International Journal of Advances in Applied Sciences (IJAAS)
Vol. 3, No. 1, March 2014, pp. 25~32
ISSN: 2252-8814

Modeling the Multiple Indirect Effects among Latent Constructs By Using Structural Equation Modeling: Volunteerism Program

Wan Mohamad Asyraf Bin Wan Afthanorhan
Department of Mathematics, Faculty of Science and Technology,
Universiti Malaysia Terengganu, 21030 Kuala Terengganu, Malaysia

Article Info

Article history:

Received Jul 27, 2013
Revised Feb 23, 2014
Accepted Mar 3, 2014

Keyword:

Analysis of Moment Structural (AMOS)
Stratified Sampling Technique
Volunteerism
Structural Equation Modelling
Multiple Indirect Effect

ABSTRACT

This study aimed to evaluate the factors used for develop a best model of multiple indirect effect among latent constructs by using Structural Equation Modelling (SEM) on volunteerism program as a research subject. The data is collected through questionnaires distributed at four higher education institution. This questionnaire is constructed based on four dimensions which are motivation, benefits, goverment support, and barrier. The data were distributed by using stratified sampling technique and involving 453 respodents. In this case, the data were analyzed by using Analysis Moment of Structural (AMOS) 18.0 in order to examine the influence of exogenous and endogenous variables. As a result showed that the goverment support is significant and direct influences on motivation, benefits, and barrier. Moreover, the benefits and barrier is significant and direct influence on motivation. In generals, the findings revealed that benefits influence is most crucial for motivation of volunteerism.

Corresponding Author:

Wan Mohamad Asyraf Bin Wan Afthanorhan,
Department of Mathematics, Faculty of Science and Technology,
Universiti Malaysia Terengganu,
21030 Kuala Terengganu, Malaysia.
Email: ash_18raft@yahoo.com

1. INTRODUCTION

This study emphasizes the level of involvement in volunteerism program especially among youth from higher education institution chosen. One of these factors can be examined by the reason of volunteer which is considered as motivation (Rhyne, 1995). The other three variables include are benefits, barrier, and goverment support. All of these factors is regarding on the literature review previously. Volunteerism is defined as a professional or non-professional person who provides a service to a welfare or development organization, usually without reimbursement (The White Paper for Social Welfare, 1998). Barrier is referred as not about supported volunteering specifically (Eva Schindler-Raiman, 1987). According to (Dingle, 2001), the benefits is extremely important if had supported by the contribution of goverment. Thus, this barrier hinders the growth of volunteery activities. In this study, the benefits, and barrier play a role as mediator variable since these variables can become exogenous and endogenous variable simultaneously.Therefore, the prior studies is to examine the relationship and influence between goverment support, benefits, and barrier on motivation as well as their different relationships.

In generals, this study employs the indirect effect in order to achieve the objective research and research question. The indirect effect can be namely as the mediating effect or intervening effect. As usual, the Confirmatory Factor Analysis (CFA) procedure should be applied in order to achieve the reliability and validity of measurement model. According to (Hair et. al, 2006) explain CFA can be namely as the

measurement model. In Structural Equation Modelling (SEM), there are two types of model which is measurement model and structural model.

The measurement model is frequently used nowadays among researchers to undergo the CFA procedure. In this case, this study applies CFA procedure before furthering the structural model in order to achieve the validity of latent contructs. In addition, measurement model can be known as model hypothesis testing in order to obtain the estimation model with more fit. First and foremost, the unidimensionality procedure should be apply for whole measurement model to remove the measuring items that have the lower standardized factor loadings (<0.50). According to (Zainudin, 2012) present the unidimensionality procedure is achieved when the measuring items have acceptable factor loadings for the respective latent construct. In order to achieve unidimensionality, the factor loading of items must be at least 0.50 for newly developed scales and 0.60 for established scales. Some of the researchers would apply the multidimensionality procedure but it depends on how the researcher to carry out their research since the result obtained will be same.

Moreover, such investigation is not conducted prior to this study, and thus, this study claims itself to be among the first to explore the relationship among variables by using SEM in modeling of multiple of indirect effect for contribution of volunteering activity.

2. RESEARCH METHOD

2.1 Target Population

The target population for this study is among youth from the selected university which is majority of respodent ages must be between 15 to 40 years old. Since the university campuses are widely scattered in term of geographical location, the study applied the staratified sampling technique whereby in Terengganu only. Then, four higher education institutions are selected randomly among the university available in Kuala Terengganu which is Universiti Malaysia Terengganu (UMT), Universiti Teknologi Mara (UiTM) Chendering, Universiti Sultan Zainal Abidin (UNISZA), and Institut Pengajian Guru Batu Rakit (IPGBR). Thus, all students in the selected university are taken as respondents in the study. In other words, the number of students from both university that encompassed by variety faculty are as a population of the study.

2.2 The Measuring Instruments In The Study

The study adopts the questionnaires developed by emerged of the literature review based on the previous research, to measure the level of involvement in volunteerism program among youth with the helps of the expertise in this field. Thus, this questionnaire be validated thoroughly before distribute to the respondents. Hence, the variable of motivation is referring of level of involvement is measured to determine the relationship of variable that related with other variable such as benefits, barriers, and goverment support. Thus, the instruments was encomprised of four section provided for the respondents. Since this research is developed for the students from higher education institution, this study would customize the items accordingly an order to suit students in the education industry.

3 THE PROCEDURE DATA ANALYSIS

3.1 Unidimensionality

Unidimensionality is the degree to which items load only on their respective constructs without having “parallel correlational pattern(s)” (Segars, 1997). Unidemensioality cannot be assed using factor analysis or cronbach alpha (Gerbing and Anderson, 1988, Segars, 1997). When there is unidimensionality, there is no sigificantly shared variance among the items beyond the construct which they reflect. In addition, while both methods of SEM provide for factor analysis, covariance- based SEM also provide the ablity to compare alternative pre-specified measurement models and examine, through statistical significance which is better supported by the data (Joreskog and Sorbom, 1989).

In SEM, the researchers should apply five types of model which is model identification, model specification, model estimation, model evaluation and model modification verification to achieve the fitness of measurement model. The first model is namely as model identification whish is prior to examine which one of the item loading is suitable for constrained as “1”. This value is also being known as the reference point. If the references point does not appear in one factor, the result for regression weight cannot be obtained.

The unidimensionality procedure can be classified as the model specification to specify which one of the items would retain in the model by regarding on the factor loadings appear. Once the measurement model pass through the unidimensionality procedure, the model evaluation, model estimation and model modification will be conducted in order to ensure the measurement model is more fit before futher the

structural model.The structural model is quite different compare to meausrement model since this model applied is the assembled of whole measurement model with existence of causal effect. When the single arrow from another variable exert to other variable, the pointed variable is become endogenous or dependent. However, discriminant validity and convergent validity should be applied first before proceed the structural model. These two validities are essential to prove the fitness of measurement model.

3.2 Type Of Construct Validity

The following table presented summarized the type of reliability and validity with literature supported. In the instance, the Confirmatory Factor Analysis (CFA) shoud be used to validate the measuring items in order to enhance the validity and reliability of measurement model before further the analysis. The multiple indirect effects can be proceeds if the validity and reliability is achieved. The result for convergent and discriminant validity can be obtained by using the formula or standardized regression weight. Standardized regression weight is used to determine the correlation among these variables.

Table 1. Type reliability and validity

Validity	Technique	Description
Construct Validity		
Convergent Validity	CFA used in Covariance- Based SEM only	GFI>0.90, NFI>0.90, AGFI>0.90 and an insignificant c^2, to show unidimensionality. In addition, item loadings shouldbe above 0.70, to show that over half the variance is captured by the latent construct (Chin, 1998, Hair et.al, 1998, Segars, 1997, Thompson et.al, 1995)
Discriminant Validity	CFA used in Covariance-Based SEM only	Comparing the c^2 of the original model with an alternative model where the construct. If the c^2 is significantly smaller in the original model, discriminant validity has been shown (segars, 1997)
Convergent and Discriminant Validity	PCA used in PLS can assess factor analysis but not as rigorously as a CFA in LISREL does and without examining unidimensionality	Each construct AVE should be larger than its correlation with other constructs and each items should load more highly on its assigned construct than on the other constructs
Reliability		
Internal Consistency	Cronbach Alpha	Cronbach alpha should be above 0.60 for explanatory research and above 0.70 for confirmatory research (Nunally, 1967, Nunally, 1978, Nunally & Bernstein, 1994, Peter, 1979)
	SEM	The internal consistency coefficient should be above 0.70 (Hair et.al., 1998, Thompson et.al, 1995)
Unidimensionality Reliability	Covariance-Based SEM only	Model comparison favor unidimensionality with a significantly smaller c2 in the proposed measurement model in comparison with alternative measurement model (Segars, 1997)

Then, the model modification verification should be attempted .This is because this procedure can remedy the multicollnearity problem. Based on the statistics assumption, the error should be uncorrelated or indepedently. According to (Alias Lazim, 2011) explain when more than one indepedent variable apperas in modelling, it is possibe that these variables are related to eash other. Means that, the multicollinearity among variables or constructs is said to be exist.Thus, the constraints or double headed arrow should be employed. The researchers can covary the error based on the modification indices present in Analysis Moment of Structural (AMOS) output. The acceptance model when the contraints applied on the same factor. According to Zainudin, 2012 explain the error should be correlated when the covariance present value greater than 15. However, Byrne, 2010 suggest the covariance should be applied when the valus is greater than 10. Hence, it depends on the researchers to apply the constraint based on ther literature supported. The Table 2 presented shows the type of fitness indexes with literature supported.

3. RESULTS AND ANALYSIS

Structural Equation Modelling (SEM) has two types of model which is measurement model and structural model. Basically, mesurement model is frequently used nowadys among reseracher to analyze for

Confirmatory Factor Analysis (CFA). Hence, the researcher needs to run CFA procedures for each construct involved in the study. All measurement models must be validated and accepted prior to modelling the structural model. In this case, there are have 4 dimension which is motivation (16 items), goverment support (9 items), barrier (8 items), and benefits (14 items). According to (Hair et.al, 2010) explain the factor loadings for each items should be greater than 0.6. However, factor loading which greater than 0.50 is also accepted depend on the decison by the researcher if have strong reason not to do so. The Table 3 shows the territory items results leave after remove.

Table 2. Type of fitness

Number of Category	Name of Index	Index Full Name	Level of Acceptance	Literature
	GFI	Goodness of Fit Index	GFI>0.90	Joreskog and Sorbom (1986)
	AGFI	Adjusted Goodness of Fit	AGFI>0.90	Joreskog and Sorbom (1986)
Absolute Fit	SRMR	Standardized Root Mean Square Error Approximation	SRMR<0.08	Bentler (1995)
	RMSEA		RMSEA<0.06	Steiger & Lind (1980)
Comment	Higher values of GFI and AGFI as well as lower value of SRMR and RMSEA indicates better model data fits			
	NFI	Normed Fit Index	NFI>0.90	Bentler & Bonett (1980)
	TLI	Tucker Lewis Index	TLI>0.95	Tucker and Lewis (1973)
	RNI	Relative Noncentrality Index	RNI>0.90	McDonald & Marsh (1990)
Incremental Fit	CFI	Comparative Fit Index	CFI>0.95	Bentler (1989,1990)
	IFI	Incremental Fit Index	IFI>0.90	Bollen (1989)
Comment	Higher values of incremental fit indices larger improvement over the baseline model fit			
Parsiminous Fit	Chisquare/ DF	Chisquare Degree of Freedom	Chisq/ DF< 5.0	Marsh and Hancover (1985)
Comment	Very sensitive to sample size			

Table 3. Number of Items

Constructs	Number of Items	Number of Items Retained
Motivation	16	15
Benefits	14	11
Barrier	8	4
Government Support	9	6

The CFA procedure produces several indices which indicate the goodness of the measurement model. This procedure can be namely as the model fits. Some indices provide meaningful explanation, together with proper literature review support, concerning the fitness of the model. There are three categories of fitness which is absolute fit, incremental fit, and parsimonous fit.

The researcher should choose any one represent for each categories.According to Holmes-Smith (2006) recommend the use of at least three fit indexes by including at least one index from each category of model fit. This study elect to employ the baseline comparion represent for incremental fit, RMSEA represent for absolute fit, and the chisquare/ Df represent for parsimonous fit. The RMSEA is fit when the default model should be less than 0.08. Other than that, the baseline comparison which includes CFI, IFI, TLI should be greater than 0.9 to achieve the fitness of measurement model. In this case, the baseline comparison and RMSEA is not a good fit to data at hands. Thus, the modification model is required in order to improve its fit. Also, the modification indeces should be employing to determine if there is any pair of measurement error happens to correlate with each other. If the items are correlated, the constraint should be employ to remedy the multicollinearity problem. The good model is the lower error and the mower error produces the better model.The modification indices presented by AMOS 18.0. If there have any pair are above 15.0, the researcher needs to apply constraints. The Table 4 shows the result of fitness indexes after having applied constraints.

All of measurement model is valid since the fitness of indexes is achieve after apply the constraints that represents for model modification. Then, the construct validity should be employed to validate the measurement models that consists of bivariate correlation (<0.85), and Average Variance Extracted (AVE). If the bivariate correlation is greater than 0.85 among the exogenous variables, the researcher should choose either one to remove from the subsequent analysis. Means that, the highly bivariate correlation is having the

same contribution among this variables.The Table 5 and Figure 1 presented below shows the correlation between these constructs:

Table 4. Fitness of Indices

Variable	Chisq/Df	RMSEA	IFI	CFI	TLI
Type of Fit	Parsimonous Fit	Absolute Fit		Incremental Fit	
Motivation	2.209	0.052	0.978	0.978	0.970
Benefits	2.133	0.05	0.984	0.964	0.978
Barrier	1.093	0.014	1.000	1.000	0.999
Government	3.700	0.077	0.980	0.980	0.958

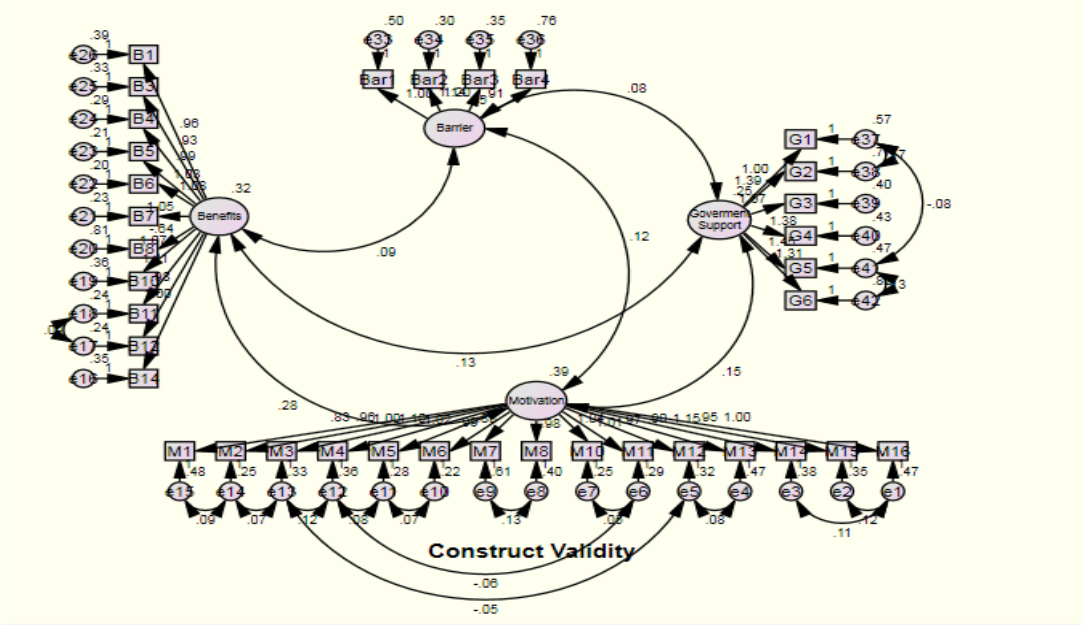

Figure 1. The correlation between these constructs

Table 5. Estimate

Variables			Estimate
Motivation	<-->	Benefits	.704
Benefits	<-->	Barrier	.283
Barrier	<-->	Goverment_Support	.274
Motivation	<-->	Barrier	.318
Motivation	<-->	Goverment_Support	.474
Benefits	<-->	Goverment_Support	.470

By regarding on the table above, all these constructs shows the correlation measure are below 0.85. Thus, the discriminant validity is achieved and all of these construct could be use in a structural model for futher analysis. According to (Zainudin 2012) if the measure correlation between two exogenous variables is higher than 0.85, one can conclude that the discriminant validity is not achieving acceptance. In this case, the construct are redundant of each other. Therefore, either one of these construct must be drop in the subsequent analysis. Then, the internal reliablity, convergent validity and discriminant validity achieve the fitness for each measurement model. The convergent validity and discriminat validity should be applied in order to enhance the validity of measurement model. The Table 6 shows the result for convergent validity.

4.1 Discriminant Validity

According to Fornell et.al., (1982) proposed discriminant validity is present when the variance shared between construct and any other construct in the model is less than the variances that construct shares with its indicators. The result for discriminant validity is presented as Table 7.

Table 6. Convergent Validity

Constructs	Items Loadings	Factor Loadings	Cronbach Alpha	Composite Reliability	Average Variance Extracted
Benefits	B1	0.636	0.923	0.899	0.503
	B3	0.669			
	B4	0.711			
	B5	0.775			
	B6	0.811			
	B7	0.772			
	B9	0.643			
	B10	0.726			
	B11	0.824			
	B12	0.776			
	B14	0.644			
Motivation	M1	0.591	0.941	0.516	0.516
	M2	0.783			
	M3	0.755			
	M4	0.777			
	M5	0.799			
	M6	0.809			
	M7	0.569			
	M8	0.702			
	M10	0.777			
	M11	0.742			
	M12	0.715			
	M13	0.634			
	M14	0.767			
	M15	0.709			
	M16	0.693			
Barrier	Bar1	0.627	0.761	0.468	0.468
	Bar2	0.765			
	Bar3	0.775			
	Bar4	0.522			
Government	G1	0.688	0.835	0.458	0.458
	G2	0.798			
	G3	0.595			
	G4	0.748			
	G5	0.721			
	G6	0.635			

Table 7. Discriminant Validity

Variables	Composite Reliability	Average Variance Extracted	Barrier	Motivation	Benefits	Government
Barrier	0.775	0.468	0.684			
Motivation	0.941	0.516	0.318	0.719		
Benefits	0.899	0.503	0.283	0.704	0.710	
Government	0.833	0.458	0.274	0.474	0.470	0.677

The diagonal values with bold are the square root of Average Variance Extracted (AVE) while other value are the correlation between the respective construct from pooled confirmatory factor analysis. The diagonal value is higher than in its row and column. Moreover, the result for discriminant validity can be obtained by using Stats Tools Package (STP) that eases the researcher to obtain the findings.

4.2 Structural Equation Modelling (Multiple Indirect Effects)

After the measurement model has been validated, the next step is to assemble these construct in the structural model. The path coefficient from the structural equation modelling is shown in Figure 1. This model can be namely as the multiple indirect effects since there had two models classify as the mediator which is benefits and barrier. As usual, the structural model should run for for the goodness of fit-test in order to achieve the fitness of model data-fits. In this case, this study also elects the baseline comparison and RMSEA for fitness.The figure shows the result for indirect effect. Based on the table presented, all of these variables is statistically significant discrepency between these variable since the the p-value bring less than 0.05.

Table 8. Unstandardized Estimate

			Estimate	S.E.	C.R.	P
Barrier	<---	Goverment_Support	.334	.072	4.632	***
Benefits	<---	Goverment_Support	.530	.073	7.280	***
Motivation	<---	Goverment_Support	.130	.054	2.394	.017
Motivation	<---	Barrier	.098	.041	2.384	.017
Motivation	<---	Benefits	.813	.074	11.063	***

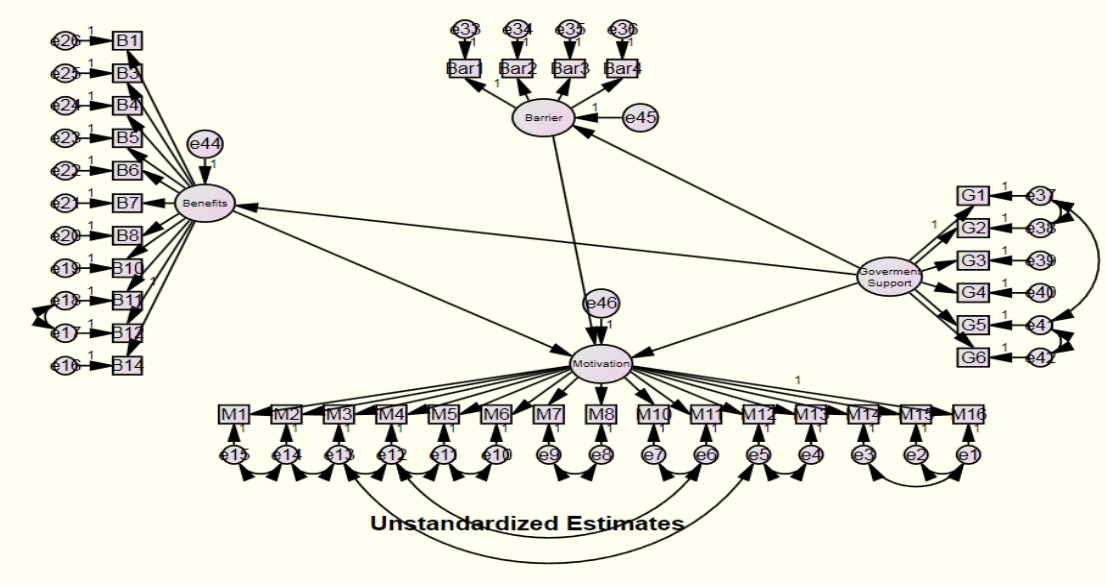

Figure 2. Mediating Effect

5 CONCLUSION AND RECOMMENDATION

The main objective of this work paper is to modeling the multiple indirect effect on motivation whereby as an endogenous variable (dependent). All the selected variables is chosen based on the previous empirical research so that the readers know the contribution and significant of these variables. Using structural equation modeling with AMOS as a second generation modeling should be emphasized many aspects or perspectives in order to acquire the best prediction on the use of these variables. In particular, the scholar should address the confirmatory factor analysis (CFA) whereby is the extension of exploratory factor analysis to validate the items provided in each constructs has been reflected coincides the purpose of selected variables. In orther words, the use of confirmatory factor analysis is compulsory in initial structural equation modeling. Afterwards, the reliability and validity should be state clearly and illuminate the reason of the prior analysis to prevent an ambiguity an explanation of the employed method. In this case, the reliability and validity of this work paper is achieved the required level based on the previous research. Indeed, the entire requirement may quite messy and waste time since the prior objective to determine the relationship of exogenous and endogenous variables. Yet, confirmatory factor analysis is a need to equip the particular analysis. Despite of having the required level in structural equation modeling, the scholars are prone to modify the variables regarding on the pedagogical thereotical framework. In this instances, the prediction of each variables is appears and of course the scholars can make a deduction through the family pairwise error to support or defy the hypothesis statement. Thus, the probability values (p-value) which is below than 0.05 indicate to defy the research hypothesis. However, the findings suggest all the relationship between exogenous and endogenous variables is significant beyond the probability value. Means that, the varibles of (government support on barrier, benefits, and motivation), (barrier on motivation) and (benefits on motivation) is supported. One can be conclude that all the employed variables are influenced on the level of involvement of youth towards the volunteerism program. Of rely on the prediction influence for each constructs, the scholar might to improve the recreation of this method to be more interesting and prevent tedious.

Thus, the author recommends the readers could test the statistical power of each mediator variable to determine to what extent the strength of the mediator variable in structural equation modeling. In short, there are three types of mediators and the scholars just to identify the type of mediators. Type of mediators is relies on the significant path provided in structural equation modeling. Besides, the findings applied is limited to four variables only and this paper suggest to add more variables so that the contribution of this work paper much better and enjoyed. Moreover, the step by step to achieve the main objective is time-consuming due to address the confirmatory factor analysis issues rather than on setup the influence of these relationship

between each variables. Thus, the author applauds to use SmartPls 2.0 for the future research so that the objective research to determine the relationship is tandem with the use of application.

ACKNOWLEDGEMENTS

I would like to acknowledge the guidance, careful reading and constructive comments was valuable for Prof. Madya Dr. Sabri Ahmad, supervisor at Universiti Malaysia Terengganu (UMT). His timely and efficient contribution helped me shape this into its final form. He also encouraged me in my interest in this topic. Special thanks, tribute and appreciation to all those their names do not appear here who have contributed to the successful completion of this study. Finally, I'm forever indebted to my beloved parents, Mr. Wan Afthanorhan and Mrs. Parhayati who understanding the importance of this work suffered my hectic working hours.

REFERENCES

[1] Afthanorhan, W. M. A. B. W., & Ahmad, S. Modelling The Multigroup Moderator-Mediator On Motivation Among Youth In Higher Education Institution Towards Volunteerism Program.
[2] Alias, Lazim. (2011) Introductory Business Forecasting a pratical approach 3rd edition.
[3] Bentler, P.M. and Bonnet, D.C. (1980), "Significance Tests and Goodness of Fit in the Analysis of Covariance Structures," Psychological Bulletin, 88 (3), 588-606.
[4] Bollen, K.A. (1990), "Overall Fit in Covariance Structure Models: Two Types of Sample Size Effects," Psychological Bulletin, 107 (2), 256-59.
[5] Brackney, W.H. (1997). Christian Volunterism: Theology and Praxis. Michigan: Eerdmans Publishing Co.
[6] Browne, M. W., MacCallum, R. C., Kim, C., Andersen, B. L., & Glaser, R. (2002). When fit indices and residuals are incompatible. *Psychological Methods*, *7*, 403-421.
[7] Byrne, (1998). Structural Equation Modeling With Lisrel, Prelis, and Simplis: Basic Concepts, Applications, and Programming.
[8] Christen, R. P., Rhyne, E., & Vogel, R. C. (1995). *Maximizing the outreach of microenterprise finance: The emerging lessons of successful programs*. Harvard Institute for International Development.
[9] Cronbach, L. J. (1951). Coefficient alpha and the internal structure of tests. *Psychometrika, 16(3)*, 297-334.
[10] Dingle, T. (1995) People and places in post-war Melbourne. In: G.Davison, T.Dingle, and S.O'Hanlon, eds. *The Cream Brick*
[11] Dingle, T. (2009) MacRobertson's Chocolate Factory: from industry to industrial chic. *Urban Policy and Research* (forthcoming).
[12] Farrell, J.M., Johnston, M.E. and Twynam, G.D. (1998). Volunteer motivation, satisfaction, and management at an elite sporting competition. Journal of Sport Management, 12(4) 288 300.
[13] *Frontier: Histories of Australian Suburbia* (Melbourne: Monash Publications in History, No. 19).
[14] Gerbing, D.W. and Anderson, J.C. (1984), "On the Meaning of Within-Factor Correlated Measurement Errors," Journal of Consumer Research, 11 (June), 572-80.
[15] Hair, J. F. (2009). Multivariate data analysis.
[16] Holmes-Smith, P. (2006). *School socio-economic density and its effect on school performance*. MCEETYA.
[17] Hu, L.T. and Bentler, P.M. (1999), "Cutoff Criteria for Fit Indexes in Covariance Structure Analysis: Conventional Criteria Versus New Alternatives," Structural Equation Modeling, 6 (1), 1-55.
[18] Jöreskog, K. and Long, J.S. (1993), "Introduction," in Testing Structural Equation Models, Kenneth A. Bollen and J. Scott Long, Eds. Newbury Park, CA: Sage.
[19] Jöreskog, K. and Sörbom, D. (1993), LISREL 8: Structural Equation Modeling with the SIMPLIS Command Language. Chicago, IL: Scientific Software International Inc.
[20] Jöreskog, K. and Sörbom, D. (1996), LISREL 8: User's Reference Guide. Chicago, IL: Scientific Software International Inc.
[21] Lombard, A. (2008). The implementation of the White Paper for Social Welfare: A ten-year review.
[22] MacCallum, R. C., & Austin, J. T. (2000). Applications of structural equation modeling in psychological research. *Annual Review of Psychology*, *51*, 201-226.
[23] MacCallum, R. C., & Hong, S. (1997). Power analysis in covariance structure modeling using GFI and AGFI. *Multivariate Behavioral Research*, *32*, 193-210.
[24] McDonald, R.P. and Ho, M.-H.R. (2002), "Principles and Practice in Reporting Statistical Equation Analyses," Psychological Methods, 7 (1), 64-82.
[25] McIntosh, A.R., & Gonzalez-lima, F. (1994). Structural Equation Modelling and ots application to network analysis in functional brain imaging. Human Brain Mapping, 2, 2-22.
[26] Nunnally, J. C. (1978). Psychometric theory (2nd ed.). New York: McGraw-Hill.
[27] Phillips, S. D. (1995). Redefining government relationships with the voluntary sector: On great expectations and sense and sensibility. Retrieved December 16, 2005, from http://www.vsr-trsb.net/publications/ phillips-e.html
[28] Steiger, J. H. (1990). Structural model evaluation and modification: An interval estimation approach. *Multivariate behavioral research, 25*(2), 173-180.
[29] Timms, N. & Timms, R. 1982. Dictionary of Social Welfare, London: Routledge and Kegan Paul.
[30] Tucker, L. R., & Lewis, C. (1973). A reliability coefficient for maximum likelihood factor analysis. *Psychometrika, 38*(1), 1-10.
[31] Zainudin, A. (2010). Research Methodology for Business and Social Science. Shah Alam: Universiti Teknologi Mara Publication Centre (UPENA).