 'monitoring' are mentioned below:

MO27: Regular auditing by the microfinance institution. MO28: Mudarib should reveal production process. MO29: Mudarib should revealing the production cost. and MO30: Mudarib should revealing the marketing and promotion cost.

Table 5.15: Result Summary of Monitoring

No	Factor Loadings: Standardized Regression Weights (β)		
		P	**B**
1	MO27: Regular Audit	<0.001	.717
2	MO28: Revealing Production Process	<0.001	.832
3	MO29: Revealing Production Cost	<0.001	.893
4	MO30: Revealing M&P Cost	<0.001	.852

RQ 2 (d): *To what extent do poor women entrepreneurs accept the Shariah principles of controlling?*

Significant Shariah principles of 'controlling' are mentioned below:

C37: Business must be termination once the contractual period is over. C38: Business could be termination if it becomes complicated. and C39: Business could be termination if the capital is impaired.

Table 5.16: Result Summary of Controlling

No	Factor Loadings: Standardized Regression Weights (β)		
		P	**B**
1	C37: Business Termination if the Contractual Period is Over	<0.001	.817
2	C38: Business Termination if it is Complicated	<0.001	.863
3	C39: Business Termination if the Capital is Impaired.	<0.001	.803
4	MO27: Regular Audit	<0.001	.717

5.16 Invariance Test

An invariance test was carried out by means of path analysis. In this case, the configural model that includes all the moderators is expected invariant (Kenny, 2011b). In this case, every moderator namely education (Educ.), income (Inc.), savings (Sav.), business experience (Exp.B) was divided into two groups, such as Educ. Low, Educ. High; Inc. Low, Inc. High; Sav. Low & Sav. High; and ExpB. Low & ExpB. High. To define "low and high" each group except income was intercepted in its 'nearby median'. Below the median was considered as "low" and above the median was considered as "high". In Malaysia, the average income of the low-income group is 2537 as of 2014 (EPU, 2016). So, the income RM 2500 and below were considered as low income and above RM 2500 as high income. However, findings of the invariance test suggest that the factor structure and loadings are sufficiently equivalent across the groups (Stat Wiki, 2016a)[50]. The invariance table (Appendix G) exhibits almost all the factors (accept religiosity and knowledge with savings) are invariant with the moderators. That implies, all the items in the *configural* model are consistent.

[50] S3tat-Wiki is a statistical website supported by the Academicians of Management Program at Case Western Reserve University and Brigham Youn4g University

Table 5.17: Group Differences

No	Items	N	Low	High
1	Education (educ.)	Low: 243 High: 87	SPM and Below	Above SPM
2	Income (Inc.)	Low: 184 High: 146	RM 2500 and Below	Above RM 2500
5	Savings (Sav.)	Low: 189 High: 141	RM 500 and Below	Above 500
6	Business Experience (ExpB.)	Low: 179 High: 151	7 years and Below	Above 7 Years

5.17 Building a Structural Model

A hybrid structural model was created with all the observed and latent variables. In this model, the independent variables (IVs) are Identification (I), Measurement (M), Monitoring (MO), and Controlling (C). On the other side, Entrepreneurship (E) is the dependent variable (DV). There are two control variables (CVs) such as Age and Experience with Microfinance (ExpM). This model included Knowledge (K), Religiosity (R) as the mediating variables.

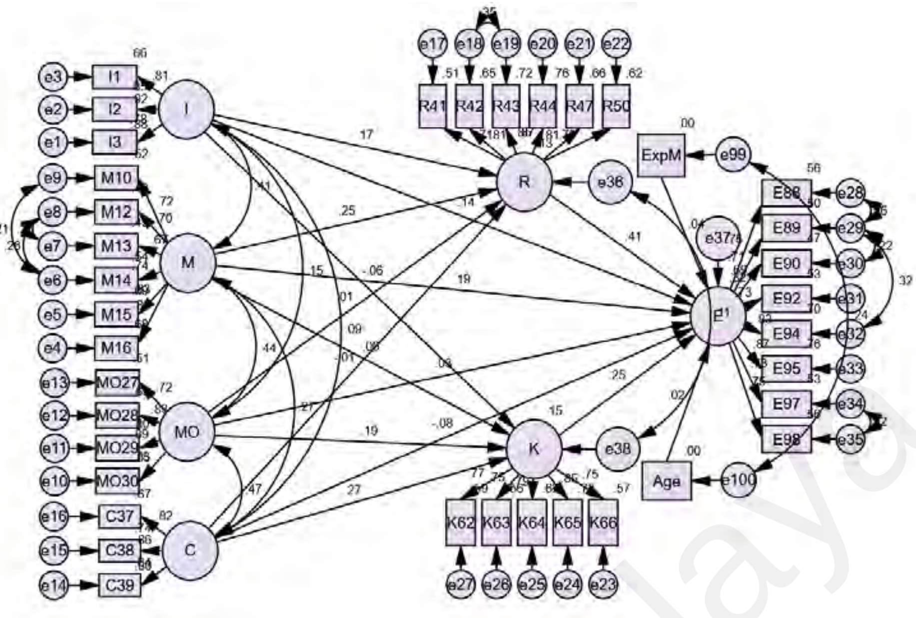

Figure 5.12: Hybrid Model

The model fit indices show that CHIN/DF:1.737 is significant at $p < .05$. So, the null hypothesis, ‘data do not fit with the model’ is accepted. The value of root mean square residual (RMR) is .175 which is higher the recommended value (.05-.08). Good of fit index (GFI) is .857 and adjusted goodness of fit index (AGFI) is .832 are near to the cut-off points (recommended GFI >.95 and AGFI >.90). But Tucker Lewis Index (TLI) .935 and comparative fit index (CFI) .942 values are significant (recommended value is >.90). Normed Fit Index (NFI) .874 is close to the cut-off point (recommended >.9); RMSEA is acceptable (.047; recommended <.05) and PCLOSE is significant .819 (recommended >.5). The indices TLI, CFI, NFI, RMSEA and PCLOSE suggest that the data are closely fitted with this model. Nevertheless, a composite model is created with the composite data for obtaining better results.

5.18 Composite Model: Total Effect

According to the model fit indices, the model below (Figure 5.13) demonstrates that CHIN/DF: .514 not significant at p <.05 (p=.847). That implies the data fit this model. Though RMR:.184 that is higher the recommended value (<.05) but GFI:.996 and AGFI: .988 are within the recommended values (for GFI is >.95 and AGFI >.90). Besides, CFI: 1.0, which is significant too (recommended value is >.90). RMSEA is .00 (recommended <.05) and PCLOSE is .982.

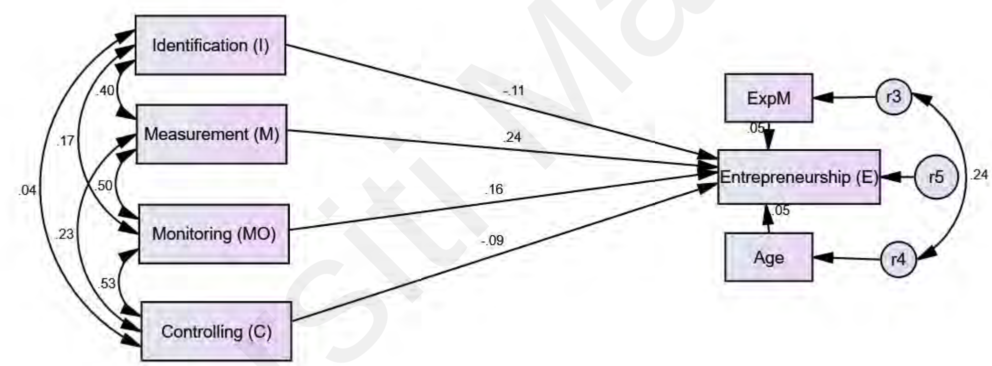

Figure 5.13: Composite Model (Total Effect)

The overall results suggest that this model is a perfectly-fitted model. It reflects the total effect of the IVs on DV. So, without including the mediators and moderators this model (Figure 5.13) produces the outputs as mentioned below:

Table 5.18: Total effect

Path			B	β	SE	CR	P
E	<-	I	-0.09	-0.109	.048	-1.892	0.058
E	<-	M	0.243	0.236	.067	3.607	<0.001
E	<-	MO	0.112	0.162	.048	2.318	0.02
E	<-	C	-0.058	-0.092	.039	-1.481	0.139

Dependent Variable: Entrepreneurship (E)

** I: Identification, M: Measurement, MO: Monitoring, and C: Controlling

** SE: Standard Error, CR: Critical Ratio; P: Probability

The findings (Table 5.18) show that measurement (M) and monitoring (MO) have significant positive impact on entrepreneurship (E) [β=.236, p <.0001; β=.162, p= .020 respectively]. Identification (I) and controlling (C) do not have significant impacts on entrepreneurship (E).

Based on these findings, the research question (3) can be answered.

5.18.1 Answer to the Research Question 3

RQ 3: *How do Shariah principles of mudarabah and musharakah (M&M) impact on poor women's entrepreneurship?*

The research question 3 can be divided into four sub-questions as mentioned below:

RQ 3 (a): *How do the Shariah principles of identification impact on poor women's entrepreneurship?*

Answer to the RQ 3 (a): Table 5.18 (above) demonstrates that path coefficient β = -0.109 is not significant at p <.05 (p = .0.058). That implies the Shariah principles of identification do not have a significant impact on the entrepreneurship. Though the p-value is not significant but the path coefficient (β) demonstrates negative impact on entrepreneurship.

RQ 3 (b): *How do the Shariah principles of measurement impact on poor women's entrepreneurship?*

Answer to the RQ 3 (b): Table 5.18 demonstrates that the path coefficient β=.236 is significant at p = <.001 (which is below .05). That implies the Shariah principles of measurement have a significant positive impact on entrepreneurship.

RQ 3 (c): *How do the Shariah principles of monitoring impact on poor women's entrepreneurship?*

Answer to the RQ 3 (c): Table 5.18 demonstrates that the path-coefficient β =.162 is significant at p < .05 (p = .020). That implies the Shariah principles of monitoring have a significant positive impact on entrepreneurship.

RQ 3 (d): *How do the Shariah principles of controlling impact on poor women's entrepreneurship?*

Answer to the RQ 3 (d): Table 5.18 demonstrates that the $\beta = -0.092$ is not significant at $p < .05$ ($p = 0.139$). That implies the Shariah principles of controlling do not have a significant impact on entrepreneurship. It also demonstrates the negative impact of the Shariah principles of controlling on entrepreneurship but the impact seems very minimal.

5.18.2 Justification of the Hypothesis 1

Hypothesis 1: *Shariah principles of mudarabah and musharakah (M&M) financing have a significant positive impact on poor women's entrepreneurship.*

Hypothesis 1 can be divided into four sub-hypotheses as shown in the table below:

Table 5.19: Justification of the Hypothesis 1

Hypotheses	P	B	Decision
1.H_a (a): Shariah principles of identification have a significant positive impact on poor women's entrepreneurship.	0.058	-0.109	Rejected
1.H_a (b): Shariah principles of measurement have a significant positive impact on poor women's entrepreneurship.	<0.001	0.236	Accepted

1.H_a (c): Shariah principles of monitoring have a significant positive impact on poor women's entrepreneurship.	0.02	0.162	Accepted
1.H_a (d): Shariah principles of controlling have a significant positive impact on poor women's entrepreneurship.	0.139	-0.092	Rejected

Table 5.19 above, suggests that hypothesis "*1. Ha (b): Shariah principles of measurement have a significant positive impact on poor women's entrepreneurship.*" and hypothesis "*1. Ha (c): Shariah principles of monitoring have a significant positive impact on poor women's entrepreneurship.*" are statistically significant. So, hypotheses *1. Ha (b) and 1. Ha (c)* are accepted. On the other hand, hypothesis "*1. Ha (a): Shariah principles of identification have a significant positive impact on poor women's entrepreneurship.*" and hypothesis "*1. Ha (d): Shariah principles of controlling have a significant positive impact on poor women's entrepreneurship.*" are not statistically significant. Therefore, hypotheses *1. Ha (a)* and *1. Ha (d)* are rejected.

5.19 Mediating Effect of Religiosity (R) and Knowledge (K)

According to the model fit indices, the model below (Figure 5.14) demonstrates that CHIN/DF:.877 is not significant at p <.05 (p=.570). So, the Chi-Square fit-test suggests that the data perfectly fit this model. Besides, RMR:.202 is not within the range of recommended value (<.05). GFI:.993 is above the cut-off point and AGFI: .974 also meets the recommended value (for GFI is >.95 and AGFI >.90) while CFI: 1.00 is very significant (recommended value is >.90). RMSEA= 0.00 at the most optimum level and PCLOSE= .948. very close to the optimum level. So, this model is perfectly-fitted with the data.

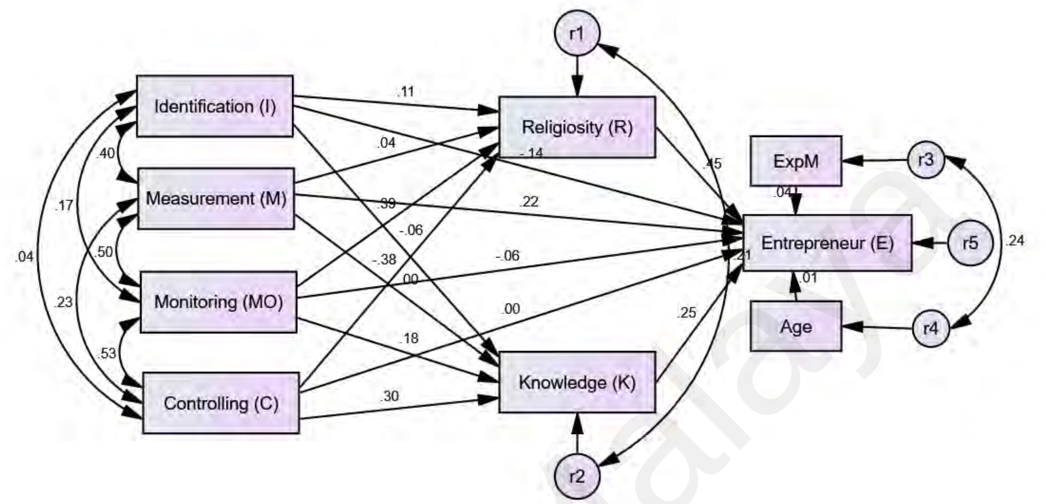

Figure 5.14: Composite Model with the mediators, religiosity (R) and knowledge (K)

5.19.1 Mediating Effect of Religiosity (R)

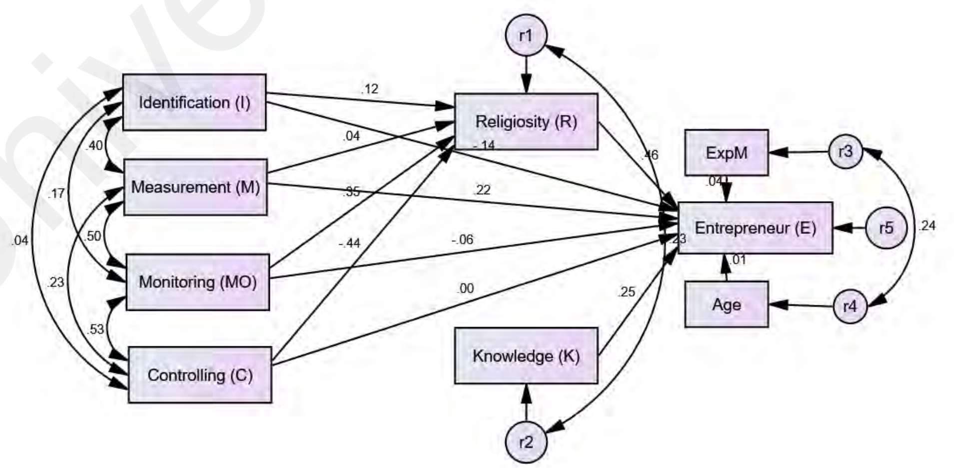

Figure 5.15: Mediation of Religiosity (R)

Table 5.20: Mediation of Religiosity (Bootstrapping Approach)

MED	IVs	Total Effects		Direct Effects		Indirect Effects		Results
		BC	P	BC	P	BC	P	
	I	-0.088	0.141	-0.119	0.015	0.054	0.046	PM
R	M	0.235	0.014	0.224	0.009	0.017	0.475	NM
	MO	0.095	0.211	-0.044	0.377	0.159	0.008	FM
	C	-0.197	0.007	0.002	<0.001	-0.2	0.005	PM

Dependent Variable: Entrepreneurship (E)

** P: Probability; BC: Bootstrap Confidence; R: Religiosity, I: Identification, M: Measurement, MO: Monitoring and C: Controlling.

** PM: Partial Mediation, FM: Full Mediation and NM: No Mediation

Table 5.20 (above) suggests that religiosity (R) has partial mediating effect on the relationship between the Shariah principles of identification (I) and entrepreneurship (E). It also poses partial mediating effect on the relationship between the Shariah principles of controlling (C) and entrepreneurship (E). This variable has full mediating effect on the relationship between the Shariah principle of monitoring (MO) and entrepreneurship (E). But religiosity (R) does not pose significant mediating effect on the relationship between the Shariah principles of measurement (M) and entrepreneurship (E).

From these findings, research question (4) can be answered.

5.19.2 Answer to the Research Question 4

RQ 4: *How does religiosity mediate the relationship between Shariah principles of mudarabah and musharakah (M&M) and entrepreneurship of poor women?*

Research Question (4) can be divided into four sub-questions, such as:

RQ 4 (a): *How does religiosity mediate the relationship between Shariah principles of identification and entrepreneurship of poor women?*

Answer to the RQ 4 (a): Table 5.20 (above) demonstrates that bootstrap confidence (BC) of the indirect effect 0.054 is significant at $p < .05$ ($p = 0.046$) and the direct effect -0.119 is significant at $p = 0.046$ while total effect is not significant. That implies, religiosity has partial mediating impact on the relationship between the Shariah principles of identification (I) and entrepreneurship (E).

RQ 4 (b): *How does religiosity mediate the relationship between Shariah principles of measurement and entrepreneurship of poor women?*

Answer to the RQ 4 (b): Table 5.20 (above) demonstrates that bootstrap confidence (BC) of the indirect effect 0.017 is not significant at $p < .05$ ($p= 0.475$) while the direct and total effects are significant. That implies, the religiosity does not have mediating impact on the relationship between the Shariah principles of measurement (M) and entrepreneurship (E).

RQ 4 (c): *How does religiosity mediate the relationship between Shariah principles of monitoring and entrepreneurship of poor women?*

Answer to the RQ 4 (c): Table 5.20 (above) demonstrates that bootstrap confidence (BC) of the indirect effect 0.159 is significant at $p < .05$ ($p = 0.008$) while the direct and total effects are not significant. That implies, religiosity has full mediating impact on the relationship between the Shariah principles of monitoring (MO) and entrepreneurship (E).

RQ 4 (d): *How does religiosity mediate the relationship between Shariah principles of controlling and entrepreneurship of poor women?*

Answer to the RQ 4 (d): Table 5.20 (above) demonstrates that bootstrap confidence (BC) indirect effect -0.2 is significant at $p < .05$ ($p = 0.005$); total effect -0.197 is significant at p = <0.007; and direct effect 0.002 is significant at p <0.001. That implies, religiosity has partial mediating impact on the relationship between the Shariah principles of controlling (C) and entrepreneurship (E). But, according to (Little et al. (2012) this type of mediation is called inconsistent mediation (see Chapter 4, Section 4.9).

5.19.3 Justification of Research Hypothesis 2

2. H_a: Religiosity has a significant mediating impact on the relationship between Shariah principles of mudarabah and musharakah (M&M) financing and poor women's entrepreneurship.

Hypothesis 2. H_a can be divided into four sub-hypotheses, such as:

Table 5.21: Justification of Research Hypothesis 2

Hypotheses	BC	p	Decision
2.H_a (a): Religiosity has a significant mediating impact on the relationship between Shariah principles of identification and poor women's entrepreneurship.	0.054	0.046	Accepted
2.H_a (b): Religiosity has a significant mediating impact on the relationship between Shariah principles of measurement and poor women's entrepreneurship.	0.017	0.475	Rejected
2.H_a (c): Religiosity has a significant mediating impact on the relationship between Shariah principles of monitoring and poor women's entrepreneurship.	0.159	0.008	Accepted
2.H_a (d): Religiosity has a significant mediating impact on the relationship between Shariah principles of controlling and poor women's entrepreneurship.	-0.2	0.005	Accepted

Based on the Table 5.21 above, hypothesis 2.H_a (a): "*Religiosity has a significant mediating impact on the relationship between Shariah principles of identification and poor women's entrepreneurship.*"; hypothesis 2.H_a (c): "*Religiosity has a significant mediating impact on the relationship between Shariah principles of monitoring and poor women's entrepreneurship.*"; and hypothesis 2.H_a (d): "*Religiosity has a significant mediating impact on the relationship between Shariah principles of controlling and poor women's entrepreneurship*." are statistically significant. So, these three hypotheses are accepted. But hypothesis 2. Ha (b): "*Religiosity has a significant mediating impact on the relationship* *between Shariah principles of measurement and poor women's entrepreneurship*." is not statistically significant. Therefore, hypothesis 2. Ha (b) is rejected.

5.19.4 Mediating Impact of Knowledge (K)

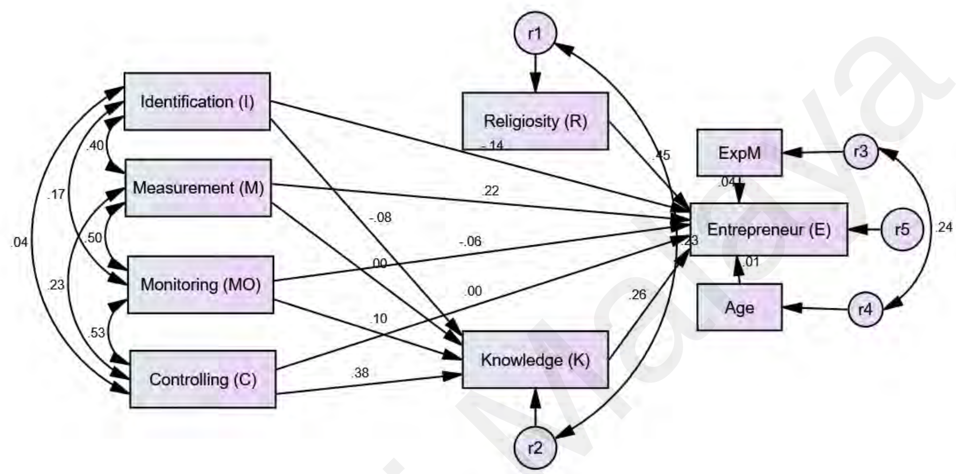

Figure 5.16: Mediation of Knowledge

Table 5.22: Mediation of Knowledge (Bootstrapping Approach)

MED	IVs	Total Effects		Direct Effects		Indirect Effects		Results
		BC	P	BC	P	BC	p	
	I	-0.038	0.638	-0.063	0.394	0.026	0.088	NM
K	M	0.099	0.288	0.003	0.992	0.096	0.002	FM
	MO	0.216	0.012	0.217	0.01	-0.001	0.908	NM
	C	-0.162	0.007	-0.142	0.011	-0.02	0.12	NM

Dependent Variable: Entrepreneurship (E)

** P: Probability; BC: Bootstrap Confidence; K: Knowledge, I: Identification, M: Measurement, MO: Monitoring and C: Controlling

** PM: Partial Mediation, FM: Full Mediation and NM: No Mediation

According to Table 5.22 above, knowledge (K) has no mediating impact on the relationship between the Shariah principles of identification (I) and entrepreneurship (E). This factor does not mediate the relationship between the Shariah principles of monitoring (MO) and entrepreneurship (E). Further, it does not impact on the relationship between the Shariah principles of controlling (C) and the entrepreneurship (E). But it has full and positive mediating effect on the relationship between the Shariah principles of measurement (M) and entrepreneurship (E). This finding suggests that knowledge on M&M has strong mediating effect on the relationship between Shariah principles of measurement and entrepreneurship. From these findings, research question (5) can be answered.

5.19.5 Answer to the Research Question 5

RQ 5: *How does knowledge mediate the relationship between Shariah principles of mudarabah and musharakah (M&M) and entrepreneurship of poor women?*

Research Question (5) can be divided into four sub-questions, such as:

RQ 5 (a): *How does knowledge mediate the relationship between Shariah principles of identification and entrepreneurship of poor women?*

Answer to the RQ 5 (a):

Table 5.22 demonstrates that bootstrap confidence (BC)= 0.026 is not significant at $p < .05$ ($p = 0.088$). That implies knowledge on M&M does not have a mediating effect on the relationship between the Shariah principles of identification (I) and entrepreneurship (E).

RQ 5 (b): *How does knowledge mediate the relationship between Shariah principles of measurement and entrepreneurship of poor women?*

Answer to the RQ 5 (b):

Table 5.22 suggests that bootstrap confidence (BC) of the indirect effect 0.096 is significant at $p < .05$ ($p = 0.002$) while the total effect (BC = 0.099, $p = 0.288$) and direct effect (BC = .003, $p = .992$) are not significant. That implies knowledge has the full mediating effect on the relationship between the Shariah principles of measurement (M) and entrepreneurship (E).

RQ 5 (c): *How does knowledge mediate the relationship between Shariah principles of monitoring and entrepreneurship of poor women?*

Answer to the RQ 5 (c):

Table 5.22 demonstrates that bootstrap confidence (BC)= -0.001 is not significant at $p < .05$ ($p = 0.908$). That implies knowledge does not have a significant mediating impact on the relationship between the Shariah principles of monitoring (MO) and entrepreneurship (E).

RQ 5 (d): *How does knowledge mediate the relationship between Shariah principles of controlling and entrepreneurship of poor women?*

Answer to the RQ 5 (d):

Table 5.22 demonstrates that bootstrap confidence (BC)= -0.02 is not significant at $p < .05$ ($p = 0.12$). That implies knowledge does not have mediating impact on the relationship between the Shariah principles of controlling (c) and entrepreneurship (E).

5.19.6 Justification of Research Hypothesis 3

3. Ha: *Knowledge has a significant mediating impact on the relationship between Shariah principles of mudarabah and musharakah (M&M) financing and poor women's entrepreneurship.*

Hypothesis 3. H_a can be divided into four sub-hypotheses, such as

Table 5.23: Justification of Hypothesis 3

Hypotheses	BC	p	Results
3.H_a (a): Knowledge has a significant mediating impact on the relationship between Shariah principles of identification and poor women's entrepreneurship.	0.026	0.088	Rejected
3.H_a (b): Knowledge has a significant mediating impact on the relationship between Shariah principles of measurement and poor women's entrepreneurship.	0.096	0.002	Accepted
3.H_a (c): Knowledge has a significant mediating impact on the relationship between Shariah principles of monitoring and poor women's entrepreneurship.	-0.001	0.908	Rejected

Hypotheses	BC	p	Results
3.H_a (d): Knowledge has a significant mediating impact on the relationship between Shariah principles of controlling and poor women's entrepreneurship.	-0.02	0.12	Rejected

According to Table 5.23, above hypothesis 3. Ha (b): "*Knowledge has a significant mediating impact on the relationship between Shariah principles of measurement and poor women's entrepreneurship.*" is statistically significant. So, this hypothesis is accepted. On the other hand, 3. Ha (a): "*Knowledge has a significant mediating impact on the relationship between Shariah principles of identification and poor women's entrepreneurship.* hypothesis 3. Ha (c): "*Knowledge has a significant mediating impact on the relationship between Shariah principles of monitoring and poor women's entrepreneurship.*" and hypothesis 3. Ha (d): "*Knowledge has a significant mediating impact on the relationship between Shariah principles of controlling and poor women's entrepreneurship.* are not statistically significant. So, these three hypotheses are rejected.

5.20 Moderating Effects

The moderation analysis was carried out by adopting group-comparison and group-differences technique (Stat Wiki, 2016b). Total eight groups were created from the four variables, such as education (low & high), income (low & high), savings (low & high), and business experience (low & high) (see the Table 5.17 for further detail).

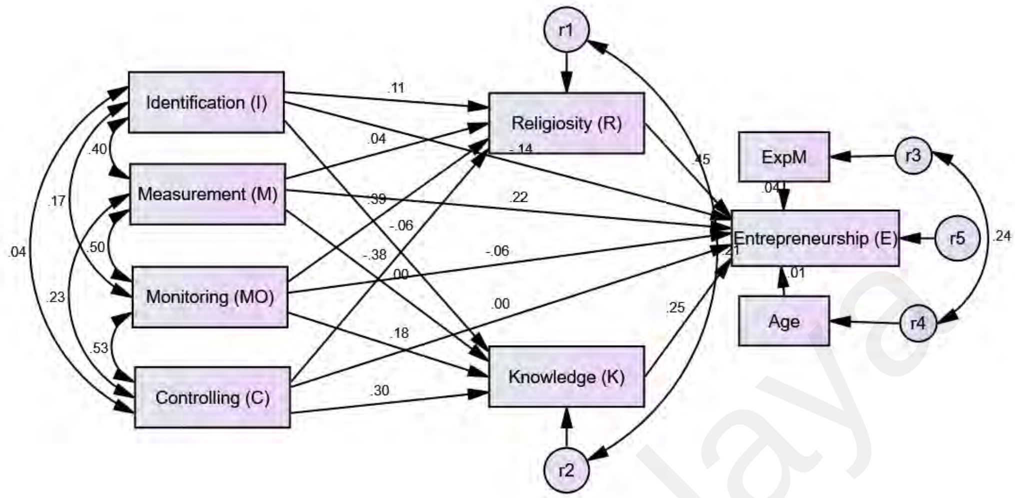

Figure 5.17: Moderation Model

The model fit[51] indices show that CHIN/DF:1.013 is not significant at p <.05 (p = .444). According to Chi-Square fit-test, the data fit this model perfectly. Though RMR: .254 is beyond the range of the recommended value (<.05) but GFI: .986 and AGFI: .947 meet the recommended values (for GFI is >.95 and AGFI >.90) while CFI: .999 value is also significant (recommended >.90). RMSEA is below than .05 (.003) and PCLOSE is 1.00. The overall results suggest this model is well-fitted with the data.

[51] If multiple hypotheses are tested on the same model, model fit will not change, so it only needs to be addressed once for that set of hypotheses (Stat-Wiki, 2016b).

5.20.1 Answer to the research question 6

RQ 6: *How do education, income, savings, and business experience moderate the relationship between Shariah principles of mudarabah and musharakah (M&M) and entrepreneurship of poor women?*

Research Question (6) can be divided in to four sub-questions as mentioned below

RQ 6 (a): *How does education moderate the relationship between Shariah principles and entrepreneurship of poor women?*

RQ 6 (b): *How does income moderate the relationship between Shariah principles and entrepreneurship of poor women?*

RQ 6 (c): *How does savings moderate the relationship between Shariah principles and entrepreneurship of poor women?*

RQ 6 (d): *How does business experience moderate the relationship between Shariah principles and entrepreneurship of poor women?*

These four sub-questions can be further divided in to sixteen sub-sub-questions and the answers are given below:

(i) Education:

RQ 6 (a) 1*: How does education moderate the relationship between Shariah principles of identification and entrepreneurship of poor women?*

Answer to the RQ 6 (a) 1: According to the table k1 (in Appendix K) $z=0.471$, at $p > .05$ is not statistically significant. That implies the different levels (low & high) of education do not affect the relationship between the Shariah principles of identification (I) and entrepreneurship (E).

RQ 6 (a) 2: *How does education moderate the relationship between Shariah principles of measurement and entrepreneurship of poor women?*

Answer to the RQ 6 (a) 2: According to the table k1 (in Appendix K) $z=0.326$, at $p > .05$ is not statistically significant. That implies the different levels (low & high) of education do not affect the relationship between the Shariah principles of measurement (M) and entrepreneurship (E).

RQ 6 (a) 3: *How does education moderate the relationship between Shariah principles of monitoring and entrepreneurship of poor women?*

Answer to the RQ 6 (a) 3: According to the table k1 (in Appendix K) $z= -0.118$ at $p >.05$ is not statistically significant. That implies the different levels (low & high) of education do not affect the relationship between the Shariah principles of monitoring (MO) and entrepreneurship (E).

RQ 6 (a) 4: *How does education moderate the relationship between Shariah principles of controlling and entrepreneurship of poor women?*

Answer to the RQ 6 (a) 4: According to the table k1 (in Appendix K) $z= -1.337$, $p >.05$ is not statistically significant. That implies, the different levels (low & high) of education do not affect the relationship between the Shariah principles of controlling (C) and entrepreneurship (E).

To sum up, the findings in the table (k1) (Appendix K) show that there is no moderating effect of education on the relationship between the Shariah principles of identification (I) and entrepreneurship (E); measurement (M) and entrepreneurship (E); monitoring (MO) and entrepreneurship (E); and controlling (C) and entrepreneurship (E). These results suggest that in case of offering M&M financing the Islamic microfinance institution does not need to consider the level of *mudaribs'* academic education.

(ii) Income

RQ 6 (b) 1: *How does income moderate the relationship between Shariah principles of identification and entrepreneurship of poor women?*

Answer to the RQ 6 (b) 1: According to the table k2 (in Appendix K) $z = -0.255$, $p > .05$ is not statistically significant. That implies, the different levels (low & high) of income do not affect the relationship between the Shariah principles of identification (I) and entrepreneurship (E).

RQ 6 (b) 2: *How does income moderate the relationship between Shariah principles of measurement and entrepreneurship of poor women?*

Answer to the RQ 6 (b) 2: According to the table k2 (in Appendix K) $z = 1.171$, $p > .05$ is not statistically significant. That implies the different levels (low & high) of income do not affect the relationship between the Shariah principles of measurement (M) and entrepreneurship (E).

RQ 6 (b) 3: *How does income moderate the relationship between Shariah principles of monitoring and entrepreneurship of poor women?*

Answer to the RQ 6 (b) 3: According to the table k2 (in Appendix K) $z= -0.365$, $p > .05$ is not statistically significant. That implies the different levels (low & high) of income do not affect the relationship between the Shariah principles of monitoring (MO) and entrepreneurship (E).

RQ 6 (b) 4: *How does income moderate the relationship between Shariah principles of controlling and entrepreneurship of poor women?*

Answer to the RQ 6 (b) 4: According to the table k2 (in Appendix K) $z= -0.475$, $p >.05$ is not statistically significant. That implies the different levels (low & high) of income do not affect the relationship between the Shariah principles of controlling (C) and entrepreneurship (E).

To sum up, the findings in table (k2) (Appendix K) demonstrate that there is no moderating effect of income on the relationship between the Shariah principles of identification (I) and entrepreneurship (E); measurement (M) and entrepreneurship (E); monitoring (MO) and entrepreneurship (E); and controlling (C) and entrepreneurship (E). These results suggest that in case of offering M&M financing the Islamic microfinance institution does not need to consider the variation of *mudaribs'* income.

(iii) Savings

RQ 6 (c) 1: *How does savings moderate the relationship between Shariah principles of identification and entrepreneurship of poor women?*

Answer to the RQ 6 (c) 1: According to the table k3 (in Appendix K) z= -2.142, p< .0001 is statistically significant. That implies the different levels (low & high) of savings negatively affect the relationship between the Shariah principles of identification (I) and entrepreneurship (E).

RQ 6 (c) 2: *How does savings moderate the relationship between Shariah principles of measurement and entrepreneurship of poor women?*

Answer to the RQ 6 (c) 2: According to the table k3 (in Appendix K) z= 0.641, p > .05 is not statistically significant. That implies the different levels (low & high) of savings do not affect the relationship between the Shariah principles of measurement (M) and entrepreneurship (E).

RQ 6 (c) 3: *How does savings moderate the relationship between Shariah principles of monitoring and entrepreneurship of poor women?*

Answer to the RQ 6 (c) 3: According to the table k3 (in Appendix K) z= -0.173, p >.05 is not statistically significant. That implies the different levels (low & high) of savings do not affect the relationship between the Shariah principles of monitoring (MO) and entrepreneurship (E).

RQ 6 (c) 4: *How does savings moderate the relationship between Shariah principles of controlling and entrepreneurship of poor women?*

Answer to the RQ 6 (c) 4: According to the table k3 (in Appendix K) z= 1.769, p >.05 is not statistically significant. That implies the different levels (low & high) of savings do not affect the relationship between the Shariah principles of controlling (C) and entrepreneurship (E).

To sum up, the finding in table (k3) (Appendix K) identify that there is a significant negative moderating effect of savings on the relationship between the Shariah principles of identification (I) and entrepreneurship (E). But it has no moderating effect on measurement (M) and entrepreneurship (E); monitoring (MO) and entrepreneurship (E); and controlling (C) and entrepreneurship (E). These results suggest that savings has a trivial and negative moderating effect on M&M financing. So, Islamic microfinance institution might need to consider the variation of *mudaribs'* savings habit.

(iv) Business Experience (ExpB.)

RQ 6 (d) 1: *How does business experience moderate the relationship between Shariah principles of identification and entrepreneurship of poor women?*

Answer to the RQ 6 (d) 1: According to the table k4 (in Appendix K) z= 0.134, p >.05 is not statistically significant. That implies, the different levels (low & high) of business experience do not affect the relationship between the Shariah principles of identification (I) and entrepreneurship (E).

RQ 6 (d) 2: *How does business experience moderate the relationship between Shariah principles of measurement and entrepreneurship of poor women?*

Answer to the RQ 6 (d) 2: According to the table k4 (in Appendix K) z= -0.051, p >.05 is not statistically significant. That implies, the different levels (low & high) of business experience do not affect the relationship between the Shariah principles of measurement (M) and entrepreneurship (E).

RQ 6 (d) 3: *How does business experience moderate the relationship between Shariah principles of monitoring and entrepreneurship of poor women?*

Answer to the RQ 6 (d) 3: According to the table k4 (in Appendix K) z= -0.691, p >.05 is not statistically significant. That implies the different levels (low & high) of business experience do not affect the relationship between the Shariah principles of monitoring (MO) and entrepreneurship (E).

RQ 6 (d) 4: *How does business experience moderate the relationship between Shariah principles of controlling and entrepreneurship of poor women?*

Answer to the RQ 6 (d) 4: According to the table k4 (in Appendix K) z=-0.208, p >.05 is not statistically significant. That implies the different levels (low & high) of business experience do not affect the relationship between the Shariah principles of controlling (I) and entrepreneurship (E).

To sum up, the finding in table (k4) (Appendix K) demonstrate that there is no moderating effect of business experience on the relationship between the Shariah principles of identification (I) and entrepreneurship (E); measurement (M) and entrepreneurship (E); monitoring (MO) and entrepreneurship (E); and controlling (C) and entrepreneurship (E). These results suggest that in case of offering M&M financing the Islamic microfinance institution does not need to consider the variations of *mudaribs'* business experience.

5.20.2 Justification of Hypothesis 4

1. *H_a: Education, income, savings, and business experience have significant moderating effects on the relationship between the Shariah principles of mudarabah and musharakah (M&M) financing and poor women's entrepreneurship.*

Hypothesis 4. H_a can be divided in four sub-hypotheses, such as:

These four sub-hypotheses can be divided in sixteen sub-sub-hypotheses, such as:

Table 5.24: Justification of Hypothesis 4

No	Hypotheses	z-statistics	Decision
	(i) Education		
1	*4. H_a (a). 1: Education has a significant moderating effect on the relationship between Shariah principles of identification and poor women's entrepreneurship.*	z=0.471 p >.05	Rejected
2	*4. H_a (a). 2: Education has a significant moderating effect on the relationship between Shariah principles of measurement and poor women's entrepreneurship.*	z= 0.326 p >.05	Rejected

No	Hypotheses	z-statistics	Decision
3	*4. H_a (a). 3: Education has a significant moderating effect on the relationship between Shariah principles of monitoring and poor women's entrepreneurship.*	z= -0.118 p >.05	Rejected
4	*4. H_a (a). 4: Education has a significant moderating effect on the relationship between Shariah principles of controlling and poor women's entrepreneurship.*	z= -1.337 p >.05	Rejected
	(ii) Income		
5	*4. H_a (b). 1: Income has a significant moderating effect on the relationship between Shariah principles of identification and poor women's entrepreneurship.*	z= -0.255 p >.05	Rejected
6	*4. H_a (b). 2: Income has a significant moderating effect on the relationship between Shariah principles of measurement and poor women's entrepreneurship.*	z= 1.171 p >.05	Rejected
7	*4. H_a (b). 3: Income has a significant moderating effect on the relationship between Shariah principles of monitoring and poor women's entrepreneurship.*	z= -0.365 p >.05	Rejected
8	*4. H_a (b). 4: Income has a significant moderating effect on the relationship between Shariah principles of controlling and poor women's entrepreneurship*	z= -0.475 p >.05	Rejected

No	Hypotheses	z-statistics	Decision
	(iii) Savings (Sav.)		
9	*4. H_a (c). 1: Savings has a significant moderating effect on the relationship between Shariah principles of identification and poor women's entrepreneurship.*	z= -2.142 P <.0001	Accepted
10	*4. H_a (c). 2: Savings has a significant moderating effect on the relationship between Shariah principles of measurement and poor women's entrepreneurship.*	z = 0.641 p >.05	Rejected
11	*4. H_a (c). 3: Savings has a significant moderating effect on the relationship between Shariah principles of monitoring and poor women's entrepreneurship.*	z = -0.173 p >.05	Rejected
12	*4. H_a (c). 4: Savings has a significant moderating effect on the relationship between Shariah principles of controlling and poor women's entrepreneurship.*	z = 1.769 p >.05	Rejected
	(iv) Business Experience (ExpB.)		
13	*4. H_a (d). 1: Business experience has a significant moderating effect on the relationship between Shariah principles of identification and poor women's entrepreneurship.*	z = 0.134 p >.05	Rejected
14	*4. H_a (d). 2: Business experience has a significant moderating effect on the relationship between Shariah principles of measurement and poor women's entrepreneurship.*	z = -0.051 p >.05	Rejected

No	Hypotheses	z-statistics	Decision
15	*4. H_a (d). 3: Business experience has a significant moderating effect on the relationship between Shariah principles of monitoring and poor women's entrepreneurship.*	z = -0.691 p >.05	Rejected
16	*4. H_a (d). 4: Business experience has a significant moderating effect on the relationship between Shariah principles of controlling and poor women's entrepreneurship.*	z = -0.208 p >.05	Rejected

Table 5.24, above demonstrates that hypothesis "*4. H_a (c). 1: Savings has a significant moderating effect on the relationship between Shariah principles of identification and poor women's entrepreneurship.*" is statistically significant (z= -2.142, p < .0001). That implies, the different levels (low & high) of savings negatively affect the relationship between the Shariah principles of identification (I) and entrepreneurship (E). So, *hypothesis 4. H_a (c).* is accepted. But rest of the hypotheses are not statistically significant. So, other hypotheses on group-difference moderation are rejected.

5.21 Triangulation

The methodological triangulation technique was adopted to justify the M&M based micro-equity financing model (discussed in Chapter 3, Section 3.3) and the findings of the quantitative study. This technique also helped make a decisive conclusion. The specific purposes of employing the triangulation technique are: 1) justification of M&M based micro-equity financing; 2) justification of client recruitment based on their religiosity, knowledge, and entrepreneurial skills; 3) justification of the importance of clients' education, income, savings and business experience; 4) justification of the impact of Shariah principles on entrepreneurship; and 5) making a decisive conclusion on the applicability of M&M as micro-equity finance. In this regard, two academic scholars and one industrial expert were interviewed by using an open-ended questionnaire (Kennedy, 2009; Rossman & Wilson, 1985). All the questions were formulated relating to the research objectives. Qualitative method was adopted to interpret the data. In this regard, the narrative and thematic approaches were incorporated. Each issue was considered as a theme. At the end, the key points of every theme were coded and then, arranged in a structural pattern (P. Atkinson, 2010; Bold, 2012; Czarniawska, 2001; Guest et al., 2012; Mills, 2010). The result of the qualitative approach is presented below.

5.21.1 Academic Scholar (1)

Academic Scholar : Dr Wan Marhaini Binti Wan Ahmad

Dept. : Department of Finance and Banking, Faculty of Business and Accountancy, University of Malaya, Malaysia

Place of Interviewing : At her office

Ground Floor, Faculty of Business and Accountancy (Old Building)

Date & Time : 13 July 2018. 12.00pm.

Interviewer : Reazul Islam

A Brief Biographical Sketch of Dr Wan Marhaini Binti Wan Ahmad

Dr Wan Marhaini Binti Wan Ahmad, the authoress of "Islamic Economics, Banking and Finance: Concepts and Critical Issues" and *"Modul 5-3 Kewangan dan Perbankan Islam untuk Diploma Eksekutif Perakaunan Koperasi"* is a distinguished scholar in Islamic Finance, Islamic Banking, and Islamic Economics. At present, she is a lecturer at the Department of Finance and Banking in the Faculty of Business and Accountancy in University of Malaya. She is one of the Shariah advisors for the Malaysian Islamic banking and capital market industries. She has been an active member of the 'Association of Shariah Advisors in Islamic Finance Malaysia' since 2013. She has published various scholarly articles in the prominent peer-reviewed journals. She has remarkably contributed to the paradigm of Islamic finance and banking by conducting significant researches (UMEXPERT, 2018b).

Theme 1: M&M Based Micro-Equity Financing Model

Mudarabah financing can be offered to the people who possess entrepreneurial skills but cannot exercise their expertise due to the lack of financial capital. Besides, some people who cannot run their business properly due to the shortage of capital can get access to *musharakah* contract. So, *mudarabah* and *musharakah* can be considered as the ideal financing instruments for both types of entrepreneurial poor. The main expected outcome of M&M financing would be engaging poor people with the businesses. Because only the lack of capital resists them to enter the business. Though skill is another factor to be counted in this regard. However, it would be a good attempt if Islamic microfinance institutions offer

M&M financing to the entrepreneurial poor. These instruments could be viable for capitalising them to join with the entrepreneurial practice.

Some negative externalities might sprout forth. But from the theoretical point of view, M&M are the best instruments to finance the poor. These instruments are better than *qardul hasan*. Because, *qardul hasan* turn people into "subsidy minded". Poor people may become reluctant as well as unfunctional to income generating activities. Because there is no enforcement of making a profit or paying any surplus return to the financing institute. On the other hand, in M&M, the capital provider joins the business as a partner (either sleeping partner or active partner) with an expectation of gaining profit. Besides, the capital provider reserves all the rights to monitor the business or participate in the management. However, both parties take responsibilities for the business.

Islamic microfinance institution should "embrace this original concept of *mudarabah*" since it benefits both parties. The financing institution needs to monitor the *mudarib*. (It must be clearly defined that monitoring and interfering in the management are two different issues.) But it (as a *rab-al-mal*) cannot interfere with the business management in *mudarabah* contract. *Rab-al-mal* has the right to set policies in *mudarabah* investment. But without proper monitoring, it is not possible to identify if the policies are being implemented.

Musharakah mutanaqisah can be used as a potential tool to alleviate poverty in a sustainable manner. It can significantly contribute to the poverty alleviation programme. In term of asset acquisition, *musharakah mutanaqisah* is the best financing method. The opportunity of acquiring asset would be regarded as a vision by the assetless people and therefore, they have something look forward to. Thus, it can motivate them to work harder. q*ardul hasan* can also offer the similar opportunity. Since *musharakah mutanaqisah is* linked to the business activities, it is relatively better than *qardul hasan*. Because it yields higher economic value.

Theme 2: Religiosity, Knowledge and Entrepreneurial Skills

The client-selection process in M&M is an important issue. Based on the entrepreneurial skills, religiosity and products-knowledge client recruitment would be viable indeed. But if poverty eradication is an economic agenda of the government, the assigned organization should not only provide capital to the poor entrepreneur but also excel their skills needed. By means of training poor people can gain competencies and become entrepreneurs. This would be one of the most effective ways to bring them out of poverty.

Religiosity might drive these clients to be more regulative. Most importantly, they should have the sense of *amanah*. The basic level of religiosity that the ordinary people generally possess should be taken as a start-up by prioritising their sense of *amanah.* So, this element (*amanah*) should be embroiled in their religious life. However, if the clients are diligent as well as sincere in their responsibilities and commitment, then the basic level of religiosity is acceptable in the recruitment phase. In terms of product knowledge, the client should have enough knowledge of M&M. Without knowing the characteristics of the products clients cannot make the right decision to deal with these products.

Theme 3: Importance of Education, Income, Savings and Business Experience

The certain level of academic qualification is needed to be a client of M&M schemes. Clients should at least know what the equity is and how to utilize that money in the business.

So, they need the basic literacy to understand these factors. Besides, without the primary knowledge of accounting, they cannot run the business too. (Even, some scholars are referring to our Prophet (PBUM) as he did not possess academic literacy but, he was not alone in the business operation. He kept some associates to take care of accounting and documentation. He was not only known for his entrepreneurial excellence but also for the deep sense of *amanah*.) To be pragmatic, in this modern age it is difficult to helm any business without literacy. So, clients must possess the minimum level of literacy so that they can understand the terms and conditions of M&M while keeping the transaction records and business accounting.

Clients' ability to generate income is important in every way. Because the investor has an expectation of a return from the investment. So, clients' ability to generate income should be taken into consideration too. In the same vein, clients' savings habit is very crucial for the sake of making reinvestment as well as to be promoted to the *musharakah* contract from the *mudarabah*. So, financing institutions should pay attention to this issue with high priority. On the other hand, whether clients should possess business experience depends on the mandate of the microfinance institutions (MFIs). People who have the potentials to be entrepreneurs should be recruited along with the people who have the business experiences. If the mandate is to eradicate poverty, MFIs should not only focus on the people with business experience. They should also recruit the people who aspire to be entrepreneurs (poor people due to lack of opportunity sometimes could not gain any practical experiences). Thus, MFIs can target the greater segment of poor people.

Theme 4: Impact of Shariah Principles of Entrepreneurship

According to the Shariah rules, in M&M both parties share the risks. And that is how it differs from the conventional interest-based financing. Shariah law somehow incentivises the *mudarib.* Therefore, Shariah principles of *mudarabah* and *musharakah* (M&M) might have a positive impact on *mudarib's* entrepreneurial exercise

Theme 5: Decision and Conclusion

Literally, interest-free Islamic financing is very lucrative to the clients. Because they are not alone carrying the financial risk. Especially, those who do not have money at the start-up, sharing risk would be very burdensome for them. But the reality in today's world, it is hard to find the good lemons. For the M&M instruments, financing institutions need the good one, the one with the sense of *amanah*. The existing financial system has the filtering mechanism that can screen out the 'bad lemons'. M&M could be applied if the 'bad lemons' are isolated properly. Considering the current circumstances, M&M cannot be offered as they are. The proper modification is needed. An effective and efficient mechanism should be set especially, to monitor and to select the 'good lemons. The modern Islamic banking system has effective infrastructure, sound environment, efficient technology and information system. By installing these facilities M&M can be launched as micro-equity financing to address poverty as well. But government intervention is important. The main blocks are the underlying risks factors, particularly selecting the 'good lemon' while isolating the 'bad lemon'.

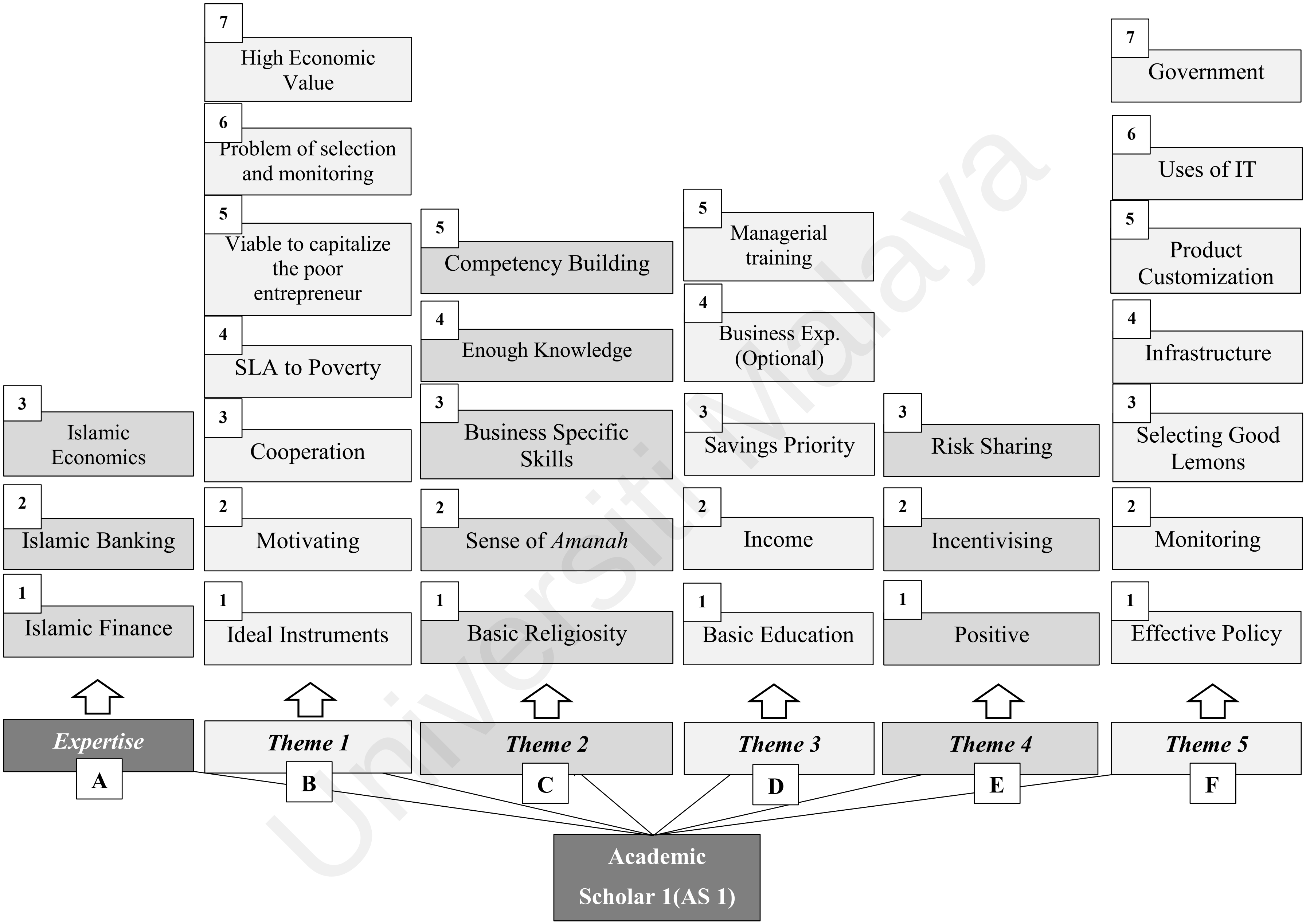

Figure 5.18: Thematic Cods (Academic Scholar 1)

5.21.2 Academic Scholar (2)

Responded : Dr Mohd Shahid bin Mohd Noh

Dept. : Department of Shariah and Economics

Academy of Islamic Studies, University of Malaya, Malaysia

Venue : At his office

Date & Time : 23 July 2018. 11.00 am -11.31am.

Interviewer : Reazul Islam

A Brief Biographical Sketch of Dr Mohd Shahid bin Mohd Noh

Dr Mohd Shahid bin Mohd Noh is a distinguished Shariah scholar. He is a lecturer at the Department of Shariah and Economics of Academic of Islamic Studies in University of Malaya. He published several scholarly articles in the reputed peer-reviewed journals. He is involved with several Islamic finance institutions and research projects. His areas of expertise are Islamic transaction and Islamic economic thought (UMEXPERT, 2018a).

Theme 1: M&M Based Micro-Equity Financing Model

Mudarabah and *musharakah* (M&M) instruments can bridge the rich and poor while rich is the financer and poor is *mudarib*. It builds a relationship between these two group of people and thus, makes business activities easier, effective as well as profitable. From the religious point of view, the blessings of God exist in this relationship. So, M&M based microfinancing could be the better alternative to the conventional microfinance for poverty alleviation. The main products of Islamic microfinance should be *mudarabah* and *musharakah* (M&M) because these products feature the main characteristics of Islamic finance by sharing the profit and risks. M&M financing is associated with the identity and faith of Muslim. However, there are some people who have the entrepreneurial qualities but no capital; on the other side, some people having money but possess no skills. In this case, *mudarabah* contract can unite them into being partners. Thus, capital and skills can be combined. In M&M contracts involved parties are the business partners. They make a relationship prior to starting a venture. They have cooperative exchanges so, they take care of each other. In *mudarabah* agreement, *mudarib* conducts business with honesty and integrity while *rab-al-mal* monitor (not interfere) whether the business is being operated according to their mutual plan. Diminishing partnership (*musharakah mutanaqisah*) is a more effective mechanism to provide ownership of the assets to the poor (compared to *bi bithaman ajil*). Since financial institutions are obliged to bear the risk they are reluctant to offer this product. Literally, this instrument would be more suitable to rescue the poor clients from poverty. Specifically, in term of addressing poverty in a sustainable manner inclusion of *musharakah mutanaqisah* seems very appropriate.

Theme 2: Religiosity, Knowledge and Entrepreneurial Skills

Mudarib should be recruited based on the business management skills and they should have minimum knowledge about these products. Religiosity could be a selecting criterion too. But this is not the main determinant of selecting the right client. People could be religious but not hard working enough to make a business profitable. In term of selecting an honest *mudarib*, religiosity could be considered as a reliable criterion.

Theme 3: Importance of Education, Income, Savings and Business Experience

Academic education is important but the financing institution should not be very ambitious about the level of education. Poor people may not get the opportunity to obtain higher education. (Up to SPM exam is considerably enough in term of bookkeeping and calculation.)

Clients must have the savings habit that needs to be calculated from the beginning of their involvement with the M&M financing. Financing organization should make it mandatory and if possible to monitor clients' accounts. By ensuring savings, *mudarabah* agreement can be transferred to *musharakah*. In this regard, *mudaribs'* ability to income is important to ensure their savings. In the same vein, business experience is important indeed. It makes easy for the organization to assess the abilities of the client. But there are many people who do not have business experience but they are committed and capable to run businesses.

Theme 4: Impact of Shariah Principles on Entrepreneurship

The influence of Shariah principle on clients' entrepreneurial exercise should be different than the influence of the conventional baking rules. Here, Islamic finance institutions need to build awareness on the Shariah principles and the profit and loss sharing mechanism. Clients should consider it as *amanah*. However, the impact of M&M financing might not be significantly different than the conventional banking rules. The conventional bank is giving loan and Islamic bank is giving capital but, at the end, the performance of the clients is the main factor to measure. Only the concept of *amanah* and honesty can make a difference in terms of better performance and benefit of the venture. And this realization may develop clients' *taqwa*. The awareness of interest-free capital and the risk sharing approach might encourage *mudarib* to take the risky venture and s/he may outperform others. Hence, better performance is expected from the Shariah-based financing.

Theme 5: Decision and Conclusion

There must be an effective risk management mechanism installed in the M&M financing process. Because poor people may fail to make the return duly. Two most important things need to be considered in M&M contract are 1) potentials of the project and 2) commitment of the *mudarib*. These two factors can determine the magnitude and implication of the kind of partnership. Instead of religiosity, the achievement of the clients or the recommendation from someone who knows the client as an honest person should get more priority. There could be certain tests to diagnose clients' honesty, commitment, and achievement by evaluating *mudaribs'* track records of financial dealings. So, it would be better to make a balance in two group of people with the business experience and without business experience.

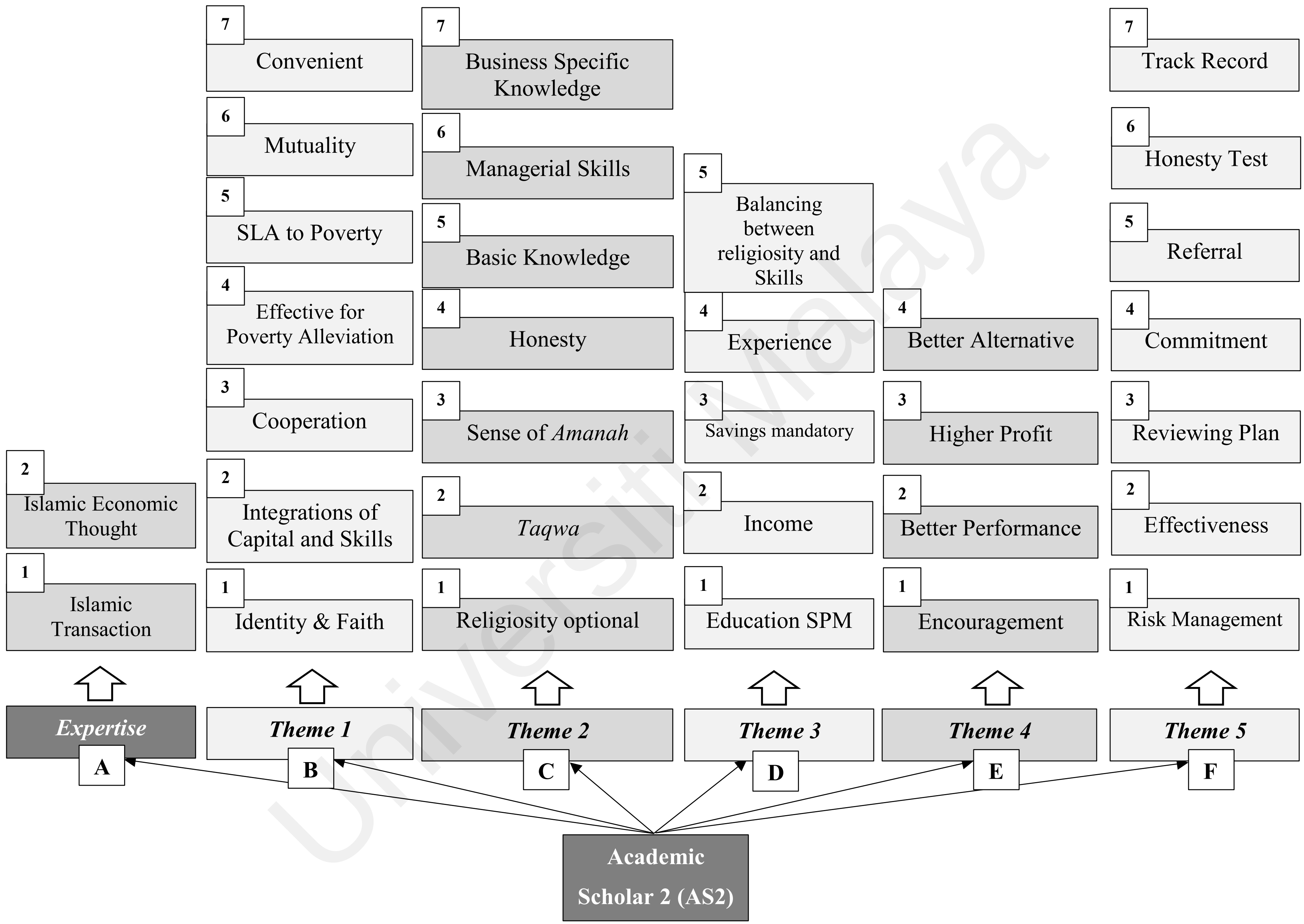

Figure 5.19: Thematic Cods (Academic Scholar 2)

5.21.3 Industrial Expert

Respondent : Assoc. Prof. Dr. Ahcene Lahsasna

(Chief Executive Officer)

Organization : SALIHIN Shariah Advisory Sdn Bhd

Taman Samudra, 68100 Batu Caves, Malaysia

Venue : Office. 555, Jalan Samudra Utara 1

Date & Time : 23 July 2018; 3.00 pm to 3.40 pm

Interviewer : Reazul Islam

A Brief Biographical Sketch of Associate Professor Dr Ahcene Lahsasna

Associate Professor Dr Ahcene Lahsasna is one of the most prominent as well as versatile experts in Shariah law and Islamic Finance and Banking in Malaysia. At present, he is the Chief Executive Officer (CEO) at SALIHIN Shariah Advisory Sdn Bhd. Formerly, he was serving as an Associate Professor at International Centre for Education in Islamic Finance (INCEIF). He has earned more than 6 years of Industrial experience as a marketing manager. He positioned himself as the Head of the Documentation Department at Manufacturer and Exporter Group in Malaysia. Most remarkably, has been the Chairman of the Shariah Board of Etiqa Takaful Berhad since July 2015. He was one of the honourable members in the Shariah advisory council at Malayan Banking Berhad (MAY Bank). Further, he was an appointed panellist in the Finance Agency Accreditation (FAA Accreditation Panel).

As a registered Shariah advisor he has been offering his expertise to the Islamic Unit Trust Schemes and Islamic Securities (Sukuk) with the Securities Commission of Malaysia while being a member in the committee of Accounting and Auditing Organization for Islamic Financial Institution (AAOIFI), Malaysia. He is an honourable member of the Shariah Committee at RGA Takaful (Labuan) and a registered fanatical planner (RFP) and certified trainer in wealth management and financial planning. Dr Lahsasna has authored many books and a great number of scholarly articles on Islamic finance and banking (Bloomberg, 2018; SALIHIN Shariah Advisory, 2018).

Theme 1: M&M Based Micro-Equity Financing Model

Mudarabah and *musharakah* (M&M) instruments are suitable for the microfinance sector because of the readiness of the market. Malaysian market is familiar with these instruments. People who have accounts in the Islamic banks somehow know the nature of these instruments. For instance, the saving accounts in the Islamic bank is designed based on the *mudarabah* concept. *Musharakah* finance is available in the retail market too. Ordinary people are dealing with the diminishing *musharakah* for asset acquisition. So, these products can be restructured to be offered as the micro-equity finance. Since these instruments promote entrepreneurship they must be more viable to exercise microenterprises as well.

Mudaribs with no capital can be eligible for *mudarabah* and the ones who can contribute a portion of the capital can join *musharakah* contact. Since the capital participation ratio is not specified in Shariah, *mudarib* can join *musharakah* contract with the minimum amount of capital sharing (which could be even 1% or .5%). If it is the group-based *musharakah* financing, the group member can mutually manage the capital too.

Musharakah mutanaqisah can be the most suitable product to handle poverty in a sustainable manner. This product can be initiated from the very beginning of the financial cycle. There must be a lot of pros and cons. Because this instrument can mitigate the overall risks of M&M financing by incentivising the clients. Offering ownership of the property should be considered as the main incentive to the client. It can either be offered singularly or simultaneously with the *musharakah*. In every case, clients' demands need to be considered with high priority.

Theme 2: Religiosity, Knowledge and Entrepreneurial Skills

Client selection is the most critical issue in M&M financing. In this regard, two criteria need to be maintained: 1) the client must possess business skills and 2) she must be honest. There should be a sound combination of these two factors. In today's business world moral hazard (it means "the attributes of a person cannot be trusted") is perceived as the most crucial problem. Many people may have entrepreneurial competencies but fewer of them might possess good morals.

The combination of three things such as managerial skills, religiosity and knowledge can ensure the right *mudarib*. But the level of each attribute should be prioritised based on the quantity of capital allocation by the financing institution. If the allocated money is high then, the entrepreneurial skills are required to be high as well. The seasoned entrepreneurship can escape major business risk while yielding a better profit margin. On the other hand, a devoted religious person with the low level of entrepreneurship may not be viable for the big investment, from the organizational point of view. Because investor always expects a positive outcome from the business. For the small investment financing institute may become somewhat lenient in term of entrepreneurial skills but for the big amount, proper screening is needed to select the skilful *mudarib*.

Theme 3: Importance of Education, Income, Savings and Business Experience

In the modern age, academic education is a must for conducting any business. But it should be taken as a complementary criterion. People without academic education might possess good entrepreneurial skills and morals. So, academic education should not be a precondition for M&M financing. Besides, poor people may not have enough privilege to go for education. If the formal education is set as a mandatory requisition a large group of people might remain unaddressed. In case of switching from *mudarabah* to *musharakah* a *mudarib* must contribute her own capital and that can come only from her savings. In this case, the organization should keep the mandatory savings option in its portfolio. This provision of transformation would be helpful in risk management. But other things such as the timeline and the nature of the project should be taken into consideration too. Based on the projection of the expected return, the mandatory saving amount can be defined. And then, after a certain period client can be shifted from *mudarabah* to *musharakah* financing contributing the savings amount as the share of the capital.

Clients' business experience should be taken as an advantageous option in M&M financing. If the clients have the business experience it could be considered as a value-adding quality. Business experience can lift the possibility of business-success to a higher degree. If it is group-based financing, peer members can share their skills and expertise to conduct the business mutually. Besides, unskilled people can learn from the group-members who possess business and managerial skills. So, they can be trained. Microfinance institution can provide some specific entrepreneurship enhancement training. Besides, (there could be an option) people with better business skills would get the bigger amount of capital. Thus, capital can be distributed more rationally.

Theme 4: Impact of Shariah Principles of Entrepreneurship

Clients' of M&M need to be better informed about the Shariah rules in order to make awareness. Once they are aware of Shariah-based financing that it provides the higher incentive; it offers ownership of the asset; and it treats the clients as partners not as borrowers, they will be more attracted to this system. In M&M financing the relationship between the financing institutions and the clients is totally different. These instruments emphasise trust and transparency and mutuality. Besides, they are not looking for any guarantee of profit. Thus, Islamic microfinance can create more incentive for the clients. Hence, Shariah should have a positive impact on the clients' entrepreneurship.

Theme 5: Decision and Conclusion

M&M can be the better alternative to the conventional microfinance. The market is very promising. These are the true instruments of partnership and the real modes of profit and loss sharing financing. Clients feel the financing institution as the partner as well as the risk taker. It creates rationality and balance. Because people without capital can be the partners in *mudarabah* while people with money can join the *musharakah* contract. Besides, from *mudarabah* contract clients can be promoted to *musharakah* agreement.

Moral hazard and agency problem are the common issues in these equity-products. *Mudarabah* contract is riskier than the *musharakah* contract since the loss is solely borne by the capital provider in this agreement. The risk is comparably low in *musharakah* contract because of mutual capital contribution and risk sharing. (*Mudarabah* as the venture capital is rarely offered by the commercial Islamic banking. It is mostly designed in the deposit side only.) If these instruments are offered to finance the projects effective measures should be taken in order to mitigate the risks. Financing organization should be cautious about the size of the contributed capital while monitoring the *mudaribs'* business activities. In this regard, incorporation of the poll of partnership method which is being practised as the group-based lending technique in the conventional microfinance can reduce the risks. The group efforts in managing the business can minimise the risk of project failure. (Though group conflict would be an *ex-post* issue.) However, some issues can be managed and some can be addressed. In this regard, pulling the people with the similar mindset in a certain business can be one of the potential solutions. Further, third-party guarantee, for instance, guarantee-organization, government agencies, *waqf* institutions, other microfinance institutions as the third party may support the M&M schemes. Overall, risks of M&M finance can be managed in many viable ways. Besides, there are some risk-mitigating instruments. Cash *waqf* can be used to mitigate risks. A third-party-guarantor might invest the cash *waqf* with the condition of subsiding the default clients. Another microfinance institution plays the same role. It can subsidy the unsuccessful clients from its business income. Thus, the guarantors can support M&M based schemes to sustain returning or rejuvenating the failure *mudaribs* to the business activities. Government's intervention might be very helpful for the microfinance institution. (It should be done silently. Otherwise, moral hazard might occur. Clients would be reluctant to pursue his/her responsibility duly.).

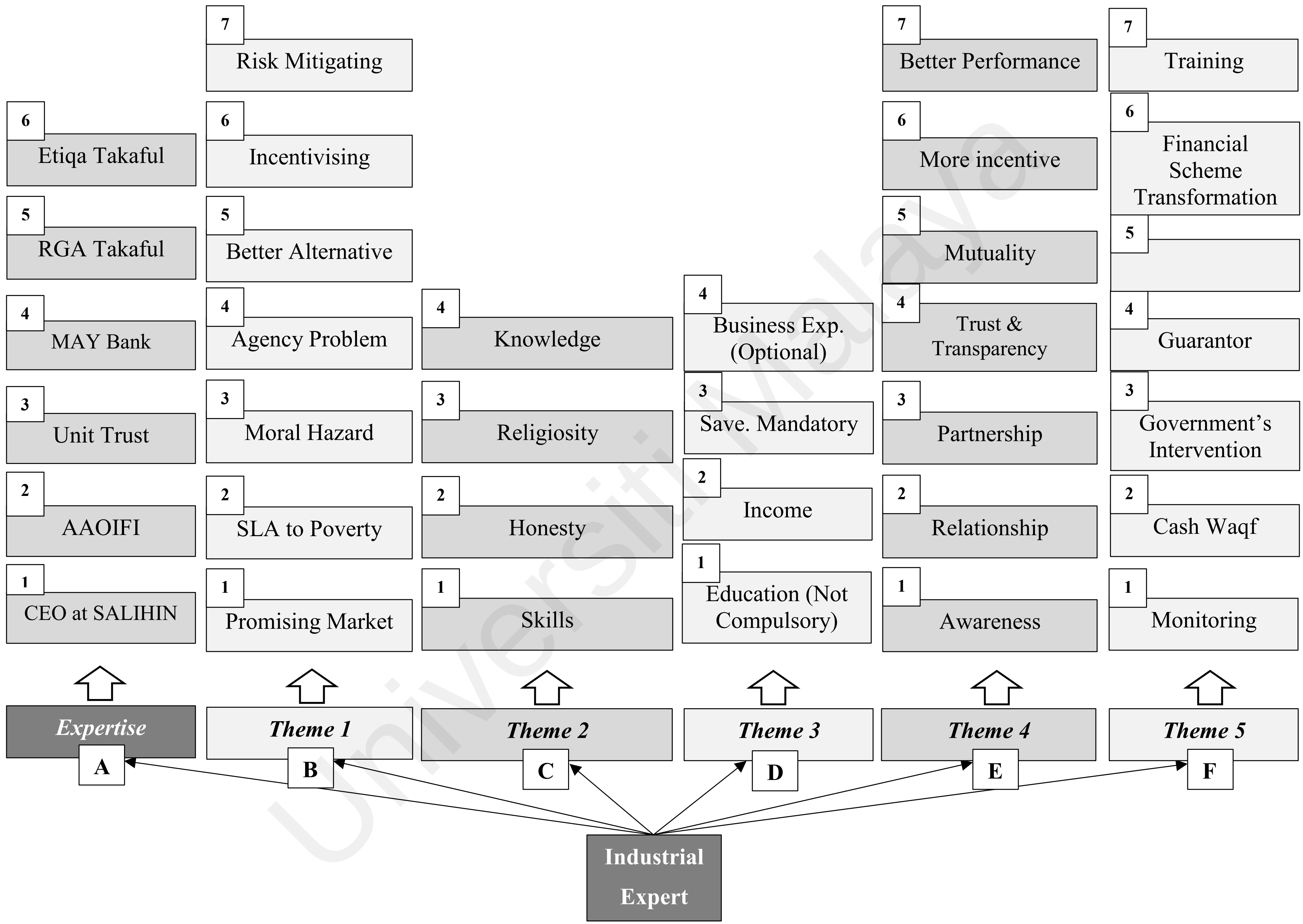

Figure 5.20: Thematic Cods (Industrial Expert)

5.21.4 Summary of the Qualitative Findings

All the respondents shared their thoughtful insights on the critical issues of *mudarabah* and *musharakah* (M&M) based micro-equity financing in the paradigm of Islamic microfinance. They were almost univocal on the importance and implication of M&M financing for poverty alleviation. They unwaveringly supported the application of *musharakah mutanaqisah* from the perspective of sustainable poverty alleviation concept. This instrument is said could be the most efficient tool for facilitating the ownership of the tangible asset to the poor entrepreneur. In terms of selecting clients, they accepted the idea of religiosity, knowledge, and entrepreneurship while created somewhat different opinions. They proposed some other options or criteria along with these three parameters in order to select the clients; those are: measuring honesty based on the recommendation by others, long-term observation, looking for the historical background (in term of financial dealings) of the clients and so on. They emphasized more on clients' entrepreneurial skills. In this regard, they suggested skill enhancement programmes that should be offered by the financing institutions. Besides, it is important for a client to have academic literary, income, savings habit and business experiences. But these are not to be the mandatory conditions for the clients, as all the respondents univocally stated.

In term of the influence of Shariah principles, they suggested the clients need to be informed as well as taught about the divine rules. If so, presumably they (clients) will accept the Shariah principles. Based on the logical reasoning, the academic scholars envisioned that the influence of Shariah principles might positively impact on the entrepreneurial exercise. In this regard, the industrial expert affirmed the possibility of the positive influence of the Shariah rules on the business.

All of them extend pieces of invaluable suggestions for the application of M&M based micro-equity financing. For instance, Academic scholar (1) suggested for policy formulation and infrastructure building, client selection process and selecting the good clients, government intervention, installation of information technology. Academic scholar (2) prioritised on the effective management, referral, honesty-test, proper planning and implementation. The industrial expert suggested: proper monitoring, policy for risk-leveraging and risk-mitigating, involving a third-party guarantor, defining the appropriate capital size for business etc.

5.22 Minor Findings

A part of the survey-data provides unique and insightful outputs. Since those outputs are not related to the research objectives they are stated here as minor findings. For stratification in data collection, four questions were used in a 'score-card' (see Chapter 4, Section 4.18.2) in order to determine if the participant falls within the ambit of the entrepreneur. Each question values 1 or 0 points. Based on the score the respondents were classified as naive, nascent, aspiring and actual entrepreneurs. For instance, with 1 point a respondent was identified as a naive entrepreneur, with 2 points nascent, with 3 points aspiring and with 4 points actual entrepreneur (Fiet et al., 2006).

However, a cross-tabulation analysis was conducted (Appendix: L) to explore the relationship between the specific demographic variables and entrepreneurship of the respondents. Hence, the relationships between the socio-demographic variables such as age, education, occupation and income with the entrepreneurship were analysed. These findings are not coherent with the main objectives of this study but they provide sensible information about the respondents. Thus, they might nourish this study while unlocking opportunities for new research.

5.22.1 Age and Entrepreneurship

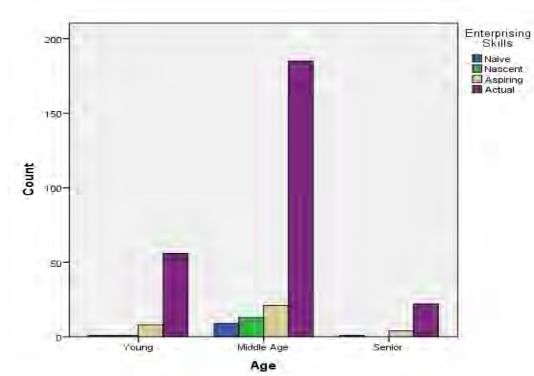

Figure 5.21: Age and Entrepreneurship

According to the Table 11 (Appendix L), 12.1% young women (age is below 35) possess aspiring entrepreneurship and 84.8% actual entrepreneurship. About 9.2% middle-aged women (36-56 years old) have aspiring and 81.1% have actual entrepreneurship. 14.8% of old aged women (57 and above) have aspiring and 32% actual entrepreneurship.

5.22.2 Education and Entrepreneurship

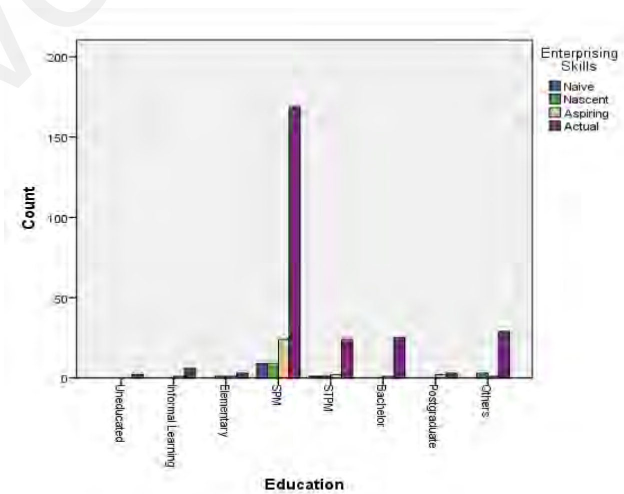

Figure 5.22: Education and Entrepreneurship

Respondents (Table 12, Appendix L) with SPM level of education, 11.4 % of them possess aspiring entrepreneurship, 80.1% actual entrepreneurship. But the respondents, who have STPM education, 7.1% of them have aspiring and 85.7% actual entrepreneurship (n=28). Among the bachelor degree holders, 3.8% have aspiring and 96.2% actual entrepreneurship (n=26).

5.22.3 Occupation and Entrepreneurship

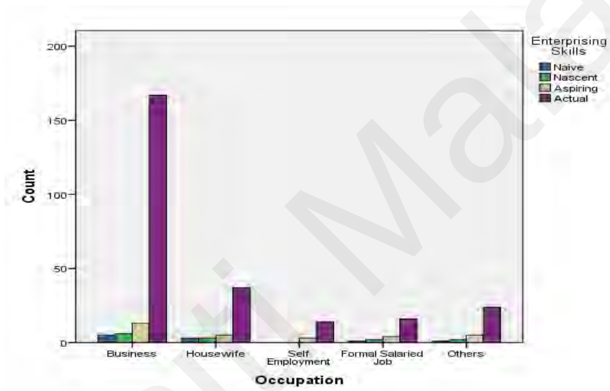

Figure 5.23: Occupation and Entrepreneurship

Table l3 (Appendix L) suggests respondents, who have a direct contribution to the business 6.8% of them possess aspiring entrepreneurship, while 87.4% have actual entrepreneurship. Respondents, who were mainly housewives and conducting business is the secondary choice, 10.4% of them are aspiring and 77.1% actual entrepreneur. About 18% of the self-employed respondents have aspiring and 82.4% actual entrepreneurship. Among the formal salaried respondents, 17.4% of them have aspiring and 69.6% actual entrepreneurship.

5.22.4 Income and Entrepreneurship

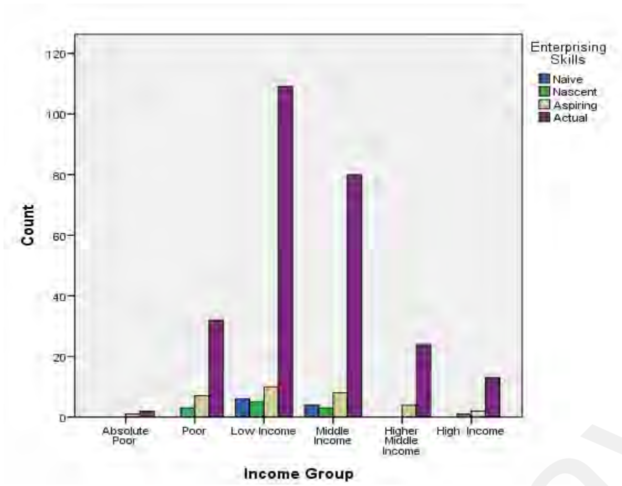

Figure 5.24: Income and Entrepreneurship

In the table l4 (Appendix L), only 16.72% of the poor possess aspiring entrepreneurship, and 76.2% of them possess actual entrepreneurship. About 8% (7.7%) low-income respondents have aspiring and 83.8% of them have actual entrepreneurship. 8.4% of the middle-income respondents have aspiring and 84.2% have actual entrepreneurship. Among the higher middle-income borrowers, 14.3% have aspiring and 85.7% actual entrepreneurship.

5.23 Summary of the Minor Findings

In a brief, most of the young respondents (84.8%) have the highest level of entrepreneurship (actual). Besides, 96.2 % of the respondents with the higher level of education (with a bachelor degree) is found having actual entrepreneurship. Respondents, who have the direct contribution to the business, 87.4% of them and 85.7% of the higher middle incomers possess actual entrepreneurial skills.

5.24 Conclusion

The findings of the quantitative study suggest that the Muslim women in Selangor possess the primary knowledge on *mudarabah* and *musharakah* financing. They maintain an intrinsic religious-life performing 'general worshipping'. Their entrepreneurial skills lay at the moderate level (aspiring entrepreneurship). They are more likely to accept the Shariah principles that are commonly used in the partnership business. The results of the statistical analyses demonstrate that *shariah* principles of M&M have the partial positive impact on the entrepreneurship. The mediating effect of religiosity is higher than that of knowledge. Besides, the different levels of *mudaribs*' academic-qualification, income, savings and business experience have very trivial moderating effects.

But the output of the qualitative study is somewhat different. All the experts are univocal on knowledge, religiosity, and entrepreneurship as the selection criteria of the clients. They devices that clients could better perform under the Shariah business rules. They asserted that academic qualification and business experience can enhance clients' business performance. They also opined out that income and saving have the important roles in shifting the *mudarib* from *mudarabah* contract to *musharakah*. They further asserted that the inclusion of *musharakah mutanaqisah* in microfinancing would be an appropriate approach to alleviate poverty in a sustainable manner.

CHAPTER 6: DISCUSSION

6.1 Introduction

This chapter is dedicated to making an elaborate discussion on the overall findings presented in the previous chapter. It exhibits the key attributes of this study by referring to the statistical outputs and the findings from in-depth interviews. Thus, it elucidates the coherence between research findings and research objectives. The research objective (1) and research objective (2) were achieved by means of exploratory factor analysis (EFA) and confirmatory factor analysis (CFA). Structural equation modelling (SEM) contributed to meet the objectives (3), (4), (5) and (6). The overall findings were triangulated by the experts' opinions.

6.2 Discussion on Objective 1

RO 1: *To investigate the extents of poor women's knowledge of mudarabah and musharakah (M&M) financing, religiosity and entrepreneurial qualities.*

6.2.1 Knowledge of M&M

In term of knowledge of *mudarabah* and *musharakah* (M&M) financing, respondents asserted that they knew the main characteristics of *mudarabah* financing such as both parties sharing business profit but the loss is carried by the financing institution. They are also familiar with the basic attributes of *musharakah* financing such as both parties share profit and loss and the financer can participate in the management along with the client. So, it can be assumed the respondents have the basic knowledge of *mudarabah* and *musharakah*

(M&M). But it is also understood that they are less familiar with the other important terms and conditions of M&M. For instance, respondents were not completely aware of the compensation that they must pay in *mudarabah* scheme for any damage or financial loss if it occurs due to their negligence or mismanagement. They were not fully aware of the interest-*based* financial transaction as a sinful act. Their knowledge seems unclear about Islamic microfinance as an interest-free financing system and M&M schemes are the collateral-free *halal* financing instruments. They did not know that they can get ownership of the tangible assets by means of diminishing *musharakah*. Though all the respondents liked *halal* business they were not fully aware that M&M are the *halal* schemes. The overall findings suggest that the respondents are familiar with the basic terms and condition of M&M financing but they are not properly knowledgeable about the total attributes of these instruments.

6.2.2 Religiosity

In term of religiosity, respondents believed in the teaching of *Shahadah* (faith), which is the basic principle of *Iman* in Islam. They used to perform the five times mandatory prayers a day and keep compulsory fasting during the month of *Ramadhan*. They did recite the Qur'an as well as practised the religious manner in their daily lives. All of them aspire to perform *Haj.* On the other hand, they seemed unwilling to pay *zakat,* join the religious meeting, be truthful and avoid sinful acts. It could be assumed that due to the low level of income rural poor are not compelled to pay *zakat.* Besides, lack of education and financial insolvency might be the reasons for their delicate morals. For the same reasons, they might infirmly practice truthfulness while being unwary to commit sin.

From the viewpoint of the religiosity scale which was developed by Krauss et al., (2007) on the Malaysian perspective, the respondents of this study possess intrinsic religious personality (*Ibadat*) that reflects through their regular worshipping and other mandatory practices of rituals. But in the light of the 'international religiosity measurement scale' (Khodayarifard, 2016), Malaysian ordinary Muslim women have the high level of religious belief but the moderate level of religious practice. For instance, they emphasised on regular prayers and worshipping but were less interested in doing charity (donation), attending the religious meeting and being very dutiful to Allah (SWT). According to Noble et al., (2007), there is a balance of intrinsic and extrinsic religiosity exists in the religious life of the respondents. Presumably, their daily lives and social standing somehow influence their religiosity to be internalized.

6.2.3 Entrepreneurial Quality

The respondents of this study seemed to possess several entrepreneurial qualities, such as 'decision making', 'problem-solving', 'diligence', 'negotiation skill', 'idea generation', 'business evaluation', 'financial planning', and 'experimentation'. But other competencies, such as 'enthusiasm', 'creativity', 'positive thinking', 'adoption with the change', 'organizing', 'presentation skills', and 'team-work' are found not significant. So, according to Fiet at.al. (2006) respondents are more likely to be the aspiring entrepreneurs rather than the actual entrepreneurs.

To be added, Ming Yen Teoh & Choy Chong (2014) empirically scrutinized and found that Malaysian women are somewhat lagged behind in the entrepreneurial exercise due to some specific reasons such as lack of spousal support, lack of confidence, weak social and business networking, few laws to support working family, neglecting women entrepreneurs in the cottage industry, and lack of domestic help and home-based childcare.

6.3 Discussion on Objective 2

RO 2: *To investigate poor women entrepreneurs' willingness to accept the Shariah principles of mudarabah and musharakah (M&M) financing defined for Islamic microfinance.*

To achieve the second objective, this study analysed respondents' willingness to accept the Shariah principles that were defined for the purposes of identification (I), measurement (M), monitoring (MO) and controlling (C). The findings are discussed below:

6.3.1 Identification (I)

In term of identification, respondents gave high priority to 'trustworthiness', 'transparency' and 'good morals'. But the parameters, 'adhered religiosity', 'good ethics', 'good social reputation', 'good credit history', 'diligently repayment' and 'rules orientation' did not reach the level of significance. It seems respondents could accept only the primary rules of identification (I) process of Shariah. Assumingly, respondents might have oversimplified the M&M financial schemes because of having less knowledge as well as lack of practice of these products.

6.3.2 Measurement (M)

Findings of this study suggest that the respondents are more willing to accept the basic rules of measurement process of Shariah, such as 'solely managing business', 'capital sharing', 'profit and loss sharing', 'goods and financial capital (as business capital)', 'having ownership (paying back the price)' and 'agreed amount of the capital (the size of capital sharing)'. But they gave less priority on 'sharing loss as a penalty (if the loss occurs due to their misconduct)', 'liquidation upon termination (liquidating the business to take back the invested capital)', 'loss or gain to the ex-partner due to the share transfer (in term of transferring ownership of the business to another party or to acquire a business from another party)', 'proportionally loss sharing upon termination', 'loss of capital means capital impairment', 'profit sharing (on an agreed ratio)', and 'recapitalization (if the business requires)'. From the findings, it is obvious that the respondents tend to accept the parameters those are easy to understand. So, it could be assumed that due to the lack of knowledge respondents preferred the common rules of measurement (M). They might have accepted some other conditions if they were fully aware of the importance and implication of the Shariah principles of M&M financing.

6.3.3 Monitoring (MO)

In term of monitoring, respondents were more interested to accept some vital Shariah rules, such as 'regular audit', 'revealing production process', 'revealing production cost', and 'revealing marketing and promotional cost'. But they were less assertive to 'joint management', 'revealing financial report', 'revealing market information' and 'revealing business information'. That implies, respondents preferred to accept only those parameters that are commonly practised in any kind of ordinary partnership-business. Furthermore, they like to conceal the financial information. of the business. It could be assumed that due to the lack of trust respondents do not want to disclose all information to the microfinance institution.

6.3.4 Controlling (C)

The findings suggest that respondents could accept the termination of the business agreement in three circumstances: 1) once the 'contractual period is over', 2) if the business is 'complicated', and 3) if the 'capital is impaired'. But they were less likely to prefer 'joint decision making', 'management employed by the MFI', 'third-party management', 'business termination upon mutual agreement', 'business termination if it incurs loss', 'mutually business policy amendment' and 'business termination upon *mudarib*'s demise'. It can be assumed that the mudaribs are more interested to make the decision by themselves. Specifically, they seemed individualistic in terms of business management, termination and policy amendment. It can be counted as a common nature of the petty traders. They might believe in the inheritance or legacy system existing in the Malay society. That could be the reason, they didn't accept 'business termination upon *mudarib*'s demise'.

To sum up, the findings provide the significant information about the Malaysian entrepreneurial poor women. The result suggests that the clients of microfinance are willing to accept the normative rules of the partnership business. It also reflects their abidingness to the common orders of the microfinance institution in Malaysia. For instance, the factor 'identification' includes the parameters: 'good ethics', 'good reputation', 'good credit history', 'diligent repayment', and 'rules abidingness'. These parameters are practised by the conventional microfinance institutions as well. This finding also indicates the moral and ethical standing of the ordinary Malaysians (Zabid & Alsagoff, 1993). Since all the respondents' in this study were Muslim their religious ideology was reflected in their perception too.

In case of 'measurement', respondents are pragmatic in selecting the Shariah rules, those are: 'business liquidation upon termination', 'loss or gain goes to the ex-partner in share-transfer' and ‘proportionately loss sharing upon termination’. These are the common practices, almost in every partnership business. For monitoring, the significant parameters were ‘revealing production process’, ‘revealing production cost’ and ‘revealing marketing and promotional cost’. These findings indicate the open-mindedness and trustworthiness of the Malaysian entrepreneurial women. However, in the case of controlling respondents preferred ‘business termination if it is complicated’, ‘business termination if the contractual period is over’ and ‘business termination if capital is impaired’. Presumably, they accepted these Shariah rules due to having their own business or prior businesses experiences. Besides, this output indicates their professional views towards partnership business. These practices can apparently reserve equal interest for both parties. Hence, the entrepreneurial poor women in Selangor identified themselves as professional as well as pragmatic.

6.4 Discussion on Objective 3

RO 3: *To analyse the impact of Shariah principles of mudarabah and musharakah (M&M) financing on the entrepreneurship of poor women who are involved with the microfinance programme.*

The findings of this study show that (Table 5.18, pg. 237) Shariah principles of identification and controlling do not have a significant impact on entrepreneurship. But the Shariah principles of measurement and monitoring have significant positive impacts on entrepreneurship. These findings provide valuable insights. The respondents probably preferred not to be structurally identified. According to the proposed Shariah rules of identification, a *mudarib* should be religious, trustworthy, transparent, morally and ethically good. Besides, she must be rules oriented and diligent in repayment as well as maintain a good credit record. These rules might have perceived very rigid and difficult to follow by the respondents. They might not prefer the strict controlling process. For instance, the proposed 'exit strategies' (the process of business termination) were not well accepted by the respondents.

On the other hand, Shariah principles of measurement and monitoring have significant positive impacts on the entrepreneurship. That implies, these categories of Shariah rules might enhance the business performance of the *mudarib*. Notably, the conditions, no collateral, no contribution of the financial capital, no loss sharing by the *mudarib* and the opportunity of owning the asset are seemed to be very lucrative to the *mudarib*. Besides, they might have perceived the joint management, auditing and revealing information as the normative practices in partnership. Thus, the Shariah principles of monitoring might become the positive contributor to *mudaribs'* entrepreneurial exercise. Therefore, it can be assumed that if the Shariah principles are easy to maintain as well as supportive of *mudaribs*' business activities they might positively impact on the entrepreneurship of the *mudaribs*. Consequently, mudaribs will be more interested to be involved with the *mudarabah* and *musharakah* (M&M) financing.

6.5 Discussion on Objective 4

RO 4: *To analyse the mediating effect of religiosity on the relationship between Shariah principles of mudarabah and musharakah (M&M) financing and the entrepreneurship of poor women who are involved with the microfinance programme.*

The findings in Chapter (5), section (5.19.1) suggest that religiosity (R) has a partial mediating effect on the relationship between the Shariah principles of identification (I) and entrepreneurship (E). It also partially mediates the relationship between the Shariah principles of controlling (C) and entrepreneurship (E). The 'partial effects' suggest that respondents' religiosity was influenced by the Shariah principles of identification (I) and controlling (C) while it impacts on their entrepreneurship (E). That implies religiosity plays an intermediating role between the Shariah principles of identification (I) and entrepreneurship (E) as well as the Shariah principles of controlling (C) and entrepreneurship (E). The result also shows that the direct effect of the Shariah principles of identification (I) on entrepreneurship (E) is negative at the significant level [BC -0.119 at p = 0.015] but the indirect effect is positively significant [BC 0.054 at p = 0.046]. That implies the combination of Shariah rules and religiosity positively effects on entrepreneurship. On the other hand, the presence of religiosity (R) turns the positive relationship between Shariah principles of controlling (C) and entrepreneurship (E) into a negative relationship [indirect relationship, BC -0.2 at p = 0.005]. It could be assumed that even being religious the respondents disfavoured the strict Shariah rules of controlling (C).

There is no mediating effect of religiosity (R) on the relationship between the Shariah principles of measurement (M) and entrepreneurship (E). But the total effect and direct effect are positively significant. That implies Shariah principles of measurement have the significant positive impact on the entrepreneurship without religiosity. This finding indicates the normative behaviour of the ordinary Malaysian women (they are religious or not) in term of their business dealings. They assumingly maintain certain clarity in case of measurement issues, such as 'capital sharing', 'profit and loss sharing', and 'agreed amount of the capital (the size of capital sharing)' and so on.

Religiosity (R) has a full mediating effect on the relationship between the Shariah principles of monitoring (MO) and entrepreneurship (E). This result indicates that religiosity (R) influenced the relationship between the Shariah rules of monitoring and entrepreneurship.

Therefore, it can be assumed that religiosity (R) is the main contributory factor in the relationship between the Shariah principles of monitoring (MO) and entrepreneurship (E) of the *mudarib*. So, it can be assumed that the religious *mudarib* might accept the Shariah principles of monitoring (MO) in term of M&M partnership.

6.6 Discussion on Objective 5

RO 5: *To analyse the mediating effect of knowledge on the relationship between Shariah principles of mudarabah and musharakah (M&M) financing and the entrepreneurship of poor women who are involved with the microfinance programme.*

Knowledge (K) has no mediating impact on the relationship between the Shariah principles of identification (I) and entrepreneurship (E). It does not intermediate the relationship between the Shariah principles of monitoring (MO) and entrepreneurship (E) as well. But the enhanced positive direct effect of monitoring (MO) on entrepreneurship (E) suggests that though knowledge does not intermediate this relationship its presence in the model enhances this relationship between the Shariah principles of monitoring (MO) and entrepreneurship (E). For instance, the direct effect [BC= 0.217 at p = 0.01] is higher than the total effect [total effect BC 0.216 at p = 0.012]. Knowledge (K) also does not have any mediating impact on the relationship between the Shariah principles of controlling (C) and entrepreneurship (E). But the significant direct effect suggests that knowledge of M&M decrease the negativity of the Shariah principles of controlling (C) on entrepreneurship (E) [Total effect BC= -0162 at p = 0.007 and direct effect, BC = -0.142 at p = 0.011]. On the other hand, knowledge has the full mediating effect on the relationship between the Shariah principles of measurement (M) and entrepreneurship (E). This finding indicates that *mudarib,* who possess knowledge of M&M financing are influenced by the Shariah rules of measurement (M) and become the better performer in the business.

6.7 Discussion on Objective 6

RO 6: *To analyse the moderating effects of education, income, savings and business experience on the relationship between Shariah principles of mudarabah and musharakah (M&M) financing and the entrepreneurship of poor women who are involved with the microfinance programme.*

The findings of this study suggest that the moderating effects of education, income, savings and business experience on the relationship between the regulatory parameters of *mudarabah* and *musharakah* (M&M) and entrepreneurship (E) are very trivial and almost negligible. Only, savings showed a significant negative effect on the relationship between the entrepreneurship (E) and identification (I) [$z = -2.142$ at $p < .05$]. The negative effect indicates that the higher level of savings reduces or weakens the influence of the Shariah principles of identification (I) on entrepreneurship. From the overall findings, it can be concluded that the variation of clients' education, income, savings and business experience do not affect the impacts of Shariah principles on entrepreneurship. Therefore, in the case of offering M&M financing instrument, microfinance institutions do not need to emphasise on the levels of *mudaribs*' education, income, savings and business experience.

6.8 Research Triangulation

To achieve more reliability of the findings from the quantitative study, a methodological triangulation was carried out. In this regard, two academic scholars and one industrial expert were interviewed with an open-ended questionnaire. Referring to the thematic codes as mapped in Figure 5.18, Figure 5.19, and Figure 5.20 a justification of the findings the quantitative study is given below:

6.8.1 Justification of the Financial Model of M&M

According to the academic scholar (1), [Figure 5.18, AS1. $B_{1,2,3,4,5,6\ \&\ 7}$]. *mudarabah, musharakah* and *Musharakah mutanaqisah*-based micro-equity financing could be an ideal system for poverty alleviation. Because this system instrumentalizes the profit and loss sharing (PLS) financial tools. The PLS system works based on the cooperation between the financer and clients. Hence, the incorporation of *musharakah mutanaqisah* in this model can be regarded as the sustainable livelihood approach to poverty alleviation. Because this instrument can ensure ownership of the tangible assets by the poor people. This opportunity would act as a motivating driver for the clients as well. Overall, M&M micro-equity financing can enhance microenterprise that must positively impact on the economy. There could be some challenges in identifying the right clients and monitoring them during the period of business operation.

According to the academic scholar (2), [Figure 5.19, AS2. $B_{1,2,3,4,5,\ \&\ 6}$]. the implementation of this financing model can manifest Muslim identity and faith. By using these provisional instruments, it would be possible to integrate the capital of one party and the skills of another. So, both parties would be cooperative in the M&M based partnership business. This model could be the most effective way of poverty alleviation in a sustainable manner because of the presence of *Musharakah mutanaqisah*. It will enhance mutuality in the socioeconomic paradigm. Moral hazard would be a potential threat to this system.

According to the industrial expert, [Figure 5.20, IE. $B_{1, 2, 3, 4, 5, 6, \& 7}$] this model seems easy to be implemented since the market is promising and almost ready. Malaysian Muslim people are familiar with the *mudarabah, musharakah* and *musharakah mutanaqisah* instruments. (Once they open and savings account in any Islamic bank they get to know about *mudarabah* and *musharakah* concept. On the other hand, Islamic hope financing in Malaysia is mostly based on *Musharakah mutanaqisah*) Besides, the implementation of the sustainable livelihoods approach to poverty alleviation is possible by offering *Musharakah mutanaqisah.* By asset acquisition, poor people will be less vulnerable to any kind of economic shock. Because ownership of the tangible assets might facilitate the poor a firm economic standing. This model seems a better alternative to the conventional microfinance model. M&M can provide a better incentive to the poor. But there are possibilities of moral hazard and agency problems.

The statements of the experts suggest that the proposed model of M&M is viable to address the disadvantaged people in Malaysia. Some negative outcomes such as moral hazard and agency problem may appear. In that case, Islamic microfinance institutions need to embrace some effective strategies to address those negative issues.

6.8.2 Justification of Knowledge, Religiosity, and Entrepreneurship

Figure 5.18, Figure 5.19, and Figure 5.20 demonstrate that all three experts unanimously agreed on the client-selection criteria based on the clients' knowledge, religiosity and entrepreneurial skills [AS1. $C_{1,3, \& 4}$; AS2. $C_{1, 5, \& 6}$; & IE. $C_{1, 3, \& 4}$]. But they emphasized more on the skills and honesty [AS1. C_3 & C_5; AS2. $C_{4 \& 6}$; & IE. C_1]. In addition, academic scholar (1) stressed the sense of *amanah* [AS1. C_2] and academic scholar (2) cast light on the sense of *amanah* and *taqwa* [AS2. $C_{2 \& 3}$].

The opinions of the experts neither denied nor fully accepted religiosity as the sole criterion for selecting an honest client. They added some other viable alternatives as well. But all of them agreed on skills and knowledge. Though they suggested on skills and knowledge enhancement programmes that should be conducted by the financing institutions.

6.8.3 Justification of Education, Income, Savings, and Business Experience

Figure 5.18, Figure 5.19, and Figure 5.20, exhibits, all the experts univocally voted on the importance of clients' education, income, savings and business experience [AS1. $D_{1,2,3, \& 4}$; AS2. $D_{1, 2, 3, \& 4}$; & IE. $D_{1, 2, 3, \& 4}$]. Notably, Academic scholar (1) opined that business experiences should be taken as an optional criterion [AS1. D_4] since entrepreneurial skills can be developed by providing training [AS1. D_5]. Academic scholar (2) gave less importance to the academic education [AS2.D_1]. He opined that poor people might not get enough privilege to get access to higher education. For this reason, a minimum qualification which is enough to maintain bookkeeping and business-related accounting would be enough. He also suggested balancing between religiosity and skills [AS2.D_5]. In the same vein, the industrial expert suggested that the two factors, education and business experience as optional [IE. $D_{1 \& 4}$].

From the above discussion, it can be concluded that education, income, savings, and business experiences are the important parameters. But none of these attributes should be expected very high except 'savings'. All the experts cast light on this parameter for the sake of switching the scheme from *mudarabah* to *musharakah*. Because this transformation can yield better safety for M&M financing form the institutional point of view. On the other side, clients might get a better share of the profit by contributing capital (in *musharakah* agreement) in the business.

6.8.4 Justification of the Impact of Shariah Principles on Entrepreneurship

Figure 5.18, Figure 5.19, and Figure 5.20 suggest that all the responds asserted Shariah principles might have positive impacts on the entrepreneurship of the poor clients. Academic Scholar (1) pointed out two specific reasons such as incentive and risk sharing. Shariah principles secure the higher incentive for the poor *mudarib* as well as share risk [AS1. $E_{2 \& 3}$]. In this regard, Shariah scholar (2) synonymously underscored two similar issues such as encouragement, higher profit margin, and better alternative [AS2. $E_{2, 3, \& 4}$]. He explained that Shariah principles encourage business by sharing risk. Therefor *mudarib* might take the risky venture and that might yield a higher profit margin. Thus, Shariah principles can positively impact on *mudaribs'* entrepreneurship. Industrial expert shared somewhat deeper insights. He pointed at the attributes of Shariah principles such as higher incentives, trust and relationship-based business operation, partnership, mutuality, transparency, and better performance [IE. $E_{1, 2, 3, 4, 5, 6, \& 7}$]. Therefore, based on the above discussion it can be decisively concluded that Shariah principles have positive impacts on the entrepreneurship of the clients.

6.8.5 Suggestions

Figure 5.18, Figure 5.19, and Figure 5.20 suggest presenting the invaluable suggestion given by the experts. Academic scholar (1) suggested an appropriate policy, effective ways to monitor the business, proper client selection, organizational infrastructure, product customization, usages of information technology, and government intervention [AS1. $F_{1, 2, 3, 4, 5, 6, \& 7}$]. In this regard, academic scholar (2) gave importance to the risk management, operational effectiveness, thorough review of the business proposal, referral to select the clients, and honesty test [AS2. $F_{1, 2, 3, 4, 5, \& 6}$]. In the same vein, the industrial expert suggested the effective way of monitoring, installation of cash *waqf* for financial risk mitigation, government intervention, third-party guarantor, the proper process of scheme transformation, and providing skills and knowledge enhancement training (for instance, switching from *mudarabah* to *musharakah* to *Musharakah mutanaqisah*) [IE. $F_{1, 2, 3, 4, 5, \& 6}$].

6.9 Implication of the Minor Findings

Though the minor findings are not in line with the objectives of this study, it provides some interesting insights. It suggests that young respondents (18-35) who have higher education possess high entrepreneurial quality. Based on this output, Islamic microfinance institutions may select the entrepreneurial *mudaribs*. But these findings cannot assure whether the *mudaribs* possess the significant level of religiosity and knowledge on M&M. But these classes of people might get primary consideration to join M&M financing. Because religiosity is not the only criterion to assess mudaribs' honesty. Besides, by providing specific training clients' product-knowledge can be enhanced.

6.10 Conclusion

From the overall discussion, it can be concluded that the disadvantaged women in Selangor are intrinsic religious. Their religiosity is somewhat internalized. They can be categorised as aspiring entrepreneurs. They have the basic knowledge on *mudarabah* and *musharakah* (M&M) financing. This study also explored that Shariah principles have partial positive impacts on the *mudarib's* entrepreneurship. In this regard, Islamic religiosity and products' knowledge (knowledge of M&M financing) mediate the relationship between Shariah principles and entrepreneurship. It is worth mentioning that the mediating effect of religiosity is higher than the effect of knowledge. But it needs to be taken into consideration that the respondents in this study are not fully aware of *mudarabah* and *musharakah* (M&M) schemes. Otherwise, the impact of knowledge would be stronger.

The effects of Shariah principles, religiosity, and knowledge could presumably be improved if *mudarib's* are provided with enough information and training. On the other hand, the variations in the levels of *mudarib's* education, income, savings and business experience have trivial moderating effects on the relationship between Shariah principles and entrepreneurship. That suggests, in term of offering M&M financing Islamic microfinance institutions might pay less attention to these issues. It can be recalled that Islamic Prophet Muhammad (PBUH) had not taken any institutional literacy. But he practised and supported *mudarabah* and *musharakah* (M&M) based businesses. On the other hand, conventional microfinance provides the loans to the poor without counting their status of education, income, savings and business experience. Therefore, Islamic microfinance institution (IsMFI) may offer M&M to the entrepreneurial poor who possess the high degree of entrepreneurship, religiosity, and knowledge of *mudarabah* and *musharakah* (M&M) schemes.

In the same vein, the academic and industrial experts suggested that proper training, evaluation of the business proposal, incentivising and encouraging the successful *mudarib* might bring greater success to M&M financing. In this case, they unanimously emphasised on the proper selection process of the *mudarib* while developing effective organizational infrastructure for monition *mudaribs'* activities. In case of addressing risk, they suggest proper risk management infrastructure, government intervention, third-party guarantor, *cash-waqf* and uses of information technology. So, considering the findings of the quantitative and qualitative studies it can be decisively concluded that *mudarabah* and *musharakah* based micro-equity financing can be offered to the entrepreneurial poor in Selangor upon further improving their knowledge, religiosity and entrepreneurial skills.

Findings at a Glance

The Aim

This study aims to explore the possibility of introducing mudarabah and musharakah (M&M) as micro-equity finance to poor women entrepreneurs who are involved with the microfinance programme in Selangor, Malaysia.

Objectives

RO 1: To investigate the extents of poor women's knowledge of mudarabah and musharakah (M&M) financing, religiosity and entrepreneurial qualities.

RO 2: To investigate poor women entrepreneurs' willingness to accept the Shariah principles of mudarabah and musharakah (M&M) financing defined for Islamic microfinance.

RO 3: To analyse the impact of Shariah principles of mudarabah and musharakah (M&M) financing on the entrepreneurship of poor women who are involved with the microfinance programme.

RO 4: To analyse the mediating effect of religiosity on the relationship between Shariah principles of mudarabah and musharakah (M&M) financing and the entrepreneurship of poor women who are involved with the microfinance programme.

RO 5: To analyse the mediating effect of knowledge on the relationship between Shariah principles of mudarabah and musharakah (M&M) financing and the entrepreneurship of poor women who are involved with the microfinance programme.

RO 6: To analyse the moderating effects of education, income, savings and business experience on the relationship between Shariah principles of mudarabah and musharakah (M&M) financing and the entrepreneurship of poor women who are involved with the microfinance programme.

Research Findings at a Glance	
Findings from the Survey Data	**Experts' Opinion**
Entrepreneurship: Aspiring	AS1: Business Specific Skills is enough. AS2: Managerial Skills IE: Skills can be enhanced (Business experience could be a value adding factor but it should not be a prerequisite).
Religiosity: Intrinsic	AS1: Basic religiosity with the sense of Amanah AS1: Basic religiosity with the sense of *Amanah* and *Taqwa*. IE: Enough religiosity to ensure honesty
Knowledge: Primary level	AS1: Need enough knowledge AS2: Need basic knowledge IE: Need enough knowledge
Acceptance of Shariah: General Guidelines	AS1: Mandatory AS2: Mandatory IE: Mandatory: Need to build awareness

Hypotheses Justification	
Findings from the Survey Data	**Experts' Opinion**
H1: Shariah principles have partial positive impact on the entrepreneurship.	AS1: Incentivising and risk sharing AS2: Encouraging, better performance, and profit IE: Better performance, incentive & mutuality

About knowledge, religiosity, education, income, savings, and Business Experience

Findings from the Quantitative Data by Hypotheses Testing	Experts' Opinion
H2: Religiosity partially mediates the relationship between Shariah principles and entrepreneurship.	AS1: Basic religiosity with the sense of Amanah AS2: Basic religiosity with the sense of *Amanah* and *Taqwa.* IE: Enough religiosity to ensure honesty
H3: Knowledge partially mediates the relationship between Shariah principles and entrepreneurship.	AS1: Enough knowledge AS2: Basic knowledge IE: Enough knowledge
H4: 1) Education, 2) income, 3) savings, and 4) business experience have trivial moderating effects on the relationship between Shariah principles and entrepreneurship.	AS1: Basic education AS2: Up to SMP IE: Education is not compulsory AS1: Income is important AS2: Income is important IE: Income is important AS1: Savings, a mandatory condition AS2: Savings, a mandatory condition IE: Savings, a mandatory condition AS1: Business experience is optional AS2: Business experience is important IE: Business experience is optional

Figure 6.1: Findings at a Glance

CHAPTER 7: CONCLUSION

7.1 Introduction

This chapter concludes this study by presenting the findings in a miniature form while providing suggestions to the microfinance institution and the future researchers. It also discusses the implications of this research and its contribution to the body of knowledge. Furthermore, the findings of this study are compared with the other contemporary works in the same discipline in order to identify resemblance and difference. Then, the epistemological and ontological values of this study are described based on its theoretical and empirical significance.

7.2 Summary of the Findings

This study attained six objectives in order to achieve the aim of exploring the applicability of *mudarabah* and *musharakah* (M&M) as micro-equity finance to the disadvantaged entrepreneur Muslim women in Selangor. The findings of this study discovered the extent of Shariah knowledge (knowledge of M&M), religiosity and entrepreneurship of the respondents. The outcome also showed that the respondents possess the basic knowledge of M&M financing. They maintained intrinsic religiosity by performing regular worshipping and following the common rules of Sunnah. They accepted Islamic cultural as a part of their life. They also possessed aspiring entrepreneurial qualities. They were concerned about the Shariah-based business rules and the way of dealing with the partnership business. Their knowledge about the rules of M&M is akin the rules are commonly practised in the general partnership business by the Muslim in Malaysia.

Respondents expressed shallow interest in those Shariah rules are commonly used in the contemporary microenterprise. The Shariah principles of M&M were found positively influence (partial) on the entrepreneurship. The religiosity had the higher impact than knowledge on these financing agreements. But the variation of the demographic factors such as education, income, savings, and business experience had very trivial effects on M&M financing.

On the other side, the results of the qualitative approach justify the findings of the quantitative study. The academic and industrial experts opined that based on the knowledge, religiosity, entrepreneurial, the acceptance of the Shariah principle mudarabah and musharakah (M&M) financing can be offered to the disadvantaged poor women in Malaysia. All the experts unanimously agreed that basic knowledge of M&M, normal religiosity and business specific skills would be enough for considering an individual for recruitment for M&M contract. But they need to be well informed and have a better understanding of the Shariah principles. In these regards, they suggested a proper selection process, appropriate training, organizational infrastructure, planning and management. The overall findings (qualitative and quantitative studies) suggest that M&M based equity financing can be offered to the poor women in Selangor Malaysia in the current context. But the enhancement of their Shariah knowledge, skills, and religious activities might yield the better result. In this regard, the Islamic microfinance institution needs to build infrastructure, environment, policy and management. Above all, the government intervention might bring greater efficiency in the application of M&M for poverty alleviation.

7.3 Research Implications

About one-third of the global population is poverty stricken and the major part of them are Muslim. Numerous anti-poverty measures have been taken to resolve poverty. In this case, conventional microfinance appeared to be the most effective initiative. But it cannot serve the Muslim community due to its entanglement with *riba*/ interest. Interest is forbidden by the Islamic legal authority (elaborately discussed in Chapter 2). Besides, the market-oriented microfinance institution (MFI) charges overly rated interest in the name of organizational sustainability and growth. This strategy is contradictory to the goal of institutionalizing microfinance. However, Islamic microfinance (IsMF) has recently come forward with a comprehensive set of poverty reduction strategies aiming five basic human requirements, such as religion, physical self, intellect or knowledge, offspring and wealth (Hassan, 2010). Nevertheless, most of the Islamic microfinance institutions (IsMFIs) are offering resalable (*bai*) products and paying less attention to the profit and loss sharing (PLS) equity products, such as *mudarabah* and *musharakah* (M&M). Expectedly, by practising M&M based profit and loss sharing financing Islamic microfinance institutions can significantly contribute to the poverty alleviation while ascertaining organizational sustainability and growth. In this regard, the findings of this study can provide valuable insights that might be helpful to implement M&M products.

7.3.1 Practical Implications

This study explored four important issues, such as 1) the existing levels of mudaribs' knowledge, religiosity and entrepreneurship; 2) the level of acceptance of Shariah parameters by the *mudaribs*; 3) the effects of Shariah regulatory principles on *mudaribs'* entrepreneurship; and 4) the impact of specific socio-demographic factors on *mudaribs'* interest to M&M financing. Furthermore, these issues were justified by doing triangulation with the opinions of the academic and industrial experts in Islamic finance. Based on these findings the Malaysia microfinance institutions could decide whether to offer M&M to their existing clients. This study explored that the underprivileged Muslim women in Selangor possess the significant levels of entrepreneurship and religiosity, but they lack enough knowledge of M&M financing. It also suggests Shariah knowledge and religiosity are the important factors affecting clients' interest in *mudarabah* and *musharakah* (M&M) instruments. This study also explored that some important Shariah parameters are not well-accepted by the respondents. Based on the findings, it could be presumed that clients' knowledge, religiosity and entrepreneurial skills need to be further improved in order to optimize their capability to deal with M&M financing. Thus, the outcomes of this study can assist the policy makers to formulate appropriate policy in order to apply the Shariah rules of M&M. This study can also be exemplified to the global Muslim community to conduct further research in other societies since, Shariah rules are universal, according to Muslims' faith.

7.3.2 Theoretical Implications

This study embroiled four specific theories such as poverty theory, alternative development theory, sustainable livelihood theory, and capability theory in order to justify the feasibility of profit and loss sharing financing by using mudarabah, *musharakah* and *musharakah mutanaqisah* instrument. In this study, poverty is not merely seen as an economic deprivation. This phenomenon is described from five dimensions as suggested by Shariah, such as religion, physical self, intellect or knowledge, offspring and wealth (Hassan, 2010; Saladin & Ariffin, 2014). To address all these issues, Shariah knowledge, religiosity, and entrepreneurship are assembled with the M&M based financing mechanism. Sen's capability theory is intertwined with the entrepreneurship and profit and loss sharing approach. From this perspective, poor people have the potential capability to participate in the economic activities. PLS approach extends the real value considering the underprivileged people as trustworthy and business partners.

Besides, the integrated financial model that comprises *mudarabah, musharakah* and *musharakah mutanaqisah* (elaborately discussed in Chapter 3, Section 3.3) devises a new form of poverty alleviation standard that envisions asset acquisition basis poverty alleviation method. The concept of asset acquisition-based poverty alleviation could be considered as the sustainable livelihood approach to poverty alleviation.

7.4 Research Contribution

This research tends to contribute to the body of knowledge in several ways. The major contributions are described below.

7.4.1 Comprehensive Statistical Modelling

To achieve the objective 3, 4, 5 and 6 a structural equation model (SEM) was built. This model includes a set of variables, such as *shariah* principles, entrepreneurship, knowledge, religiosity, and some socio-demographic factors such as education, income, savings, and business experience. This model includes all the important parameters that the Islamic microfinance institution needs take into account offering M&M finance to the poor clients. Based on the standardised regression weights of the observed variables and path coefficients of the latent factors this structural model (SEM) suggests the causal relationship among the variables and their impacts. Thus, it shows the influences of the Shariah principles of M&M financing on the entrepreneurship of the underprivileged Muslim women. It also demonstrates the mediating impacts of religiosity and knowledge while manifesting the moderating effects of education, income, savings and business experiences. The overall model helps to assume the applicability of *mudarabah* and *musharakah* (M&M) financing to the existing clients of the microfinance. So far, no research has been carried out in Malaysia accumulating all the aforesaid parameters in a single model. So, this attempt can be considered as the novel approach in the paradigm of Islamic microfinance.

7.4.2 Theoretical Design

The conventional microfinance system works based on the market-oriented approach. Arguably, this approach views the poor as a niche market segment. The conventional system focuses on the absolute poor addressing their basic needs. But poor people with the entrepreneurial quality can be seen through the lens of the capability approach. Every human being possesses significant potentials (Yunus, 2007; Sen, 1999). Hence, by accounting their managerial and entrepreneurial skills microfinance institutions can offer profit and loss sharing (PLS) instruments in order to conduct partnership business. Thus, the financial condition of this group of poor can be improved. Besides, once the entrepreneurial poor are capitalized, they might create jobs for the other classes of poor people, such as labouring poor or absolute poor. In this way, a 'semi-autonomous'[52] poverty alleviation technique will be introduced. This study combines the capability approach with the profit and loss sharing (PLS) financing and Islamic principles for poverty alleviation in a sustainable manner. According to the Islamic finance philosophy, a *mudarib* is entitled to practise her

[52] The word semi-autonomous means the process how the poor people take part in poverty reduction among themselves and this process continues without any effort of the financial institutions.

entrepreneurship with the optimum level of freedom under *mudarabah* and *musharakah* (M&M) schemes. Clients' freedom and capabilities are given high priority in M&M contracts. By adopting capability and sustainable livelihood approaches this study, therefore, adds a new dimension to the theoretical context of poverty alleviation.

7.4.3 New Framework of Poverty Alleviation

This study proposes a comprehensive conceptual framework (in Chapter 3, Section 3.3) of poverty alleviation combining *mudarabah, musharakah,* and *musharakah mutanaqisah* financing schemes. The proposed framework demonstrates a different approach of poverty alleviation through asset acquisition which falls within the ambit of the sustainable livelihood approach to poverty alleviation. In this case, it focuses on the pick of the 'poverty pyramid' (explained in Chapter 3, Figure 3.1) in order to target the entrepreneurial poor. According to this model, underprivileged entrepreneurial people can overcome poverty by owning assets. And poverty alleviation through asset acquisition is a more sustainable way of building a stable economic status of the disadvantaged people. It differs from the conventional microfinance system which addresses the absolute poor with no assurance of improving their economic standing in a sustainable manner. Thus, this study proposes an alternative technique of poverty alleviation.

7.4.4 Adaptation of Shariah Parameters for Microfinance

So far, there is no specific Shariah guideline has been prescribed in Malaysia for *mudarabah*, *musharakah* and *musharakah mutanaqisah* based micro-equity financing for the microfinance institutions (MFIs). This study utilizes the selected Shariah parameters recommended by Bank Negara Malaysia (BNM) for the commercial Islamic banks. Thus, it lays the founding stones to build the structure of a Shariah regulatory framework (in Chapter 3, Section 3.4.6) for the M&M based microfinancing. This framework might show the way forward to develop a comprehensive framework for profit and loss sharing Islamic microfinance.

7.4.5 Methodological Design

This study adopted a stratified convenient sampling[53] technique for data collection (Kristi, 2010). For stratification, it looked for four specific characteristics of the respondents, such as 1) Muslim by religion, 2) female by gender, 3) business by profession or possessing business loan/s or having the primary level of entrepreneurship and 4) a member of a microfinance institution. In the beginning, the entrepreneurial skill of the respondent was defined by asking four specific questions[54]. Notably, these four questions are generally asked by *Amana Ikhtiar* Malaysia (AIM) as part of the process of its *sahabat* (member/ client) recruitment (Chapter 4, Section 4.18.2). These questions were implanted in the questionnaire as a score-card. A person with the non-business loan or with no enterprising skill was not accepted as a respondent for this study. This methodological approach of stratification might be considered a unique technique for sample selection.

7.5 Similarities and Dissimilarities with the Contemporary Works

So far, no similar study has been carried out in Malaysia (see Section 1.9). Therefore, this research can be considered as the first attempt in this country. But the findings of this study can be partially compared to some of the recent works that were carried out in the different contexts. For instance, an empirical study was carried out by Jaffar & Musa, (2014)

[53] In order to stratify, the population was chosen based on the gender, religion and entrepreneurship (Kristi, 2010)
[54] Section (2) of the questionnaire presents a set of questions in order to identify the entrepreneur.

entitled, “Determinants of Attitude towards Islamic Financing among Halal Certified Micro and SMEs: A Preliminary Investigation”. They found that awareness, knowledge and religious obligation have positive impacts on the entrepreneurs’ attitude towards Islamic financing (Jaffar & Musa, 2014). Manan & Shafiai (2015) conducted a research on the risks in Islamic microfinance and the risk management strategies by the commercial Islamic banks in Malaysia. They identified adverse selection and moral hazards are the main risk in financing to the poor. In term of risk management, they suggested several points, such as loan loss reserve, risk identification process, peer lending, character assessment, savings requirement, the small size of the loan, various loan terms, limits to the loan size. Johan & Putit (2016) have recently published a theoretical paper entitled as “Conceptualizing the Influences of Knowledge and Religiosity on Islamic Credit Card Compliance” on the impacts of knowledge and religiosity on the Islamic credit card. They hypothetically justified that knowledge and religiosity have significant impacts on the Islamic credit card. They also associated the *halal* and *riba* free concept along with the Shariah principles. They hypothesised that *halal* concern, as well as religiosity, derive Malaysian to accept the Shariah-compliant financial products. Their argument somewhat supports the findings of this study. However, their hypotheses were not empirically tested (Johan & Putit, 2016). Ahamad et al. (2016) did a study based on the existing literary works published from 1995 to 2015. They determined the factors influencing borrowers’ performance and wellbeing were: loan-size, time with the microfinance (experience with the microfinance), training, morality and religiosity, age, and education. Wediawati & Setiawati (2016) conceptualised that Islamic microfinance was under the influence of spiritual intermediation as the manifestation of Islamic principles. They emphasised on the spiritual practice, spiritual training and spiritual education to obtain spiritual mission. They carried out this study on *Baitul Maal wat-Tamwil* (BMT) in Jambi, Sumatra.

A study identified that the regulations of Islamic finance positively impact on the borrowers' entrepreneurship (Fleuter, 2016). The paper entitled, "Failing Fast in the Gulf : Entrepreneurship, Bankruptcy, and Islamic Law" exemplified that the Shariah-based bankruptcy laws in some Muslim countries. Fleuter (2016) argued that low failure cost increases the incentive for the new entrepreneur to start a business as well as encourage the failed entrepreneur to resume her businesses. An entrepreneur might be more interested to start a business if there is an assurance of reviving of her failure business (Fleuter, 2016). However, this (current) study determined that Shariah regulatory has a partial positive impact on the entrepreneurship. The result of this study somewhat differs from Fleuter's (2016) findings probably because of the characteristics of the respondents. The respondents of this study possessed less knowledge of M&M and they were from the rural women with weak economic standing. Besides, they lacked the knowledge of *shariah* principles and had barely experienced the Shariah rules of M&M since these instruments were never offered to them by any microfinance institutions in Malaysia. Similarly, Adhikari & Agrawal, (2016); Amaliah, Aspiranti, & Purnamasari, (2015); Amin, 2010; Rulindo & Mardhatillah, (2011); Tepe, Piyale, Sirin, & Sirin, (2016) showed that religiosity motivates Muslim to be involved with the Shariah-compliant financing. They contended that Shariah-compliant products attract religious Muslim client due to their religious faith. Their findings somewhat support the findings of this research, especially the positive impact of Shariah regulations on the clients' willingness to be involved with. Aysan, Disli, Duygun, & Ozturk, (2018) carried out an empirical study in Turkey on the Islamic Banks namely "Religiosity versus Rationality: Depositor Behavior in Islamic and Conventional Banks". They found that clients are not switching to other non-Islamic banks because of Shariah law. They are inclined to Islamic bank due to Shariah-compliant financing system (Aysan et al., 2018). Hartomi et al. (2018) explored the factor determined clients' behaviour to participate in Islamic microfinance. They identified behavioural control had the positive and significant impact on clients' participation in Islamic microfinance (BMT, Indonesia).

7.6 Conclusion

The main characteristic of Islamic finance is the profit and risk sharing (PLS) principle and *mudarabah* and *musharakah* (M&M) are the prime PLS instruments. So, the practice of M&M can manifest the main tenets of the Islamic financing system. Besides, M&M can bring greater benefits to the Islamic microfinance institutions as well as the clients in the long run.

The integrated financial model (Figure 3.2) in this paper can assist the entrepreneurial poor to overcome poverty while ensuring the ownership of the tangible asset. According to this model, M&M instruments are the viable instruments since *mudarib* must operate the business in a specific place defined by the *rab-al-mal* (this study considers only the closed *mudarabah*). Besides, the microfinance institution can earn rental from the assets. Later, this asset can be offered to the *mudarib* as a lease-rental basis (under *mudarabah mutanaqisha*). On the other hand, *mudarib's* investment in *musharakah* scheme can complement the collateral or guarantee. Besides, once a *mudarib* is involved with the *musharakah* contract s/he is proven capable of managing the business masterfully. So, the M&M based business partnership is feasible. Furthermore, if a client can run a business under M&M schemes, she may create employment opportunity for other classes of poor, such as labouring poor or vulnerable poor. Thus, a *mudarib* can scale up the income level of two other disadvantaged groups in the society.

Presumably, the entrepreneurial poor can deal with the riskier businesses. So, under the M&M schemes, the risk-taking approach of both parties might generate greater profit. As a result, the business may produce better income. So, the proportion of profit sharing could be higher than the percentage of predefined interest. Thus, the financial gain of Islamic microfinance institutions would be better than the interest-based conventional microfinance institutions.

But some key areas need to be addressed before introducing *mudarabah* and *musharakah* (M&M) as micro-equity finance to the poor. Microfinance authority should suitably design the *shariah* regulatory framework for the *mudaribs* so that they can easily deal with all the terms and conditions. On the other hand, *mudaribs'* religiosity, knowledge and entrepreneurial qualities need to be improved if the existing levels of these three elements become unparalleled with the organizational demand.

Malaysia has positioned herself as the Islamic finance leader at the global stage by building effective and efficient operational infrastructure as well as a sound regulatory framework (Wulandari & Kassim, 2016). Since Muslim is a majority country, Islamic microfinance industry can expect a wider market segment. Besides, the rapidly-increasing relative-poverty can be better addressed by using M&M. It is worth mentioning, according to the recent statistics that the lower 40% of the population are mostly relative-poor in Malaysia (Nair & Sagaran, 2015). That means, about 12 million[55] people are assumingly relative-poor in this country. *Mudarabah* and *musharakah* (M&M) schemes can be precisely designed for those

[55] Total population in Malaysia is about 30.33 million by the year 2015 (World Bank, 2017)

people who are managing their livelihood by means of micro-entrepreneurship. From the organizational viewpoint, the symmetrical integration between the welfare approach and the market-based profitability approach is important for the microfinance institutions to alleviate poverty while ensuring organizational sustainability. In this regard, *mudarabah* and *musharakah* (M&M) schemes can be introduced as the market-based products.

However, the microfinance institutions need to assist the vulnerable poor with the charitable services while offering the market-based financial products to the entrepreneurial poor. For instance, absolute poor can be treated with the benevolent funds, such as *zakat, sadakah* and *waqf*. As an initiative of microfinancing, *quardul hassan* or resalable (*bai*) financial products can be offered to the poor segment. After scaling up to a certain height of their economic position, *mudarabah* and *musharakah* (M&M) can be offered.

This approach can bring organizational sustainability and growth. But these financing schemes as discussed earlier are risky because of the higher possibility of agency problem (Ibrahim, 2015). This risk can be minimized by following some strategic steps. For instance, group lending mechanism can be considered as one of the most effective approaches. Because, peer-group monitoring, peer-pressure and internal disclosing mechanisms can be utilized for the purposes of monitoring and controlling the M&M based projects. Since microfinance institutions mainly operate in the rural area, where almost everybody knows each other; it is easy to gather personal information and the credit history of the prospective *mudaribs*. This process of *mudarib* identification seems easy and cost-effective.

Besides, the family-based lending method can also be chosen as the alternative technique, where the family members are entitled to participate and contribute in the business. If the business fails due to their mismanagement and negligence, every member of that family can be held accountable for that loss. A husband or a household-head can be chosen as the guarantor of the loan if it is allocated to a woman. Through these practices, some *ex-post* risks can be reduced. Furthermore, bottom-up approach can be another alternative method where the poor *mudarib* will be eligible for the microcredit schemes and after a few successful transactions, they will be able to access to the micro-equity schemes after proving their entrepreneurship and honesty. In this process, credit history and credibility of *mudaribs* can be assessed based on their participation in the previous schemes. In this regard, *murabaha* or *bi-bithaman ajil* can be initially offered as microcredit schemes and then, *mudarabah* or *musharakah* can be promoted as the micro-equity schemes.

In the case of market risk, if the Islamic microfinance institution (IsMFI) can accurately predict the market determinants, it will be easier to set the ratio of profit and loss. In this regard, microfinance institutions (MFIs) can offer equity-finance only under the specific industries of which market trend can be predicted based on the historical data. Besides, by providing training IsMFIs can teach the clients about religious ethics and principles as well as enhance their entrepreneurial skills. Religiosity positively impacts on risks minimization, moral-hazard reduction by improving clients' morals and ethical norms. The cost-cutting approach also can reduce market risks. In this regard, to economise the loan-cost government support and aid from the donor community can play the crucial roles. For instance, soft loans, low-cost capital, and the benevolent funds would bring greater organizational efficiency. Furthermore, the government may take part in risk management and auditing in order to assure the operational clarity of the IsMFIs.

In can be recollected that the conventional microfinance initiated its journey with the purpose of poverty alleviation by providing financial services to the disadvantaged and unbankworthy people (Le, 2017; Mia, 2017). But in case of excelling household income, the performance of this system is below the expectation (Cull & Morduch, 2017). Several empirical studies outlined that the excessively rated predefined interest is one of the major barriers in scaling up the household income, synonymously poverty alleviation (Khazanov et al., 2018; Nanayakkara & Stewart, 2015; Roberts, 2013). Besides, most of the MFIs overly stress on the loan repayment while barely consider if the borrowers are capable of utilising the loans for income generation (Chowdhury & Mukhopadhaya, 2012; Norell, 2001). In this situation, profit and loss sharing (PLS) approach of Islamic microfinance can be regarded as a viable alternative to serve the Muslim poor. The profit-sharing approach can substitute the predefined interest. The mutual management might positively impact on the profitability and growth of the business. On the other hand, the provision of sharing financial loss by the microfinance institution must encourage the clients to undertake risky venture as well as resume the sick business. Thus, M&M can contribute to the institutional sustainability and growth while scaling up the income of the entrepreneurial poor.

The findings of this study delineated a comprehensive picture of borrower's perception towards the general Shariah rules of M&M financing. Based on this output Islamic microfinance institution can take necessary initiatives to launch M&M financial instruments. But further research needs to be carried out to empirically scrutinize the viability of M&M in poverty alleviation and simultaneously gaining organizational sustainability. Besides, the stability of this novel approach needs to be assessed comparing with the interest-based system which is working more than three decades across the globe at large.

7.7 Epistemological Values

This study adopted microfinance (MF) theory as a cornerstone in order to develop its philosophical ground. Based on this theoretical aspect it envisions to introduce the profit and loss sharing (PLS) microfinance system to address the entrepreneurial poor. Hence, it considered two financial instruments, namely *mudarabah* and *musharakah* (including *musharakah mutanaqisah* which is one of the *musharakah* instruments). To postulate the applicability of these instruments, the alternative development theory was chosen as a way forward to address poverty. This developmental theory contemplates that M&M based microfinancing can come into light by the non-governmental organizations (NGOs) preferably, Islamic microfinance institution (IsMFI). Henceforth, IsMFI envisages to escalate the household income of the poor as well as strengthens the rural economy. In this regard, Shariah-based financing, poverty, and Islamic microfinance (IsMF) theories took part in the theoretical construct of this study. Besides, by installing *Musharakah mutanaqisah*, this financing model facilitates the opportunity of asset acquisition by the poor. Thus, it adopts the sustainable livelihoods approach to poverty alleviation. Simultaneously, the capability theory came into the discourse in order to support the viability of extending profit and loss sharing (PLS) microfinance instruments to the entrepreneurial poor. This theory asserts that entrepreneurial poor are eligible for M&M finance due to their capability of pursuing business. M&M financial instruments were preferred as the most suitable financial principles that are in line with the capability approach as well as the microfinance. These financial principles focus on *mudaribs'* capability and active participation to operate a business with the freedom of managerial practice. These instruments do not seek for tangible collateral.

But M&M encounter agency problems. Therefore, agency theory is introduced to clarify agency-principal conflicts. However, along the way, *sharia* rules and Islamic financial principles, religiosity and entrepreneurship were studded on the philosophical body. Thus, this study draws a new philosophical outline that concludes that the profit and loss sharing financing method can be implemented in the context of Islamic microfinance by using *mudarabah* and *musharakah* financial instruments in order to alleviate poverty in a sustainable manner.

7.8 Ontological Values

Based on the causal relationship between the variables this study suggests the applicability of M&M in the context of Islamic microfinance. The structural equation model (see Figure 5.14) exhibits the relationship between Shariah principles and entrepreneurship, mediating impacts of knowledge and religiosity while showing the moderating effects of Education, Income, Savings and Business Experiences. Hence, it justifies all the research hypotheses. The findings also unveiled the level of mudaribs' knowledge, religiosity and entrepreneurial qualities. Based on the overall results, metaphilosophically this study draws a conclusion that *mudarabah* and *musharakah* (M&M) can be introduced to the entrepreneurial poor. It also provides a logical statement based on the statistical outputs how the clients of M&M to be recruited. Specifically, suggesting to what extent clients' knowledge, religiosity and entrepreneurship need to be improved. Thus, this study achieves the ontological values.

7.9 Suggestions to the MFIs

Findings of this study demonstrate that all the Shariah rules are not highly significant according to the perception of the entrepreneurial poor women in Selangor. Their lacking of knowledge on Islamic financial instruments and limited practice of Islamic microfinance could be the reasons for the deficient scores of some Shariah parameters. But there could be some other causes behind this matter too. For instance, Shariah rules are aptly linked with the strict moral and ethical principles that could be somewhat difficult to maintain in the current social circumstance. Besides, disclosing all types of business information seems somewhat unparallel with the business strategy. Besides, apart from business skills, M&M contract emphasises on honesty, integrity, and transparency. Every men and woman in our society cannot be expected to maintain the high level of moral standard. They might not entirely understand the core meaning of the Shariah parameters. In this regard, microfinance institutions may take some initiatives to ameliorate clients' morals, knowledge, and entrepreneurship. In this regard, a few suggestions can be extended to the microfinance institutions.

7.9.1 Building Trust:

Mudarabah and *musharakah* are the trust-based financing tools. By developing strong social tie Islamic microfinance institutions (IsMFIs) can come close to the *mudarib*s to build trust. The mission-based approach can lead IsMFIs to be the socially responsible organizations. By contributing to the social wellbeing Islamic microfinance institution can build a better relationship with the people. Instantly, the charitable funds (*zakat, waqf* and *sadakah*) and benevolent loan (*qardul hasan*) can be useful to make bondage with the clients. Besides, poverty alleviation should be taken as the singular mission of the microfinance. Gradually, IsMFIs will be able to practice joint venture with the poor entrepreneurs.

7.9.2 Providing Literacy on M&M

Previous literature suggests that clients' product knowledge is an important parameter in choosing any financial instruments (see Section. 1.6.3). In this light, the finding of this study suggests that respondents have lack of knowledge on M&M. In this case, proper literacy on M&M can expectedly escalate mudaribs' intention to accept M&M scheme. Some initiatives can be taken as:

a. General Information: A general information can be provided to every member of the microfinance institution. In this case, printing media (leaflet, booklet etc), electronic media (radio/ TV programme on microfinance, emailing), the mobile-based learning system can be initiated.
b. Product Specific Training: Product specific training can be provided to the targeted clients.
c. Literacy-Based Incentive: Incentive can be offered if members can outperform others in financing literacy.

7.9.3 Building Entrepreneurship

Alike products' literacy, better entrepreneurial quality can lead a *mudarib* to choose M&M scheme. The entrepreneurial skill is one of the key elements of succeeding in business. Higher entrepreneurial qualities encourage the *mudarib* to take more profitable and risky ventures. Besides, entrepreneurial competencies can assist her to manage and recover the business loss. In this regard, MFIs can introduce entrepreneurship enhancement training. Besides, the short courses on the business-specific peer-learning mechanism[56] can be added with the financing programme. Government's intervention might bring better result in this regard. The government can take the vital initiative to build or improve the entrepreneurial skills of the underprivileged people who intend to practice micro-entrepreneurship. Besides, providing funds, taking part in the financial risk management, assigning the guarantor agency

[56] In this mechanism group members lean from each other.

the government can excel the performance of the Islamic microfinance while increasing the success rate of the clients.

7.9.4 Inspiring Religiosity

Religiosity can enhance *mudarib*s' honesty and integrity (see Section 1.6.2). Besides, several studies asserted that religiosity encourages Muslim to accept Islamic financial instruments. By inspiring *mudaribs* to be inclined to religiosity MFIs can expect better transparency, honesty and integrity all along the financial transaction and commercial exchange. In this regard, Islamic microfinance institutions can take some initiatives: 1) religiosity enhancement programme, 2) inspiring group-based religious activities, 3) incentivising and encouraging for religious activities, 4) providing religious literacy etc.

7.9.5 Freedom of Choice

Every human being cherishes enormous potentials. The freedom of choice can unlock their potentials of doing unique ventures with creativity. So, Islamic microfinance institutions should pay attention to clients' free wills as well as creative business ideas. But the viability and prospect of the business plan should be assessed prior to making an investment. In this regard, some suggestions can be offered as 1) proper evaluation of the business proposal, 2) prizing the better proposal, 3) assisting to improve the business proposal, 4) participating to execute the proposal, and 5) building awareness on the potential risks.

7.9.6 Incentivising for the Successful Project

To motivate and encourage the *mudaribs* to be mindful to their business activities as well as be honest in dealings with the Islamic microfinance institution (IsMFIs), special incentives can be offered. The stimulating offers could be: 1) the share of the higher profit margin, higher investment for the consecutive venture.2) Besides, a complementary loan for non-income generating projects, such as a loan for education, housing, renovating business centre, performing *haj*, debt repayment, treatment, arranging children wedding etc. can be offered to the successful *mudarib*.

7.9.7 Compensation Plan

Islamic microfinance institutions (IsMFIs) should the compensation plan in some specific circumstances, such as natural disaster, accident etc. In *mudarabah* financing microfinance institution as the *rab-al-mal* bears the whole financial loss while the *mudarib* loses her contributed time and efforts. If the natural disaster or accident lefts no outcome from the business poor *mudarib* my experience financial hardship and becomes destitute. In this situation, IsMFIs might provide financial assistance so that destitute *mudarib* can survive and restart the venture. On the other hand, in *musharakah* contract financial loss is allocated according to the ratio of the investment. The allocation of the business loss may impoverish the *mudarib*. In such circumstances, IsMFIs may convert the *musharakah* contract into *mudarabah* or provide a compensation so that *mudarib* rejuvenate the injured business.

7.9.8 Analysing the Project Viability

The viability of every proposed project needs to be properly scrutinized prior to capital allocation. Islamic microfinance institution needs to have a dedicated project assessment unite formed with the professionals and business experts. Excessively risky or Shariah incompliant project should be avoided. The project analysing processes might include: 1) Time Tested Project: It needs to be scrutinised if the proposed project was previously succeeded. 2) No Ambiguity: The project plan should be clearly and comprehensively stated. 3) New but not Nonsense: New plan can should be welcome but if it seems practical and viable. 4) Marginal Risks Manging: If the risks are predictable and manageable. 5) Possibility of Gaining Profit: It the possible outcomes of the business is predictable.

7.9.9 Careful Group Formation

In term of group-based financing mechanism, the group should be formed carefully. In this regard, similar characteristics among the group members, socio-economic position and an individual's personality traits need to be taken into consideration.

7.9.10 Stimulating Package for the Sick Project

The sick project can be revived by offering project stimulating fund. In this regard, benevolent funds including *qardul hasan* and charitable funds such as *zakat* and *sadakah* can be offered. Besides, the involvement of the third-party guarantor, government agency, and cash *waqf* would be effective.

7.9.11 Careful Monitoring

From the organization viewpoint, monitoring is one of the most crucial issues in M&M financing. Specifically, the open *mudarabah* is difficult to maintain because it is more difficult to observe the activities of the *mudarib* (Adnan, 2013). However, careful monitoring can help the microfinance institutions (MFIs) to take necessary steps to prevent loss of any project. A vigilant monitoring unit needs to be formed inside the management. Besides, peer-group monitoring and building social tie would be useful. Considering the operational ease and viability, this study confined to the restricted or closed *mudarabah* (*mudarabah muqayyadah*) and eschewed unrestricted *mudarabah* (*mudarabah mutlaqah*). In open *mudarabah* financing *rab-al-mal* cannot interfere with the business but, in closed *mudarabah rab-al-mal* can impose the terms and conditions for business operation.

7.9.12 Industry Based Project Financing

Microfinance institution may provide financing to the specific industry-based projects. In this case, the type of the industry can be chosen based on its appropriacy with the micro-enterprise and profitability. For instance, the cottage industry, food and beverage industry, handicraft etc. would be suitable for M&M financing. Under these industries, people can start any business with comparably low capital. Besides, these businesses can be managed with the small team of management, expecting high profit and low risk.

7.9.13 Continuous Research and Learning

MFI should conduct researches to innovative new business ideas, new market opportunities, and risk management techniques and technologies etc. Besides, every successful and failed project leaves some lessons about the causes of the success or failure. These lessons can help in risk avoidance, risk-mitigating, risk-minimising, risk-control, risk-resolving and organizational sustainability and so on.

7.10 Risk Management

Effective risk management strategies should be articulated in order to risk identification, risk minimisation and risk avoidance. Islamic finance has some risk-managing financial tools, such as *zakat*, *waqf*, *sadakah* and *qardul hasan*. Proper usages of these tools can address the risks effectively. Bank Negara Malaysia (BNM) outlined three specific risks, such as investment risk, counterparty credit risk, and liquidity risk. Shariah advisory council (SAC) of BNM prescribed a comprehensive risk management infrastructure that every financing institution should build in order to helm the internal control, strategies, risk valuation and exit mechanism. According to BNM, the materiality of the investment needs to be monitored by a dedicated committee. Proper assessment should be carried out to determine the investment, business prospect and turnaround. The valuation methods of profit and risk should be appropriately implemented based on the mutual agreement between the contracting parties (BNM, 2007). Islamic microfinance institutions (IsMFIs) can implement similar risk management strategies. Besides, four strategic steps, such as 1) identifying the appropriate *mudarib* based on the entrepreneurial quality and morals; 2) measuring the appropriate size of the required capital and the proportion of profit and loss to be shared; 3) monitoring the business/ market trend as well as the performance of *mudarib*; and 4) controlling the business risks should be carefully taken by the Islamic microfinance institutions (IsMFIs).

Furthermore, to manage risks, IsMFIs can adopt group-based, family-based, and reputation-based financing mechanism. In group-based financing, the group itself acts as a social collateral. Peer-monitoring and internal disclosing can be helpful to monitor as well as control the investment. Under this mechanism, gathering personal information and the credit history of the clients is comparably easy. Though, the monitoring cost in Islamic bank is higher than the conventional bank due to maintaining the mandatory issue of Shariah compliance and supervision (Shaikh, 2017). But in the microfinance paradigm, group supervision can decrease that cost. When group formation is impossible, family-based financing method can be chosen as an alternative to group-based lending. Hence, family members would be authorised to participate and contribute to the business. If the business fails due to mismanagement or negligence, family member/s would be held accountable for the loss. In reputation-based financing, only the successful borrowers in microcredit schemes can be considered for the micro-equity schemes. In this case, the credibility of the borrowers can be assessed by monitoring his/her participation in the previous schemes.

Financing institution can also extend specific training and religious teaching programmes in order to enhance clients' business skills and morals. Because, entrepreneurial competencies encourage people to be involved with the risky projects to generate better income (Marshall & Ojiako, 2015; Zeffane, 2015). On the other hand, religious principles, values, and practices have a positive impact on decreasing credit risk (Ahmad, 2012). Thus, microfinance institutions presumably can minimize the *ex-ante* and *ex-post* hazards of M&M financing.

Section 3.6 suggests a market determiner, ρ, which is an important parameter to predict the expected outcome of M&M financing. If Islamic microfinance institution can forecast the market trend, financial risk controlling and defining the profit and loss sharing ration would be easier.

Leveraging the debt and reviving the sick business could be also the strategic options for the financing institutions. In certain circumstances, Islamic microfinance institutions may utilise the *zakat* fund to leverage debt (Ahmad, 2012). *Quardul hassan* financing, which is unleashed from the 'time value of money' can be offered to revive a sick business (Khir, Gupta, & Shanmugam, 2008).

Allah (SWT) states in the Holy *Qur'an*,

"If the debtor is in a hard time, then grant him time till it is easy for him to repay, but you remit it by way of charity, that is better for you if you did but know" (*Al Qur'an 2:280*) Translation: (Alam & Shanmugam, 2007).

According to this Quranic statement, Muslim creditors are advised to show empathy to the debtors. If the debtor fails to repay the debt duly, the lender should either extend the duration or convert the loan into charity (Amin et al., 2011). Majority of the Islamic scholars consider converting the loan into charity is the better alternative (Amin et al., 2011; Haron & Azmi, 2009). Microfinance institutions should follow the Quranic suggestion if they provide *qardul hasan* as a business reviving loan.

7.11 Suggestion for Further Research

Based on the findings of this study, a few suggestions can be extended to the future researchers. It is important to develop a comprehensive Shariah regulatory framework in order to implement the suggested *mudarabah* and *musharakah* (M&M) based poverty alleviation system (a conceptual framework is delineated in Chapter 3). In this regard, several issues, such as the switching mechanism from a successful *mudarabah* contract to *musharakah* contract and then to diminishing *musharakah* contract need to be defined. A more comprehensive regulatory framework can be developed for the suggested issues such as paying incentive and compensation, providing stimulating package, forming group, offering auxiliary loans, managing risk etc. Furthermore, an inclusive curriculum needs to be designed for the effective training programme for the clients on financial and Shariah literacy as well as improving their entrepreneurship and religiosity.

The research framework of this study is designed with the major parameters such as Shariah principles, knowledge, religiosity, entrepreneurship, education, income, savings, and business experience. Other parameters can be chosen based on the *mudarib*'s characteristics and geographic location (in the different states and societies in Malaysia there could be other influential factors) to conduct further research. Some of the limitations of this study can be addressed by the future researchers. For instance, this study focused on the entrepreneurial poor women only. But M&M financing can be offered to the entrepreneurial male as well. Besides, self-employed poor can be recruited based on their entrepreneurial competencies. It is also confined to the restricted *mudarabah* and *shrikat inan*. But the inclusion of open *mudarabah* can widen the market for the Islamic microfinance institutions to a greater extent. Similarly, by offering *shirkat al-wujuh* and *muzarah* IsMFIs can reach to the agrarians, a different market segment. From the experts' opinion some risk laveraging and risk mitigating factors were identified. For instance, they suggested the usages of cash *waqf*, third-party guarantor, intigration of technology, monitoring system, infrustructural change, government intervestion etc. To explore the applicabilty and viability of those facotors in the microfinance paradigm more research needs be conducted.

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