

Measuring the Unmeasurable: Maternal Piety Scales

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Keywords: Spirituality-piety-maternal-SEM-CFA

ABSTRACT

The purpose of this study was to develop an instrument that measures maternal spiritual characteristics. Particularly, the instrument aims to measure a domain of spirituality which is commonly regarded as "the un-measurable" i.e. Maternal Piety. The study was conducted in two phases. The first phase was a longitudinal study of a focus group from an Islamic Integrated Primary School (IIPS). In, this phase Cronbach's alpha was employed to assess the reliability index. Accordingly, Principal Component Analysis was employed to explore the underlying dimensions of Maternal Piety. The second phase was an ex-post facto study that involved 12 IIPS in the Klang Valley area. Confirmatory factor analysis (CFA) was utilized to examine the construct validity of the instrument. Finally, Structural Equation Modeling (SEM) was utilized to investigate the relationship between Maternal Piety (MP) and Maternal Quality Relationship (MQR) as supporting evidence for the criterion-related validity. The results provided evidence that the instrument achieved sound psychometrics properties. This instrument succeeded the standard Cronbach's alpha > 0.70 for internal consistency and the proportion of variance explained was > 50 % for the three dimensions of Maternal Piety. The goodness-of-fit measures GFI, AGFI, IFI, TLI, and CFI were > 0.90 and RMSEA was < 0.08 which were evidences for construct validity. Moreover, the findings supported the postulation that MP positively influenced MQR as evidence for the criterion-related validity. In short, Maternal Piety Scales is a reliable and valid instrument. From the practical standpoint, it suggests that spirituality is no longer remaining aloof in theoretical forms and neither exclusive for theologians only.

BACKGROUND OF THE STUDY

Some children are lucky to be blessed with parents whose personality meshes well with theirs, or some are even luckier to have parents who are able to appreciate their children's personality even though there are temperament clashes. Others however are not so lucky. They have parents who mainly disapprove them and demand them to be different and better. Still others have parents who largely ignore them, parents who pay attention to their children only

when the children fulfil their needs. The children of these demanding, distant or self involved parents often grow up with the feeling that they are not good enough to merit their parents' love. These children tend to constantly criticize themselves and hoping to improve in order to gain their parents' attention and approbation (Hillman, 1992).

Nevertheless, the fate of the children may be planned by mothers. These well intending mothers not only understand the children's

needs but are also willing to learn and adapt their personality. Winnicott (1987), a British Psychoanalyst, coined the term “good-enough mother” to describe a mother who though far from perfect is able to consistently and appropriately give enough attention to her children’s needs. He posits that, “There is no question of perfection here. Perfection belongs to machines: what the infant needs is just what he usually gets, the care and attention of someone who is going on being herself ” (Davis and Wallbridge, 1990; p. 107). These children grow up with the feeling that the mother is there when she is needed, and view the world as a good place where the children can be their authentic self and where their needs can be met. She is not only setting appropriate limits, guiding and supporting, but also being able to let go—giving her child both roots and wings.

In view of the aforementioned concern, there has been limited research on the relationships between maternal characteristics and the attachment patterns of mother and child. Sensitive mothering has been described as the maternal characteristic that promotes a child’s emotional, social and cognitive growth (Clarke-Stewart, 1978; Belsky, 1984). Carranza and Killmann (2000) investigated links between perceived parents’ characteristics and attachment variables for young women from intact families. They rated both parents using items derived from Secunda’s (1992) descriptions of parental characteristics. The study revealed positive correlations between secured attachment, self-concept and doting mother characteristics. An insecure attachment pattern is associated with lower self worth, less Interpersonal trust, distant and demanding absent maternal characteristics. A preoccupied attachment pattern is linked to demanding maternal characteristics. Collectively, positive maternal characteristics relate more strongly to a secured attachment pattern.

Statement of the Problem

The aforementioned Secunda’s framework of parental characteristics may not be relevant to Malaysian Muslim society that embraces religion as a way of life. The dimension of spirituality of one’s life may not simply be ignored. Instead, it is the focal point of an individual. Religion, past and present, may affect attitudes and practices in almost all aspects of life, including childcare and recreational activities (Wilcox, 2002).

Previously, religion and psychology were two separate domains (Badri, 2000). However, a growing body of empirical research has associated spirituality and religion with a wide array of salutary characteristics (Sidek Mohd Noah, 2006; Hodge, 2005). Nevertheless, to date, little efforts have been made to empirically substantiate the Islamic perspectives of maternal spiritual characteristics. Therefore, this study intends to develop an inventory for maternal spiritual characteristics based on the Islamic literature and legacy.

Maternal Spiritual Characteristics

Specifically, in a Muslim population context, religiosity and spiritual dimension of an individual is of cardinal characteristics that shape a person’s personality (Mohd. Noon, 2002; Kassim, 1985). An individual’s personality is very much determined by faith in God the All-watching and the All-hearing. In other words, a person’s spiritual connection to God determines their characteristics and deeds.

The character is said to be good, when the state of soul produces virtuous action. On the contrary, when the state of soul is such that is consistently and spontaneously produces evil actions, the character is termed evil or bad (Alhabshi and Ghazali, 1994). Al-Ghazali, in his magnum opus *The Revival of Religious Knowledge*, listed good characteristics to include sincerity, patience, and truthfulness (Karim, 1982). Accordingly, there are many Muslim writers who apply and extend these characteristics into other specific domains such as management, education and family sciences.

In the family science literature, Schleifer (1986) suggested that there are two characteristic aspects of a mother: that which aligns itself to responsibility, and that attributed to natural, God-given qualities, including both the physical exertion of childbirth and the expression of positive emotion. These two aspects are not mutually exclusive but rather supportive of each other, thus enhancing a state of equilibrium, which is the desired atmosphere in a Muslim household. There are two most important qualities of a mother, namely affection and generosity (Schleifer, 1986; Mansor *et al.*, 1998). However, this does not mean that other qualities are not important. In addition, it is important to note that cardinal characteristic for Muslim personalities is piety (*taqwā*) be it in the

professional or non-professional arena (Langguglung, 1988). Therefore, the present study focuses on Maternal Piety, the cardinal characteristic of a Muslim mother.

Piety (Taqwá)

The root of the word *taqwá* has two interwoven meaning: to fear and to protect oneself. The basic meaning from the Qur'anic verses is to stand in awe of God, to fear the consequences of acting against Him, and to do everything in one's power to protect oneself from these consequences. The term implies observing the religion meticulously, sincerely, and with full presence of mind. Hence, *taqwá* is an individual characteristic established in relationship to God (Chittick, 2000).

Consistently, al-Nawawi (1983) describes the meaning of *taqwá* as to "abstain and refrain from committing sin". According to the *hadith* and *Al-Qur'an*, it means the state of mind in which the omnipotence and omnipresence and watchfulness of Allah is creating and developing a person to distinguish between good and bad. *Taqwá* leads the person towards virtues and against vices.

Al-Qurtubi (1937) explained that calling for good and forbidding evil are the characteristics of real believers. *Al-Qur'an* (Ali-Imran: 110) explicitly stated that, those who possess these three characteristics, calling for good, forbidding vices and having faith towards Allah, are the best among all human race. Hence, the degree of nobility towards Allah is the degree of piety (Al-Hujurat: 13). Al-Tabari (1904) defined calling for virtues and forbidding evil as encompassing all aspects of life that have been prescribed in *syāriah Islamiyyah* (Islamic law).

Based on Hanafi Mohammed's (1995) works, *taqwá* means to safeguard oneself from His punishment and anger by obeying His command and avoiding His prohibition. According to *al-Qur'an*, this concept of *taqwá* encompasses several dimensions and carries several meanings: a) *Taqwá* means to be fearful of Allah (Al-Baqarah: 41). b) *Taqwá* means to obey Allah (Ali-Imran: 50). c) *Taqwá* means God-wariness (Al-Baqarah: 233). According to the Sufis, *taqwá* means to protect oneself from sinful acts. *Al-Imam* Al-Ghazzali explains that the word *taqwá* is derived from the root word *wiqāya*, which means shield or armour. Hence, with *taqwá* one is protected from evil due to a strong will power to avoid sin. The *salaf* scholars define *taqwá* as follows.

Abdullah Ibn Abbas (r.a) defines *Muttaqin* (one who has the characteristics of *taqwá*) as one who is careful in his words and actions in order to avoid His anger and punishment and is hoping for His blessings by enjoining His command. Accordingly, Abu Darda' explains that *taqwá* is to avoid sin, however small, and *shubhah* (something that is not clear between permissible or prohibited). Thalq ibn Hubayb describes *taqwá* as to obey His command, by following His guidance, longing for His pleasure and avoiding sinful acts. Musá ibn Ayun illustrates *taqwá* as avoiding oneself from *shubhah* due to fear of falling into *haram* (prohibited).

In short, *taqwá* means having faith in life hereafter and living this life as to seek the pleasure of Allah through enjoining good and forbidding evil. In the context of a mother, she is being consistent and committed to raise her children to become the persons Allah decrees. Her role is to remind her children there is life in the hereafter and to enjoy for virtues and forbid vices among them.

Development of Maternal Piety Scales

Scale construction began with conceptualising Maternal Piety via preparation of a blueprint table of specification. According to Thorndike (1997) and Mohammad Sahari (2002), it is necessary for the blue print table to be comprehensive in order to establish its content validity. In addition, several steps have to be taken to help improve the validity of the instruments in general (Norah, n.d; DeVellis, 1991). The steps are: (1) defining the objective of the questionnaires; (2) itemizing the questionnaires; (3) trying out the questionnaires; (4) statistically analysing the items, and (5) revising the questionnaires.

In addition to these steps, to ensure the highest validity, this instrument was reviewed by four independent experts. Two of them are content experts and the other two are methodology experts. The content experts are scholars who specialize in Islamic studies. Professors in Educational Psychology of Measurement and Evaluation and Quantitative Research and Statistics are the methodology experts. The experts are from three different universities in Malaysia. Additionally, the instrument has been presented in an International Symposium of Measurement and Evaluation in 2005 and at the Structural Equation

Modelling Workshop in 2006, organized by Prof. Mohamad Sahari Nordin, at the International Islamic University Malaysia.

OBJECTIVES OF THE STUDY

This study aimed at developing a psychometrically sound multi-dimensional measure of Maternal Piety Scales. The specific objectives of the study were to:

- (1) assess the reliability of the developed instrument
- (2) explore the underlying dimension of maternal piety
- (3) test the construct validity of the instrument
- (4) examine the criterion-related validity of the instrument

METHODOLOGY

Phase I

This phase was conducted to assess the reliability of the developed instrument and to explore the underlying dimensions of Maternal Piety. The first phase was a longitudinal study of the focus group from an Islamic Integrated Primary School (IIPS). In this phase a purposive sampling was employed. The duration of this phase was two years. Due to the mortality rate (15/105), which is a common problem in longitudinal studies, such as changes of schools and absentees during the data collection period, there were only 90 valid respondents, 40 girls and 50 boys aged between 11-12 years involved in this phase. At time 1 (T 1), data was collected when the respondents were in Year 4, Time 2 (T 2) was during mid-year examination week of Year 6. At Time 3 (T 3), data was collected during the final national examination week of Year 6, which was during phase 2 of the study.

Respondents completed a 36-item instrument, 12 out of 36 items were for the domain of Maternal Piety. They indicated how each statement was true to them on a 7-points Likert type scale. Response categories were 7 for always true, 6 for almost always true, 5 for often true, 4 for sometimes true, 3 for seldom true, 2 for almost never true and 1 for never true. The items were reverse scored when the statements were negatively worded.

Phase II

Having found evidence of multi-dimensionality for Maternal Piety, Phase II was to confirm these underlying dimensions by employing

Confirmatory Factor Analysis (CFA). This phase also aimed to test other psychometrics properties for criterion-related validity. Adopting the work of Hanafi Mohamed (1999) and Chittick (2000), the hypothesis of Maternal Piety was formulated to test for the construct validity.

H1: Maternal Piety is a second order latent construct for the three-dimensional measurement model, which includes Faith in Hereafter (Faith), Call for Virtue (Virtue) and Forbid Vices (F-Vices).

As mentioned earlier, maternal characteristics influence substantially the attachment between mother and child (Winnicott, 1957, 1987). Hence, the following hypothesis was formulated to test for the criterion-related validity.

H2: Maternal Piety positively influences Maternal Quality Relationships.

Sample

The respondents of this phase consisted of students from Islamic Integrated Primary Schools in the Klang Valley. Initially, a total of 200 students were systematically selected from 12 participating schools. This size is considered an optimum size to run SEM (Arbuckle and Wothke, 1999; Bentler and Mooijart, 1989). Upon checking the outliers via Mahalanobis distance test, 5 respondents were eventually dropped from the respondent's list.

More than half of the respondents (55.6%) were female and the rest male. A majority of the respondents (62.8%) had 4-6 siblings. More than half (63.7%) were either the first or the third child in the family. In terms of maternal employment, 30.1% and 29.6% of mothers were professional workers and homemakers, respectively. Accordingly, respondents' mothers were non-professional workers. Finally, 14.8 % were business owners and directors of companies.

Instruments

There were two sets of questionnaires involved in Phase II. The data were collected using the following measures:

- 1) *Maternal Piety*. A 10-items questionnaire of Maternal Piety Scales. The details of the collected data from this instrument were discussed earlier for Phase I.
- 2) *Maternal Quality Relationship*. An adapted maternal version of Inventory of Parents and Peer Attachment (IPPA; Amrden and Greenberg, 1987) which comprises of 11-

items was used. The items were grouped into three subscales. The first subscale, named Trust, consists of 4 items. The second subscale, named Communication, consists of 4 items as well and finally, the last subscale named Alienation consists of 3 items. This adapted version of IPPA is named M-IPPA. Similar to Maternal Piety Scales, M-IPPA response categories were 7 for always true, 6 for almost always true, 5 for often true, 4 for sometimes true, 3 for seldom true, 2 for almost never true and 1 for never true. The items were reverse scored when the statements were negatively worded. In this study, the score for each subscale was cumulative scores of the items. These cumulative scores were represented as observed variables in Structural Equation Modeling (SEM).

RESULTS

Phase I

(i) Reliability

The reliability analyses were conducted three times (T1, T2, and T3) to ensure the internal consistency was at least maintained if not improved after item revisions over time. The results indicated that the internal consistency for the three different times was maintained ($\gamma > 0.70$). At T1, T2 and T3, Cronbach's $\gamma = 0.847, 0.840$ and 0.850

respectively. Table 1 shows *Alpha if item deleted* for all of the items did not exceed *alpha standardized item*. The results indicated that all of the items are reliable and stable.

(ii) Dimensionality

In order to determine the underlying structure, Maternal Piety items were factor analyzed using Principal Component Analysis (PCA) with Varimax rotation. However, it is imperative to test the multivariate assumptions to ensure the appropriateness of the technique employed. In order to justify the use of Principal Component Analysis, one of the important assumptions to be assessed is the intercorrelation among the items. Some degree of multicollinearity is desirable, because the objective is to identify the interrelated sets of variables (Hair *et al.*, 2006).

Prior to conducting the PCA, several statistical assumptions were tested in order to justify the relevancy of PCA. A visual inspection of the correlation matrix and Bartlett Sphericity Tests were conducted. The results indicated that Maternal Piety was statistically significant, $\chi^2 (630) = 1304.82$, $p = 0.001$ for its multicollinearity. Besides that, Kaiser-Meyer-Olkin Measure of Sampling Adequacy was 0.707 . Thus, the overall Measurement Sampling Adequacy (MSA) fulfilled the requirement of at least 0.50

TABLE 1
Item reliability analysis for maternal piety scales

	T1	T2	T3
	Cronbach's Alpha if Item Deleted	Cronbach's Alpha if Item Deleted	Cronbach's Alpha if Item Deleted
msc1	0.829	0.827	0.841
msc2	0.836	0.842	0.849
msc3	0.835	0.828	0.838
msc4	0.826	0.811	0.820
msc5	0.827	0.813	0.822
msc6	0.832	0.827	0.843
msc7	0.836	0.827	0.841
msc8	0.828	0.839	0.845
msc9	0.845	0.820	0.830
msc10	0.834	0.823	0.840
msc11	0.848	0.839	0.848
msc12	0.842	0.838	0.843
Cronbach's Alpha Based on Standardized Items	0.848	0.841	0.850

In conducting PCA, certain criteria have to be set *a priori* by the researcher in order to resolve for the factors solution. Items were retained when the loading was greater than 0.40, the difference of cross loading was greater than 0.1, and at least three items were loaded in each component. The rotation method of Varimax with Kaiser Normalization was selected due to the goal of the researcher to reduce a larger number of variables to a smaller set of uncorrelated variables for subsequent use.

At time 1 (T1), Maternal Piety domain contained 12 items, but after several Varimax rotations were conducted three factors emerged. Upon scrutinizing each item that was loaded in a factor, the first dimension was labelled as Faith in Hereafter (Faith), the second dimension was labelled as Call for Virtue versus Vices (Virtue vs. Vices), and the third dimension was labelled as Commitment. Instead of two separate dimensions as conceptualised for Virtue and Forbid Vices, the items were lumped together in a single factor. On the other hand, the dimension of commitment in performing Muslim obligations (Commitment) emerged to be conceptually sound as well. These three factors accounted for 59.15% of total variance explained.

Similarly, at time 2 (T2) the results yielded for three- factors solutions with 59.80 % proportion variances were explained with loadings ranging from 0.40 to 0.85. However, a clearer label of the dimensions was expected in the second phase of the study. This was due to the larger sample size and also the randomised sampling of a bigger population. In addition, these dimensions were subjected to construct validity by employing CFA. Hence, the itemized details are elaborated in the final analysis reported in Phase 2.

Phase 2

(i) Construct Validity

Phase 2 was conducted to test the construct validity and to examine the criterion-related validity of the developed instrument. Confirmatory Factorial Analysis (CFA) is one of the most commonly employed tool to test the construct validity of the developed

instrument (Hair *et al*, 2006). In this study, a second order CFA that is embedded in Structural Equation Modelling (SEM) was employed. In *Fig. 1*, the shaded part is the measurement model for Maternal Piety. P represents Maternal Piety, the second order latent construct for the three underlying dimensions of call for virtue (virtue), faith in hereafter (faith) and forbid vices (f-vices).

The results shown on *Fig. 1*, $\gamma^2 (61) = 85.986$, $p = 0.019$, suggested that there is no significant difference between the hypothesized and observed models. Hence, the results indicate that the hypothesized model was admissible. Maternal Piety (MP) was hypothesized to be a second order latent construct for three underlying dimensions, namely Faith in Allah and the Hereafter (Faith), Call for Virtue (Virtue) and forbidding F-Vices (F-Vices) was supported.

In *Fig. 1*, the middle shaded ellipse (Faith), was *a priori* set to be the reference indicator due to the conceptually sound indicator of Maternal Piety. Hence, the p -value was not estimated because Faith was presumed a significant indicator of Piety. In addition, the constraint was needed for model identification where the unstandardized regression weight was set at 1. A presumed indicator is needed in order to run SEM using AMOS 4.0 (Arbuckle and Wothke, 1999). This was evident when the estimated parameter found that Piety accounted for 96 % of the total variance in Faith ($\gamma_{21} = 0.98$, $R^2 = 0.96$). The second highest explained variance by the second order construct of Maternal Piety was forbid vices ($\gamma_{31} = 0.69$, $R^2 = 0.47$, $p = 0.001$). Maternal Piety explained 47% of the variances in the forbid vices dimension. Finally, the third indicator was named Virtue ($\gamma_{12} = 0.61$, $R^2 = 0.37$, $p = 0.001$), which was found to be statistically significant as well. Maternal Piety explained 37% of the variances for the Virtue dimension.

In addition to the unobserved constructs, this model was also tested for the statistically significant loadings (standardized regression weight) of each item. Table 2 describes statements for the item; standard error (S.E.) critical ratio (C.R) and statistical significant probability values (p) were summarized for

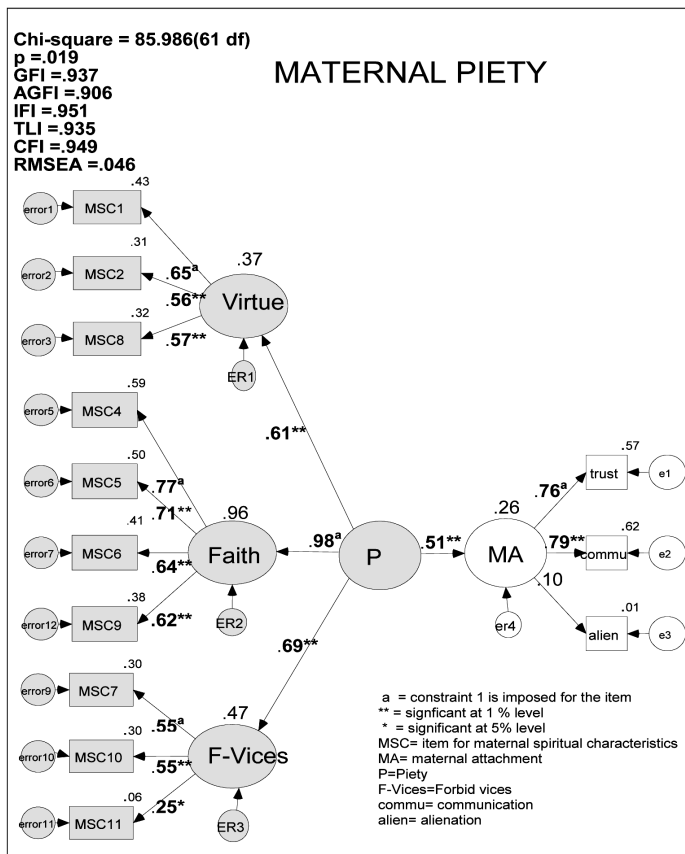


Fig. 1: Structural equation modelling for maternal piety

the measurement model of Maternal Piety. All items were found to be statistically significant at 1% level, with loading greater than or equal to 0.4 except for item MSC11. This item was statistically significant at 5% level with loading only 0.25. This item was not dropped due to the minimum of three items per factor was suggested by Stevens (1996) and Hair *et al.* (2006).

In summary, the hypothesized Maternal Piety as a second order construct for tri-dimensional measurement model fits the data. Faith in hereafter (Faith) was found to be the best indicator for Maternal Piety followed by forbid vices (F-Vices) and then calls for virtue (Virtue). Faith was best indicated by item MSC4, *mom reminds about hereafter*. F-Vices was best indicated by item MSC7, *mom forbids watching indecent TV programs*. Finally, Virtue was equally best

indicated by items MSC2 and MSC8, *congregational prayer* and *reading Al-Quran* respectively.

- (ii) Criterion-related Validity of Maternal Piety
 Criterion-related validity is an empirical relationship between test scores and another valid criterion measure (Thorndike, 1997). There are two types of criterion validity, namely, concurrent validity and predictive validity. Concurrent validity is the relationship between a test and the criterion when evidence is obtained at approximately the same time. In this study, criterion – related validity of the instrument Maternal Piety Scales, was assessed employing Pearson correlation and structural equation modeling (SEM). From Table 3, Piety scores correlated significantly with Maternal Quality Relationship (MQR) and the two subscales, Trust and Communication. Hence, this

TABLE 2
CFA results of loadings, standard error, critical ratio significant p- value and item description for Piety

Construct	Item	Statements	Loadings	S.E.	C.R.	P
Virtue	MSC1	pray five times a day	0.64	*	*	*
	MSC2	pray congregationally	0.56	0.24	4.71	0.00
	MSC8	read <i>Al-Qur'an</i> every night.	0.57	0.25	4.71	0.00
Faith	MSC4	reminds me about the hereafter	0.77	*	*	*
	MSC5	reminds me about our purpose of life	0.71	0.11	8.84	0.00
	MSC6	reminds me that satan is our enemy	0.64	0.11	7.85	0.00
	MSC9	reminds me to thanks Allah	0.62	0.11	7.65	0.00
F-Vices	MSC7	forbids me to watch indecent ...	0.55	*	*	*
	MSC10	forbids me to portray ..	0.55	0.26	4.32	0.00
	MSC11	forbids me to uncover my ...	0.25	0.155	2.52	0.01

*The value was not estimated due to the required constraint for model identification where unstandardized regression weight of the item is fixed to default 1.

TABLE 3
Correlations maternal piety and quality relationship constructs

	VIRTUE	FAITH	F-VICES	PIETY	TRUST	COMMU	ALIEN	MQR
VIRTUE	1.000							
FAITH	0.437**	1.000						
VICES	0.251**	0.399**	1.000					
PIETY	0.752**	0.868**	0.631**	1.000				
TRUST	0.126	0.323**	0.207**	0.297**	1.000			
COMMU	0.097	0.378**	0.228**	0.322**	0.594**	1.000		
ALIEN	0.035	-0.082	-0.019	-0.037	0.199**	0.009	1.000	
MQR	0.092	0.399**	0.229**	0.332**	0.682**	0.802	-0.455**	1.000
Mean		14.450	20.970	18.720	54.140	23.600	22.130	17.560
SD	3.820	4.960	2.640	8.858	4.394	4.6951	5.038	9.054

** Correlation is significant at the 0.01 level (2-tailed).

correlation table provides a preamble to the criterion related validity of Maternal Piety. Nevertheless, it is yet to be tested via SEM as discussed in the following.

As shown in *Fig. 1*, Piety accounted for 26% of the variance explained for maternal attachment (MA) with the standardized regression weight at 0.51 and significant at 1 % level ($\lambda_{14} = 0.51$, $R^2 = 0.26$, $p = 0.001$). The subscale Trust with loading at 0.76, significantly indicated MA and 0.57 squared multiple correlations. Using the default setting of AMOS 4.0, the first defined observed variable was taken as a significant reference indicator. Secondly, the subscale Communication significantly indicated MQR with loading at 0.79 and squared multiple

correlation was 0.62 at 1% significant level ($\lambda_{42} = 0.79$, $R^2 = 0.62$, $p = 0.001$).

In summary, the findings provided evidence to support the postulation that Maternal Piety significantly influences Maternal Quality Relationship (MQR). A mother with the highest Maternal Piety is indicated by her consistency in inculcate faith in the hereafter in her children. Second, Maternal Piety is reflective of a mother who strongly enjoins her children for virtue and third by forbidding vices in the children. Accordingly, these three significant indicators of Maternal Piety contribute positively towards open communication and mutual trust in a mother-child relationship.

DISCUSSION

A psychometrically sound instrument is the one that provides evidence of high reliability and validity. Therefore, a rigorous effort has been put in developing Maternal Piety Scales. There were two phases of the study. Phase 1 was conducted to assess the internal consistency of the instrument. Reliability tests were conducted at three different times within two years period of the longitudinal study. According to Hair *et al* (2006) and Thorndike (1997) the generally agreed upon lower limit for Cronbach's alpha is 0.70. In this study, Cronbach's alpha exceeded 0.80 at all times (T1, T2 and T3). The results indicated that Maternal Piety Scales is a highly reliable instrument.

Next, Principal Component Analysis was conducted in the first phase to explore the underlying dimension of Maternal Piety. The results indicated that there are three dimensions of Maternal Piety Scales. The three dimensions accounted for almost 60 % of total variance explained at T1 and T2. Moreover, the entire item loadings were greater than 0.40 and deemed sufficient for total variance explained. Therefore, the conceptualisation of Maternal Piety Scales as a multidimensional instrument was supported. In order to confirm which items belong to what constructs, i.e., to test the construct validity of Maternal Piety Scales, Confirmatory Factor Analysis was conducted in Phase 2. Findings indicated that Maternal Piety as a second order measurement model was supported. According to Hair *et al.* (2006) and Arbuckle and Wothke (1999), the goodness-of-fit measures GFI, AGFI, IFI, TLI, and CFI were > 0.90 and RMSEA was < 0.08, and this provided evidence for the construct validity of Maternal Piety Scales.

Finally, the results of Structural Equation Modelling supported the postulation that Maternal Piety positively influences Maternal Quality Relationship. The regression weight of 0.51 provided evidence for criterion-related validity for the instrument. In short, the findings implied that Maternal Piety Scales is a reliable and valid instrument.

Implications

Theoretical Implication

In Islamic literature, piety is considered as the core value for all other values. According to Langgulung (1988), spiritual, moral, educational,

economic, social and political values emanate from piety. This pivotal value, i.e. piety, helps evaluate one's feeling, thinking and intentional behavior, which is known as attitude (Hanafi Mohamed, 1999; Chittick, 2000). Therefore, attitude that is based on piety leads an individual towards certain observable actions and behaviors. These observable actions and behaviors are the signs that act as indicators for piety measures. It is worth noting that, the present instrument developed is meant to measure these observable indicators of piety but not the real state of piety.

The Holy Prophet Mohammad (Peace Be Upon Him), time and again reminded his companions about the indicators for hypocrites (*munāfiq*) as opposed to believers in his *ḥadīth* narrated by Bukhari (Khan, 1983). These indicators of *munāfiq* are observable behaviors such as lying, not honouring one's promise, corrupting one's trust, and arguing excessively. These indicators are merely guidelines as the real state of hypocrisy in a person can only be judged by Allah alone. Thus, the signs that were explained by Allah's acted as a barometer for his companions to check upon their own level of faith (*imān*) toward Allah. Similarly, the indicators of piety are of observable actions that may be tapped in the present instrument.

Though it is not possible to be a perfect mother as suggested by Winnicott (1957), being a "good enough" mother is crucial. A "good enough" mother is consistently available to meet her children's needs. She is always there to guide and to set limits to her children to live their lives. Concomitantly, Bowlby (1973) postulates consistent maternal care leads to secure attachment between a mother and child. On the hand, maternal deprivation leads to an insecure pattern of attachment. Therefore, this study implies that Maternal Piety is the cardinal characteristic for a "good enough" Muslim mother. This characteristic would positively influence the quality of the relationship between a mother and child.

Practical Implication

Maternal Piety Scales are useful in conducting diagnostic assessment for family counselling. The instrument gauges maternal spiritual characteristics, particularly, maternal piety. Results of the assessment would enable the family

counsellor to plan and conduct family counselling intervention. To illustrate this, piety is observed in the mother's daily interactions with her children. As results show, a mother is to always remind her children about life in the hereafter, she enjoins her children for virtues and forbids vices, she is responsible for her children under her guardianship to practice the teachings of Islam. In addition, a mother's responsibility is to ensure her children perform their obligatory 5 daily prayers correctly and on time. Likewise, to forbid vices such as watching XXX-rated movies are incumbent upon mothers.

As a result of seeking the pleasure of Allah through the calling for good, forbidding evil and believing in life in the hereafter, a mother may strengthen her relationship with her children as well. It is also pertinent for parents to enjoin their children to go to the mosque together since they are young, instead of the parents going alone to the mosque (Norah, 1999). The proximity during congregational prayers between a mother and her children may lead to the feeling of closeness. As the saying goes "family that prays together stays together". Therefore, open communication is made possible and mutual trust is established between the mother and child.

REFERENCES

- ALHABSHI and GHAZALI, A. (1994). *Islamic Values and Management Sciences*. Kuala Lumpur: Institute of Islamic Understanding Malaysia (IKIM).
- AL-QURTUBI. (1937). *Al-Jami' li-Ahkam Al-Qur'an*. Al Qahirah: Matba'ah Dar al-Kitab al-Massiyah.
- AL-TABARI. (1904). *Jami' al-Bayan fi Tafsir Al-Qur'an*. Beirut: Dar al-Ma'rifah.
- AN-NAWAWI. (1983). *Riyadh-us-salihin* (Translated by S.M. Madani Abasi). Karachi: International Islamic Publishers.
- ARBUCKLE, J. and WOTHKE, W. (1999). *AMOS 4.0 user's guide*. Chicago, IL: Small Waters Corporation.
- ARMSDEN, G.C. and GREENBERG, M. (1987). The inventory of parent and peer attachment: Individual differences and their relationship to psychological well-being in adolescence. *Journal of Youth and Adolescence*, 16, 427-425.
- BADRI, M. (2000). *Contemplation: An Islamic Psychospiritual Study*. Kuala Lumpur: The International Institute of Islamic Thought.
- BELSKY, J. (1984). The determination of parenting: A process model. *Child Development*, 63, 1198-1208.
- BENTLER, P.M. and MOOIJART, A. (1989). Choice of structural model via parsimony: A rationale based on precision. *Psychological Bulletin*, 106, 315-317.
- BOWLBY, J. (1973). *Attachment and Loss: Vol. 2: Separation*. New York: Basic Books.
- CARRANZA, L.V. and KILMANN, P. (2000). Links between perceived parent characteristics and attachment variables for young women from intact families. *Adolescence*, 35 (138), 295-312.
- CLARKE-STEWART, K. (1978). "The effects" of infant day care reconsidered "reconsidered". *Early Childhood Research Quarterly*, 3, 293 - 318.
- DAVIS, M. and WALLBRIDGE, D. (1990). *Boundary and Space: An Introduction to the Work of D.W. Winicott*. New York: Brunner/Mazel Publisher.
- DEVELLIS, R. (1991). *Scale Development: Theory and Applications*. Newbury Park, California: Sage Publication.
- HAIR, J.F, BLACK, W.C, BABIN, B.R., ANDERSON, R.E and TANTHAM, R.L. (2006). *Multivariate Data Analysis* (6th ed). New Jersey: Prentice Hall.
- HANAFI MOHAMED. (1999). *Bagaimana menjadi Muslim bertaqwa*. Kuala Lumpur: Al-Hidayah Publishers.
- HASAN LANGGULUNG. (1988). Strategi pendidikan Islam dalam meningkatkan kualiti sumber daya manusia. *Jurnal Pendidikan Islam*, 8, 2, 17-38.
- HILLMAN, C. (1992). *Recovery Your Self Esteem: A Guide for Women*. New York: Fireside.
- HODGE D.R. (2005). Spiritual assessment in marital and family therapy: A methodological framework for selecting from among six qualitative assessment tools. *Journal of Marital and Family Therapy*; Oct; 31, 4; Health & Medical Complete.
- KASSIM, A. (1985). *Wanita dan Masyarakat*. Kuala Lumpur: Utusan Publications and Distribution Sdn. Bhd.
- KARIM, F. (1982). *Ihya ulum-id-din Al-Ghazali*. Kharachi: Pakistan: Darul Ishaat.
- KHAN, M. (1983). *Sahih Al-Bukhari*. Lahore: Kazi Publication.

- MANSOR, E., EUNOS, F. and SIDEK, O. (1998). *Tranquil Hearts*. Singapore: Majlis Ugama Islam Singapura.
- MOHAMAD SAHARI NORDIN. (2002). Pengujian dan penaksiran di bilik darjah. Gombak, Selangor Darul Ehsan: International Islamic University Malaysia.
- MOHD NOON, A. (2002). Paper presented at *Malaysian Psychological Association (PSIMA) Conference*, July 13-14. International Islamic University.
- NORIAH ISHAK. (n.d.). Rules and tips in constructing an instrument. Universiti Kebangsaan Malaysia: Faculty of Education.
- NORIAH ISHAK. (1999). An analysis of a parental and peer attachment and its determinant factors- A test of the attachment theory on Malaysian students studying at universities in the United States of America (Doctoral Dissertation, Western Michigan University, 1999).
- SCHLEIFER, A. (1986). *Motherhood in Islam*. London: The Islamic Academic Cambridge.
- SECUNDA, V. (1992). *Women and Their Fathers*. New York: Basic Books.
- SIDEK MOHD.NOAH, JAMIAH MANAP, AZIMI HAMZAH, HASNAN KASAN, TURIMAN SUANDI, KAIRUL ANWAR MASTOR, RUMAYA JUHARI, AZMA MAHMOOD, ZANARIAH MOHD NOR and STEVEN ERIC KRAUSS. (2006). Pembinaan inventori personaliti muslim (InPm) untuk kegunaan belia Malaysia. *Jurnal Pekama*, 12, 53-69.
- STEVENS, J. (1996). *Applied Multivariate Statistics for the Social Sciences*. New Jersey: Lawrence Erlbaum Associates, Publishers.
- THORNDIKE, R. (1997). *Measurement and Evaluation in Psychology and Education* (6th ed). New Jersey: Prentice Hall.
- WILCOX, W. (2002). Religion, convention, and parental involvement. *Journal of Marriage and Family*, 64, 780-792.
- WINNICOTT, D. (1957). *Mother and Child. A Primer of First Relationships*. New York: Basic Books, Inc.
- WINNICOTT, D. (1987). *Babies and Their Mothers*. London: Free Association Books. Reading, Mass.: Addison-Wesley. Perseus Press (1990).