Smart Partnership and Women Micro-Entrepreneurs in Tanjung Karang- A Rasch Model Analysis

Salwana Hassan[1, 2], Rohani Mohd[2], Geetha Subramaniam[2] & Badrul Hisham Kamaruddin[2]
[1]Accounting Research Institute, UiTM Shah Alam
[2]Faculty of Business and Management, UiTM Selangor Kampus Puncak Alam
salwana@salam.uitm.edu.my

Abstract

Micro-enterprises in Malaysia have contributed a great deal to the economy, specifically to income generation and quality of life. However, many of them continue to face challenges when they want to expand their businesses and become sustainable. The main reason is due to insufficient capital. The purpose of this study is to examine whether a smart partnership between women micro-entrepreneurs and major retailers brings any impact on the quality of life. A case study was conducted in Tanjung Karang, a predominantly rural paddy field area in Selangor. A group of 17 women micro-entrepreneurs participated in a project in which they collaborated with local major retailers. Self-administered questionnaires were distributed to the participants and Rasch analysis was used. Based on the analysis, five groups of micro-entrepreneurs were identified based on the strata scores. Two rulers, needed for profiling and gaps, were also generated from the analysis. Regarding the level of satisfaction on the different aspects of quality of life, the ruler that functions to profile had identified five groups. Meanwhile, the ruler for effectiveness measured the level of effectiveness of the program. Taking into consideration the size of the gap between items, both before and after project showed that the collaboration has successfully transformed the quality of life of the women micro-entrepreneurs. This result verified the significance of the collaborative effort. This effort ensures the expansion and sustainability of micro-enterprise businesses.

Keywords: women entrepreneurs, collaborative, partnership, quality of life

Introduction

Tanjung Karang is a rural area in Selangor. The people of this town concentrate on agricultural activities for a living which means an income that fluctuates as nature is seasonal. This makes them very vulnerable to poverty. It a global phenomenon that poverty is a hindrance to economic development for many countries. The incidence of poverty is worse among the rural population regardless of whether the country is developed or not. Malaysia is not excluded based on the

poverty line of USD$1.90 a day; the poverty rate among the rural population is at 3.4% which is higher than the national level of 1.7% (EPU, 2013). One of the effective means of overcoming poverty is by providing micro-financing at a subsidized rate to be utilized for any income-generating activities; hence giving them enough income for a living. Consequently, many of these micro-entrepreneurs would experience better living conditions. Unfortunately, not all of them have sustainable enterprises. Some of the enterprises are short term and they keep on changing the businesses to survive. According to Hassan (2013) among the reasons for business, failures are lack of capital and marketing skills. For example, they might be willing to work hard, utilizing any skills that are already acquired, or learn new entrepreneurial skills. However, due to poverty, they cannot expand their business, widen their market coverage or promote their products. As a result, they cannot become self-reliant.

Hassan (2013) revealed that 25% of the rural entrepreneurs interviewed stated that the source of capital is their biggest barrier in doing business. Another 16% identified inconsistent demand as one of the challenges their business faces. These prompted a case study to be conducted in the rural area of Selangor to see if a collaborative model can enhance the performance of the micro-entrepreneurs in terms of productivity, income, and quality of life. The collaboration proposed was between the women micro-entrepreneurs and a major retailer. With the help of a local non-government organization (NGO), 17 women were selected for the project. The criteria for selection was such as they must come from low-income households, able to work in groups and possess some basic sewing skills. Skills training were provided to enhance and familiarise them with the newly acquired sewing machine and tailoring equipment. Standard operating procedures and workshop rules and management were also provided to facilitate group work in the centre. The centre was an existing workshop which was abandoned for quite some time. A local microfinance institution provided the machine; equipment; and helped to clean, paint, and made the centre ready for use for the project. Before the project, the participants were once small-scale tailors with inconsistent and seasonal demand that did not provide promising regular income to make a good living. Furthermore, they could not afford to buy the fabric and sew dresses to be marketed at any store or boutique in town. They relied solely on orders from clients who would bring their fabric to them. Besides, they also did not have proper transport and channel to

market their finished goods. As a result, their services were limited within their village.

After several meetings, a local major retailer agreed to act as a supply chain source to provide the required raw materials for the tailors. Besides that, there was always a continuous periodic order so that the tailors would not stay idle but continue sewing consistently rather than seasonal demand they faced previously. With the collaboration initiative, the distribution channel has become effective and wider markets become apparent for the micro-entrepreneurs' finished products. The main aim of this study was to examine the effect of collaboration on women micro-entrepreneurs. It also attempted to assess the impact of a collaborative program on the income performance of those women micro-entrepreneurs and how it affected their quality of life.

Literature Review

Poverty is more dominant in the rural areas (Tamura, 2003) where the regional imbalance in development between the rural and urban areas causes urban-bias development. Consequently, rural areas continue to be undeveloped. The rural poor migrate to urban areas looking for better job opportunities (Pramanik et al., 2009), leaving the vulnerable struggling in the village shifting from the traditional to the modern sector. Initiatives have been tailored for them to become entrepreneurs utilizing whatever skills they already acquired to start any income-generating activities (Hassan, 2013). Hassan also found that being poor and living in a remote area discourages potential entrepreneurs. They struggle to make ends meet, and most entrepreneurial activities will only make them survive. In other words, they cannot grow their business or venture beyond their village. The concept of business they are operating is like 'mom and pop' style store. Probably due to lack of funds, they are not able to add value to their business. For example, if their business grew, they would be able to create jobs for the nearby community, demonstrate a unique business model that other businesses of similar nature can emulate and so on. Additionally, unavailable proper transportation limits them from travelling to the town to buy raw materials to make other products. The transportation problem also limits marketing activities for their existing products and/or services. Eventually, they

ended up operating business in a single location and the community surrounding the business provides very limited demand for their products and/or services.

As globalization brings technological advances, new thinking, and wider accessibility to different parts of the world, many large companies are now attracted to the value of Inclusive Business Model (IB). This model aims to achieve not only commercial success but also aims at providing development impact. According to Prahalad (2005), the concept of IB is about using a better approach to create value for the poor and micro-entrepreneurs. It is an approach that involves partnering with them to innovate and achieve sustainable win-win scenarios. The poor and business owners will continue to be actively engaged with their business, while at the same time the partner companies also provide them with their products and services and solve the issue of supplying raw materials and distribution channels of the micro-entrepreneurs' finished goods. In the process, there is a transfer of technology and knowledge. The benefits of concentrating on inclusive business models go beyond mutual gains. This means immediate profits and higher income for both businesses/ micro-entrepreneurs and major retailers. For the major retailers, they gain in terms of the drive for innovation, building markets and strengthening supply chains. For the women micro-entrepreneurs, they gain in terms of improving communities, enhancing productivity, generating sustainable earnings and greater empowerment.

Opportunities cannot come by if large and small firms, governments, non-governmental organizations, development agencies, and the poor themselves do not work together with a shared agenda. The methodology of the collaboration concept involves the large retailers deploying their core business competencies to assist the micro-entrepreneurs (including the poor) on the demand side as customers, or on the supply side as employees, producers or business owner/entrepreneur. By applying this model, the large company does not need to reinvent the wheel to create a similar product line or service to compete with the smaller company or micro-entrepreneurs. Instead, the former only needs to be creative by way of adapting its business operations to meet the range of consumer needs in a new market or facilitate the growth of micro-entrepreneurs' businesses so that the businesses can transform to the next level of becoming an SME.

For example, Banco Santander Spain (a bank) has a goal of promoting banking/financing inclusion using the Inclusive Business Model. In other words, the Spain-based bank intends to un-banked so that they could provide financial

guidance to entrepreneurs who lack access to conventional forms of credit. Another productive example is Santander Microcredito, a company that belongs to Santander Brazil, has a goal of encouraging financial literacy and growth in small businesses. In this context, loans are offered to informal micro-companies that are unable to obtain traditional loans. Following this, more than 70 per cent of these microloans is targeted at businesswomen. They received between USD 200 and USD 600 in loans with no requirement for guarantors.

Additionally, according to 'The Next 4 Billion', a report written by Hammond et al. (2007), the IB model has also attracted philanthropic organizations and other organizations as an alternative method to fulfil corporate social responsibility. For example, Shakti Programme of Hindustan Unilever Limited provides entrepreneurship training for women by helping them to build distribution channels for their previously untapped markets (Vyas 2012). Next, Safaricom and Vodacom companies introduced the mobile phone-based financial service known as M-Pesa. For the latter company, the development impact of its action is in terms of increased household income, skills, and enterprise development. Hindustan Unilever Limited has introduced a similar program to other parts of the world. One particular example is the company provides a livelihood training program to the owners of "mom and pop" stores across the Philippines through a program called Kabisig. Kabisig means 'partner' or 'linked arms'. The collaborative nature of the Kabisig program was designed to help small shopkeepers in the country by way of modernizing their operations with the same standards of professionalism of much bigger operations. The program has been operating since 2014. By 2016, a total of 25,000 store owners attended Kabisig summit events; thereafter those owners delivered a gross sales value contribution of nearly 900,000 Philippine Peso (17,418 USD) (Unilever Global Company Website, 2017).

Initially, multi-national corporations (or MNCs) often assume that the default rate among the poor is likely to be higher than that of their rich customers. However, after partnering, the performance of micro-entrepreneurs or poor entrepreneurs perform positively in paying back their small loan amounts. In other words, with the IB model in place (specifically financing inclusion), the poor pay their instalments on time. Hence, default rates are very low. In the case of Industrial Credit and Investment Corporation (ICICI Bank) of India, the bank relieves the burden of poor entrepreneurs by offering them small loan amounts among their customer base of

200,000. Again, the default rate was less than 1 per cent (Narula, 2008). Next, the default rate at Grameen Bank, a microfinance pioneer in Bangladesh, was less than 1.5 per cent among their 2,500,000 customers. Through persistent effort and the provision of world-class quality, private sector businesses can create mutual trust and responsibility between their companies, and the poor and micro-entrepreneurs. The moral of the story is quite clear where trust is difficult to build after 50 years of suspicion and prejudice as there are little evidence and strong stereotyping (Narula, 2008).

Next, a survey done by Bank of America (2013) revealed that collaboration is a necessity because by working together, the entrepreneurs can improve their productivity and product quality. It is believed that collaborative arrangements have benefitted the organizations to achieve better performance than if they attempted it alone. The above evidence prompted us to undertake the project to identify the impact of collaboration initiatives between a successful trader and micro-entrepreneurs in the rural area. The IB is similar to a decentralized production system known as “putting-out” or cottage industry which had been practised long before the Industrial Revolution to benefit the rural people in Germany and France (Kriedte, Medick & Schlumbohm, 1981). Under the system, the trader provides raw materials and other means of production or instruments to the households which would be too expensive for them to afford on their own due to their weak economic status. The trader then will have its distribution system.

Quality of life is manifested via the satisfaction level on several aspects of life namely health, income, food, education, safety, spirituality and house condition (Raphael, Waalen and Karbanow, 2001). They classified people in terms of their quality of life under three categories namely positive; neutral; and negative based on the scores of nine aspects. Those who rate all the nine aspects above three are having a positive quality of life, equal to three are neutral and below three are negative. This classification was perceived to be too simplistic and might not portray the situations for those who have different scores for different aspects. Therefore, a new classification was introduced to accommodate detailed quality of life taking into consideration the changes in life after certain events.

We can conclude from the literature the following important points. Without the Inclusive Business Model, the entity (i.e., poor entrepreneur/micro-enterprise) will not be advancing in any way. Eventually, they become dependent on grant funding and

philanthropy. When inclusive business works, the transformation is expected to be extraordinary. Specifically, the model creates job security, educates and up-skills workers, and sustainable earnings. Before the partnering in IB Model, the poor entrepreneurs have limited choice of products and/or services to offer to customers. Moreover, without proper transportation or weak distribution channel, the items may not reach out to those who will find value in the items. Consequently, sales revenue will be minimal because of poor networking. Next, the lack of supplier networking can result in products having low quality in terms of ingredient and packaging. However, after the partnering, the micro-entrepreneur transforms himself/herself into someone who has an internal locus of control. This means the entrepreneur believes success is from his effort to seek partnering. In turn, his productivity will boost profitability. The entrepreneur also becomes one who connects with society as he/she now has access to the distributions channels. Apart from the above, the entrepreneur can provide other values to the society as his/her business become bigger, apart from the values embedded in the product and/or service offerings. The other values include employment opportunities, provision of quality of life when there are innovative features to the existing product and/or service offering, and up-gradation of infrastructure to provide convenient access to the entrepreneur's physical outlet. Thus, a partnership between large companies and micro-entrepreneurs as in the Business Inclusive Model can transform the poor or micro-entrepreneur into a real entrepreneur that has the characteristics of risk-taking, creative and innovative, as well as upholding ethical principles related to business.

Methodology

This study was a case study, trying to compare the standard of living of the women micro-entrepreneurs living in Tanjung Karang, before and after the collaborative efforts between micro-entrepreneurs and the major retailers. The data were collected via self-administered questionnaires with 19 paired items (before and after) using a scale from 0 (not satisfied at all) to 10 (very satisfied) to indicate satisfaction level on certain items. 17 women micro-entrepreneurs who were directly involved in the program participated and they were personally guided to help understand the questions and their answers were recorded by the researchers. The data were collected after the program that took place for two years. However, they

were visited every six months to see the progress of their life. To achieve the objective of this research, Rasch Analysis was conducted to evaluate the level of a gap in their quality of life, where comparison was made on the variables that indicate their quality of life. Rasch Measurement Model was chosen for this analysis because this is the most appropriate tool that can illustrate both person and item on a scale. It is also the best tool to classify persons based on items selected. Rasch is a model which looks at the probability of the correct response to an item and it can be portrayed in the following equation (Wright & Mok, 2004):

$$P(\theta) = \frac{e^{\beta n-\delta i}}{1+e^{\beta n-\delta i}}$$

where e is the Euler's number = 2.7183

βn = person's ability δi = item difficulty 19

Rasch enables the transformation of ordinal data into ratio data by the utilization of a ruler of "probability of the event" using logit (log-odd-unit) scale. For example, a student who obtained 99% in a test is ranked as a capable student. This also means that his/her probability of endorsing the item as a ratio of 99 to 1. Based on this explanation, the probabilistic ruler represents the probabilistic line diagram which is converted into the logit scale ruler via logarithmic calculation. The Rasch Measurement Model is based on two fundamental expectations (Greene & Frantom, 2002):

- A more capable person has a greater likelihood of endorsing all the items given but the less capable person can only endorse a few items correctly.

- An easier item is more likely to be endorsed by all persons but the most difficult item is unlikely to be endorsed by all.

Rasch model takes the responses given by respondents and creates a relationship with the items operationalizing a certain trait. The Rasch model assumes that the item difficulty is the attribute that is influencing the person responses while the personability is the attribute that is influencing the item difficulty estimates (Linacre, 1999). In other words, this means that a person's ability is very much closely related to the level of difficulty of an item. The scale of measurement used in Rasch, called logit (log odd unit) is an equal-interval scale converted from the logarithm of the probability of an event dimensional. A person who has the same

ability logit scale as the item's difficulty level is assumed to have a 50:50 chance of endorsing the item. In other words, Rasch estimates the item difficulty as the 50% probability of a student of a given ability endorsing that particular item. With the item mean set at zero logits, items which are above average (greater than zero logits) are recognized as more difficult items while those below average (less than zero logits) are seen as easier items. Since Rasch takes into account the relationship between the person's capability and item difficulty, it is desirable to look at the person fit as well as the item fit. A Person fit implies that the respondent could be identified as being able to provide a correct response or wrong response to a certain item of a difficulty level. An irregular or erratic response which does not display the pattern of a correct response could be a sign of a misfit. Similarly, an item fit refers to an index which implies the functionality of the item. A misfit item means that the item is not testing on the desired latent trait. Having a misfit item in a test or questionnaire could lead to the likelihood of having an instrument which is non-unidimensional.

Among the variables investigated in terms of respondents' satisfaction in life were standard of living, food intake for the family, clothing, health condition, family's health condition, household income, personal income, education, family education, community safety, spiritual peacefulness, work achievement, overall condition of their house, savings, investment particularly in ASB or Tabung Haji, skills level, self-identity, self-confidence, self- communication skills with the aspects of life that valued by the individual. The levels before and after the collaboration efforts were recorded. Ratings were used to weigh satisfaction responses so that the scores reflected the satisfaction level of either good, moderately good, moderate, moderately poor and poor. This classification is an extension of Raphael, Waalen, and Karbanow (2001) who classified the quality of life into three levels only which are positive, neutral and negative. The model is so simplistic thus they are split to be more detail, their positive is split into good and moderately good and negative is split into moderately poor and poor, however neutral is maintained as moderate to make five levels altogether.

Findings and Analysis

The respondents in this study comprised the 17 women micro-entrepreneurs who are in the age range between 37 and 62 years old. They had income from

informal business activities between RM100 to RM1200 before the program started. Most of them have basic education, except for one who has tertiary education. They expressed their satisfaction level on several aspects of their lives (based on the questionnaire) before and after the program.

The data were analyzed using the Rasch measurement model. Before the ruler that shows the gap of effectiveness was produced, the determination of the best fit of data to the model was first conducted. This involved several tests: the test of item person reliability, the test of items and persons fit, and test of items unidimensionality.

Table 1: Statistic Summary (38 items; 17 respondents)

	TOTAL SCORE	COUNT	MEASURE	MODEL ERROR	INFIT MNSQ	INFIT ZSTD	OUTFIT MNSQ	OUTFIT ZSTD
MEAN	251.5	37.5	.81	.13	1.08	.2	1.05	.1
S.D.	31.4	.9	.45	.02	.40	1.5	.34	1.4
MAX.	297.0	38.0	1.52	.16	1.88	2.9	1.57	2.1
MIN.	186.0	35.0	-.05	.10	.50	-2.4	.44	-3.0

REAL RMSE	.14	TRUE SD	.43	SEPARATION 3.70	Person RELIABILITY	.91
MODEL RMSE	.13	TRUE SD	.43	SEPARATION 3.92	Person RELIABILITY	.92
S.E. OF Person MEAN = .11						

Person RAW SCORE-TO-MEASURE CORRELATION = .96
CRONBACH ALPHA (KR-20) Person RAW SCORE "TEST" RELIABILITY = .92

Table 1 shows that both items and persons are reliably indicated by the high value of reliability score for both items (close to 1). The person reliability score which is at .91 indicates that the items were good to measure the various ability level of respondents. Furthermore, the reliability score of items of more than .8 indicates that the respondents were well targeted at measuring various levels of items difficulty level. The person separation of 3.7 indicates that the respondents were divided into five major groups by the four separations (poor, moderately poor, moderate, moderately good and good).

Table 2: Summary of 38 Measured Item

	TOTAL SCORE	COUNT	MEASURE	MODEL ERROR	INFIT MNSQ	INFIT ZSTD	OUTFIT MNSQ	OUTFIT ZSTD
MEAN	112.5	16.8	.00	.19	1.07	.1	1.06	.1
S.D.	20.2	.6	.57	.03	.48	1.2	.52	1.3
MAX.	138.0	17.0	1.34	.26	2.34	2.8	2.67	3.2
MIN.	60.0	15.0	-.96	.14	.35	-2.3	.37	-2.1

REAL RMSE	.21	TRUE SD	.53	SEPARATION	2.50	Item	RELIABILITY	.86
MODEL RMSE	.19	TRUE SD	.54	SEPARATION	2.80	Item	RELIABILITY	.89
S.E. OF Item MEAN = .09								

UMEAN=.0000 USCALE=1.0000
Item RAW SCORE-TO-MEASURE CORRELATION = -.97
638 DATA POINTS. LOG-LIKELIHOOD CHI-SQUARE: 1998.13 with 576 d.f. p=.0000
Global Root-Mean-Square Residual (excluding extreme scores): 1.400

Table 3: Unidimensionality Test

	Eigenvalue	Observed	Expected
Total raw variance in observations	51.3699	100.0%	100.0%
Raw variance explained by measures	26.3699	51.3%	56.3%
Raw unexplained variance (total)	25.0000	48.7%	100.0%
Unexplained variance in 1st contrast	4.7994	9.3%	19.2%

To satisfy unidimensionality, the items in the instrument must measure the same composite of abilities. The principal component analysis of the residuals in Rasch showed that the raw variance explained by measures of 51.3% closely matches the expected target of 56.3% (Table 3). 51.3% of the raw variance explained by measures is also exceeding the standard acceptable calibration of 40% (Conrad et al., 2010). The unexplained variance in the first factor of 4.7994 rated the instrument as very good (Fisher, 2007).

Fig. 1 is the profiling map, which identifies people with different levels of satisfaction in terms of their quality of life. On the right side was the person with certain demographic attributes. On the left side of the page were the items measuring the level of satisfaction for their quality of life. Concerning the figure, each member of a group shares common attributes in terms of their age, level of responsibility, personal income, and household income.

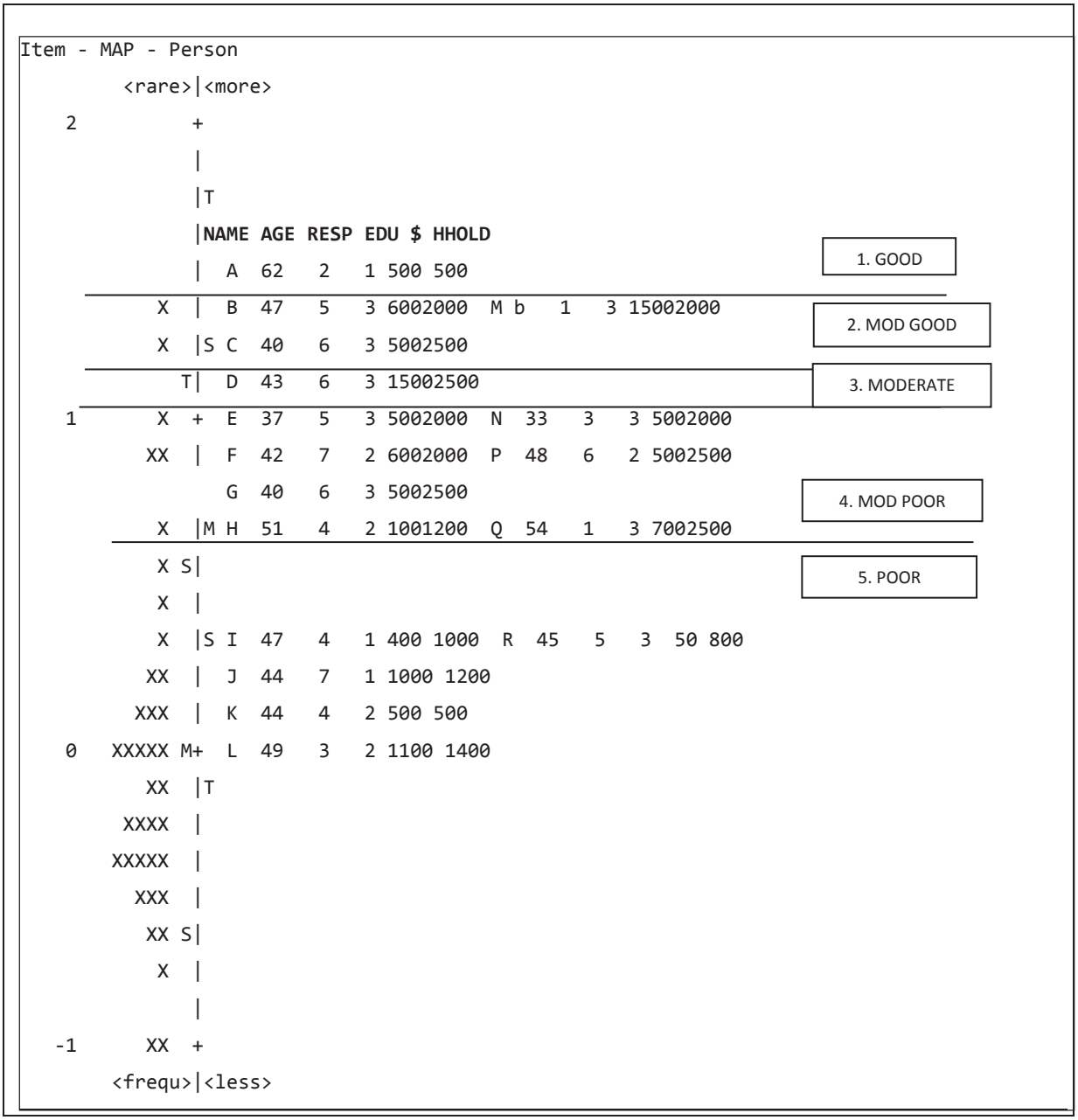

Figure 1: A Ruler of Profiling

As expected, based on the ruler shown in Fig. 1, there were five groups of respondents derived from the four separations (determined by the calculation of strata: (4g+1)/3). The respondents were classified based on the items that were commonly agreed and disagreed by the group members and they were classified as poor and moderately poor to replace negative quality of life as specified by Raphael, Waalen and Karbanow (2001), moderate which was regarded as neutral in Raphael, Waalen and Karbanow (2001) and moderately good and good which were lumped as positive quality of life by them.

The groups located on the top are those who were satisfied with all variables (the standard of living, food intake for the family, clothing, their health condition, their family's health condition, household income, their income, their education, their family education, the community safety, their spiritual peacefulness, their work achievement, the overall condition of their house, savings, investment especially in ASB or Tabung Haji, their skills, self-identity, self-confidence, self-communication skills). Thus, this group was known as good. This is because they found themselves and their family healthy and were comfortable with their life (regarding food, house, income, the standard of living). They were considered as good because the location between groups and most items were far which indicates a high level of satisfaction. Table 1 also shows that those belong to this group are quite senior in terms of age, and have a stable income compared to the small number of people under their responsibility.

The group located on the second row is categorized as moderately good. This is because the majority of them are satisfied with many aspects of life. However, there are still a few aspects of life that were not at a favourable level. They were those who were moderately old and had quite a good household income. However, the number of dependents under their care were many, meaning that there is a possibility that their income may not be enough.

The third group is categorized as moderate. This is because they were moderately satisfied with many aspects of life, certain aspects of life were not at their favourable stage (refer to Fig. 2; savings (B14) and investment (B15)), and few were very highly favourable (food (B2), clothing (B3), health (B4 & B5), income (B6 & B7), education (B8 & B9), safety (B10), spirituality (B11), house condition (B13). They were those who were at their middle age, having many people under their responsibility with a moderate household income.

The fourth group is categorized as moderately poor. This can be seen from the location of some items located higher than the location of the group in the ruler. I cross-check with Fig. 2, the ruler shows that the aspects of life that were not at their satisfaction level were their standard of living (B1), their income (B7), work achievement (B12), their savings (B14) and their investment (B15). They were most satisfied with their family education (B9) and their home (B13).

The last group is categorized as poor. This group is called poor because the majority of the aspects of life (which is 9 over 19) were located above the location of

the group on the ruler. Among the aspects of life that they were very satisfied are family education (B9) and their house condition (B13). All other aspects of life were having a low level of satisfaction. This can be referred to in Fig. 2. All items located above the persons' location were not rated as satisfied.

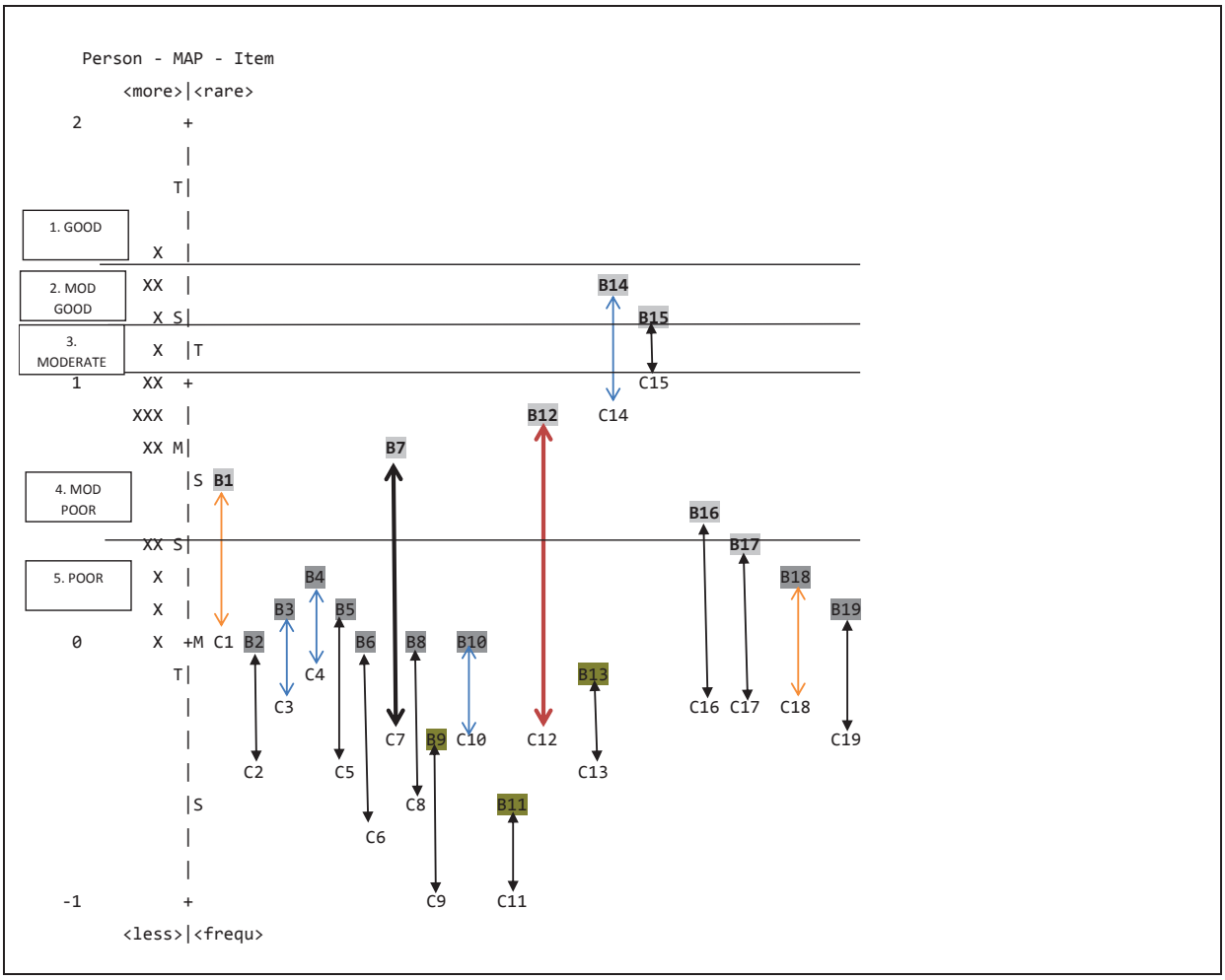

Figure 2: A Ruler of the Level of Effectiveness of the Program

Fig. 2 illustrates the size of the gap between item B (before the collaboration) and item C (after the collaboration). I cross-check with each group, it is seen that the poor category shows a tremendous shift in their level of satisfaction. Before the collaboration, only items B9, B11 and B13 were located below the group. Items B2, B3, B5, B6, B8, B10, and B19 were located parallel to the location of the group indicating lack of satisfaction for the aspects of life. All other items located above them indicates no satisfaction for the aspects of life (standard of living, health, personal income, work achievement, skills, personal identity, confidence, and communications).

Only groups 1 and 2 had a change in their satisfaction in terms of savings and investment after the collaboration. All other groups found that they had no opportunity to save and invest yet, thus not satisfy with the items. For all groups, there was a huge transformation of B7 (personal income), B12 (work achievement), B1 (standard of living) and B16 (skills acquired). The gaps indicate the effectiveness of the program. The higher the gap, the more effective is the program. In general, all items were having a shift in terms of their location after the programme.

Discussion

The findings have proven the effectiveness of the collaboration between micro-entrepreneurs and the major retail outlet. Studies were done by Bank of America (2013) and Kriedte, Medick and Schlumbohm (1981) also showed that micro-entrepreneurs which do collaborative programs are more successful and can sustain capital and businesses. However, future studies should investigate the time required to improve savings and investment of micro-entrepreneurs. This is because savings and investment are two main denominators which can impact businesses and the quality of life. This study also did not study the variable “attitude” in-depth. A further study should look at insufficient income is due to a lack of capital or attitude issue.

Conclusion and Policy Implications

The major conclusion from this study is that the quality of life of the women micro-entrepreneurs has improved after going through a smart partnership with a major retailer. The steady flow of work and demand for the products which were part of a major supply chain resulted in a major increase in income for these women. They enjoyed a better income and eventually a better standard of living which they could not have achieved if they were on their own. The collaborative model enabled the women entrepreneurs to grow and sustain their business as well as expand their income and improve their life in many aspects. By working together at a centre, the productivity of the individual entrepreneurs and product quality also improved tremendously. The collaboration also resulted in their business achieving better performance that could not have been achieved without the smart partnership.

The original aim of this project was to elevate the socio-economic condition of the women micro-entrepreneurs. This means upgrading their quality of life, from

micro-entrepreneurs to an independent tailoring entrepreneur one day. It is hoped that this group of women will be empowered and able to transform their state of livelihood in the future. More effort must be done to emulate this IB business model to pave the way for more sustainable business entities to exist among micro-entrepreneurs. The principles of collaboration and smart partnership should become government policies in their attempt to quantify the number of entrepreneurs in Malaysia, particularly among the Malays and Bumiputeras. Bigger retail outlets and corporates should apply the Inclusive Business Model to facilitate empowerment by way of strategizing based on a win-win partnership.

Acknowledgement

The authors would like to acknowledge the research funding by the Accounting Research Institute (ARI) grant scheme with the project code 600-RMI/ARI_IRES 5/3(14/2015).

References

Angeloantonio, R. & Antonio, T. (2009). Formal vs Informal CSR Strategies: Evidence from Italian Micro, Small, Medium-Sized, and Large Firms. Journal of Business Ethics. Vol. 85, Supplement 2, 339-353.

BSI Group (2013) http://about.bankofamerica.com/assets/pdf/Connection-Imperative-Survey-Overview.pdf, retrieved on Nov 1, 2016

EPU (2013) *Laporan Ekonomi* 2012/2013

Hammond, A, L., Kramer, W, J., Katz, R, S., Tran, J, T. (2007). *The next 4 billion: market size and business strategy at the base of the pyramid (English)*. Washington DC; World Bank. http://documents.worldbank.org/curated/en/779321468175731439/The-next-4-billion-market-size-and-business-strategy-at-the-base-of-the-pyramid

Hassan, S. (2013). Microfinance for Poverty Reductions and Quality of Life Enhancement From the Shariah Perspective-The case of Amanah Ikhtiar Malaysia (AIM). Unpublished Thesis, INCEIF

Kriedte, P., Medick, H. & Schlumbohm, J. (1981). *Industrialization before industrialization: Rural industry in the genesis of capitalism.* Translated by Beate Schempp. Cambridge, UK, and New York.

Linacre, J. M. (1999).Investigating rating scale category utility. Journal of Outcome Measurement, 3(2), 103-122.

Narula, U. (2008). *Global Empowerment: Emerging Practices*. New Delhi: Atlantic Publishers & Distributors (P) Ltd.

Raphael, D., Waalen, J., & Karbanow, A. (2001) Factor Analytic Properties of the Quality of Life Profile: Examination of the nine subdomain Quality of Life model. *Psychological Reports, 88,* 265-276.

Prahalad (2005) *The Fortune at the Bottom of the Pyramid. Eradicating Poverty through Profits*, Wharton School Publishing.

Pramanik A. H., Abdullah, M. A., Mat Derus, A. & Barom, M. N. (2009). *Urban poverty: a case study of major cities in Malaysia.* Kuala Lumpur: IIUM Press.

Tamura, Y. (2003). Redistribution policies for the rural poor of developing countries – Towards more equitable development. Kuala Lumpur: University of Malaya Press.

Unilever Global Company website (https://www.unilever.com)

Vyas, D. N. (2012). Microfinance: Its impact on women. International Journal of Management Research & Reviews. Vol. 2, Issue 5. 692-696.

Wright, B. D., & Mok, M. M. C. (2004). An overview of the family of Rasch measurement models. In E. V. Smith & R. M. Smith (Eds.), Introduction to Rasch measurement (pp.1–24). Maple Grove, MN: JAM Press.