

Development and Validation of Muslim Moral Emotions Inventory (MMEI)

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To Link this Article: <http://dx.doi.org/10.6007/IJARBSS/v11-i10/11502>

DOI:10.6007/IJARBSS/v11-i10/11502

Published Date: 16 October 2021

Abstract

The increased number of criminal offenses statistics among adolescents in Malaysia is alarming. This is believed to be rooted from the reduce of moral emotions such as shame and guilt in themselves. Therefore, this study presents the results of an exploratory factor analysis of the Muslim Moral Emotions Inventory (MMEI), a self-report measure of moral emotions of shame and guilt to overcome this issue. This instrument was administered to a sample of Malaysian-Muslims youth (n = 640) to determine the factor structure and internal reliability of these scales. The analysis showed that 18 items factored around four factors of perceived Guilt subscales includes God consciousness, Care for Others, Fear of Punishment and Forgiveness. Another 18 items factored around five factors of perceived Shame subscales include Positive Speech, Sensitive Towards Others Judgment, Safeguarding Chastity, Guarding One's View and Modest Self-presentation. The Shame scale accounted for 54.48% of the variance, while the Guilt scale accounted for 56.10% of the variance. The results of showed that the factor structure of the two moral emotions scales of the MMEI was significantly measured with the current sample of Muslims youth. Cronbach alpha, split-half coefficients and item analysis verified the reliability of instrument. The significance of adaptive shame and guilt as a unique contributor to psychological well-being and applications for the MMEI in assessment and outcome research among youth are discussed.

Keywords: Shame, Guilt, Exploratory Factor Analysis

Introduction

Recently, there is an increase interest among social psychologists to study the role of moral emotions (shame and guilt) in determining moral behaviour. Most of the prominent

scholars in the field such as Haidt (2003); Tangney and Stuewig (2011) believed that shame and guilt can be a driving force to steer an individual toward prosocial behaviour and away from negative ones. Shame and guilt are secondary emotions that requires awareness of self, understanding and evaluation of people about themselves and their own behaviour in relation to normative standards, rules and social objectives, which involve complex cognitive processes.

The hot debate among psychologists regarding shame and guilt is whether shame and guilt can be considered as adaptive and/or maladaptive emotions which can contribute to the development of social, moral and also psychological well-being. The social-adaptive perspective proposes that guilt is an inherently adaptive emotion and shame is an inherently maladaptive emotion (Dempsey, 2017). Based on this perspective, those interested in moral character development and psychopathology should work to increase an individual's guilt-proneness and decrease an individual's shame-proneness.

The most widely used instrument to measure shame and guilt known as Test of Self-Conscious Affect (TOSCA) was developed within the social-adaptive framework. This instrument was developed by Tangney, Wagner, & Gramzow in 1989. TOSCA-shame has been shown to be related to depression, anxiety, social anxiety, self-derogation, eating disorders, posttraumatic stress disorder, anger, aggression, alcohol and drug problems (including early drinking), decreased self-forgiveness, and low self-esteem. Meanwhile, TOSCA-guilt has been shown to be unrelated to anger, state anxiety, phobic anxiety, depression, interpersonal sensitivity, self-esteem, suicide ideation, negative self-evaluation, externalizing, and social insecurity. Many researchers have criticized TOSCA because of its biasness toward guilt as an adaptive emotion (Ferguson et al., 2000; Scheff, 2014).

On the other hand, the functionalist perspective, argues that both guilt and shame can serve as adaptive or maladaptive forces depending on the situational appropriateness, duration, intensity, and so forth (Dempsey, 2017). It emphasizes on when do guilt and shame serve adaptive and maladaptive purposes. Guilt can also be seen as maladaptive when people develop an excessive or distorted sense of responsibility (Tangney, Stuewig & Mashek, 2007). Aknouche and Noor found that there is an adaptive type of shame as induced by the religion of Islam. They suggested future research on the role of instilling adaptive shame, specifically in Muslim societies. The conclusions made regarding shame as a maladaptive emotion could exist because of biases in how shame and guilt are defined, operationalized, and measured by the TOSCA (Dempsey, 2017). To address this issue, the current study employed the conceptualization of shame and guilt from an Islamic perspective, taking into account the functionalist perspective.

An observed gap in the current literature on measures of shame and guilt, particularly for religious populations and societies is the psycho-spiritual dimension. Jumahat, & Abdullah (2014); Othman (2011) encouraged Muslim scholars, in particular, to develop psychometric instruments that are more relevant and suited to the need of Muslim populations grounded in the values of source texts of Islam, the Quran and Sunnah. The need of psychometric instruments that suited Muslims population is more prominent in Malaysia in view of increasing numbers of criminal offenses statistics involving Malay children and adolescents as mentioned in Malaysia Crime Statistics Report (2020). The criminal offenses were those related to theft, injuring people, burglary, rape and robbery. Tibbetts (1997) and Rahman et

al. (2011) revealed that the increase in criminal offenses cases is believed to be rooted from the reduce of moral emotions such as shame and guilt. Thus, this research aimed at developing an Islamic measure for shame and guilt, known as the Muslim Moral Emotions Inventory (MMEI). The validity of the Muslim Moral Emotions Inventory was initially assessed through Exploratory Factor Analysis. The study sets out to answer the following research questions: (i) what are the underlying factors of shame and guilt scales? (ii) how many factors explain the concept of shame and guilt? and (iii) what is the total proportions of variance explaining shame and guilt?

Methodology

Pilot Testing

Pilot testing of the Muslim Moral Emotions Inventory was conducted with 133 respondents. All of the respondents came from three institutions, namely, Tahfiz, Public Institutions of Higher Learning (IPTA/IPTS) and Rehabilitation Centers in Negeri Sembilan and Selangor, Malaysia. The instrument consisted of 135 item statements. Descriptive analysis of the respondents reported that there are 34 male respondents which constitute 25.6% from total sample and the rest (99) are the female students which accounts for the majority of the respondents (74.4%). The respondents' age is between 18-25 years old. Percentage of those who are 21 years old is higher compared to other ages (N = 44; 33.1%). Reliability analysis using the Cronbach's Alpha test revealed these results. The results of Cronbach's alpha reliability of Shame and Guilt scale are shown in Table I and II.

Table I

Reliability Value for Shame Scale

Subconstructs	Alpha value	Number of items
Positive Speech	0.877	15
Modest Self-presentation	0.831	15
Safeguarding One's Chastity	0.801	15
Lowering one's Gaze	0.756	15
Concern with others' Judgment	0.772	15

Total reliability values = 0.95 (75 items)

Table II

Reliability Value for Guilt Scale

Subconstructs	Alpha value	Number of items
Care for others	0.652	15
Fear of punishment	0.857	15
God consciousness	0.640	15
Forgiveness	0.798	15

Total reliability values = 0.881 (60 items)

The reliability value of alpha coefficient that is said to be good or acceptable as reliable is varied. According to Konting (2000), the reliability coefficient of 0.60 or more is acceptable. Mohamad (2001) recommends that the value between 0.65 and 0.85 is good and acceptable.

The relatively high value is placed by Hopkins (1998) which is 0.90 minimum to say the item has good reliability. However, most researchers suggest that the value of alpha coefficient greater than 0.8 typically indicates the high level of reliability and acceptability of an instrument (Aiken 2000; Cohen et al., 2000). Based on Table I and II, the values range between .756 to .831 for Shame Scale, while for Guilt Scale the values are between .640 to .652. The obtained result indicated the internal consistency of scores for the instrument.

Procedures

In order to conduct exploratory factor analysis, Hatcher (1994) recommended a ratio of a minimum of 5 cases for each item in a questionnaire. Since this study have 90 items, multiply by 5 cases, the total comes up to 450. Thus, the minimum samples required to conduct EFA for the items in the instruments for this study was 450. The main study involved a total of 640 respondents from three institutions, namely, Tahfiz, Public Institutions of Higher Learning (IPTA/IPTS) and Rehabilitation Centers in Klang Valley, Malaysia. Respondents were between 18-25 years old of age (M age=20.17, SD=1.84). Descriptive analysis reported that there were 271 male respondents which constituted 42.3% of the total sample and 369 females accounting 57.7%. Using PCA, the sample size depends on the number of items in the instrument. The minimum size is determined by the rule of thumb that there should be at least five times as many cases as there are variables to be analyzed (Hair et al., 2006).

Instrumentation

The survey instrument used in the study to measure shame and guilt- the Muslim Moral Emotions Inventory- developed by the first author based on the Quran, Sunnah and the works of several prominent Muslim scholars. The final instrument after pilot testing consisted of 90 items; 50 items to measure shame and 40 items to measure guilt. The MMEI examines individuals' perception towards shame and guilt using a 10-point Likert scale, ranging from 0 (Does not describe me at all) to 10 (Definitely describe me). Example items are, "Dress to cover my aurat/body", "Am careful about how I behave so that will not be looked down upon by others", "Saying offensive words" (negative item), "Do not care about how people respond to me" (negative item). For the second dimension, Guilt, there are 40 items using a ten-point scale ranging from (0) Does not describe me at all" to (10) "Definitely describe me," to measure a respondents' perception of forgiveness, fear of punishment, God consciousness and care for others/empathy. Example items include, "Never lose hope in Allah's forgiveness" and "Accept the punishment for what I did wrong". Internal consistencies was found to be acceptable (.83 for guilt scale and .82 for shame scale).

Data Analysis

The data were analyzed using PCA to identify the underlying dimensions for each construct of the instrument. The reliability of each construct was based on Cronbach's Alpha. coefficient alpha was used.

Result

Exploratory factor analysis was run separately for each scale. To determine the number of factors to retain, 4 criteria were used:

1. The presence of correlation with the other resulting factors (Barlett's test, KMO of MSA)
2. Factors with eigenvalues much greater than 1.0.
3. The value of factor loading for each variable was greater than 0.40.

4. Suppress small coefficient values below than 0.50.

Shame Construct

In order to justify the use of principle component analysis, one of the important assumptions to be assessed is the intercorrelations among the items. Barlett Sphericity Test was statistically significant, $\chi^2 (276) = 4897.39$, $p = .001$ the variables were highly correlated to one another. The measurement of sampling adequacy (MSA) for each item showed that all of the values were greater than .80. The Kaiser-Meyer- Olkin Measure of Sampling Adequacy was .857. Thus, there was evidence for the overall measurement of sampling adequacy fulfilling the requirement of at least .50 (18). Moreover, EFA showed that there were 5 factors generated by the data with eigenvalues greater than 1.0, accounting for 54.88% of the total variance described (Table III). This indicates that five underlying dimensions explained more than 50% of the variance among the 50 variables.

Table III

Rotated Component Matrix

Component	Positive Speech	Sensitive to Others Judgment	Guarding One's View	Safeguarding Dignity	Modest Self-Presentation
SH20			.780		
SH21			.779		
SH29			.568		
SH50			.623		
SH12					.743
SH13					.810
SH9					.526
SH44				.606	
SH45				.841	
SH46				.827	
SH49				.586	
SH14	.658				
SH16	.521				
SH30	.744				
SH33	.747				
SH35	.771				
SH36	.750				
SH48	.704				
SH15		.529			
SH25		.716			
SH26		.688			
SH28		.679			
SH38		.657			
SH40		.556			
Eigenvalue	3.718	2.834	2.440	2.327	1.759
% Variance	15.490	27.299	37.464	47.158	54.488
Note: N=640. Principal Component Analysis. Varimax Rotation with Kaiser Normalization					

Factor 1 consisted of 7 items. Based on the contents of the items (Table III), factor 1 was labelled as Positive Speech. The main purpose of the items in this factor is to measure the individual an individual's ways of speaking according to Al-Quran and As-Sunnah. Those who has high shame will tend to safeguard his tongue from any negative speech. Guarding one's tongue from speaking in an offensive or rude manner, speaking about issues that are of no concern to that individual. The religion of Islam plays a significant role in shaping the way Muslim should communicate or "rules of speaking". People who do not speak politely, will be considered rude. Meanwhile, people who speak politely will be generally get praise and accepted by others.

Factor 2 was labelled Concern with others' judgment which consist of 6 items. This group of items measured how much individual are aware and sensitive towards others' judgment of his behaviour. The person will feel uncomfortable if others look at them negatively and try to maintain the behaviour according to the Islamic principles and societal norms. The items also indicate that shame towards other fellow beings is an essential characteristic that keeps people from harming one another and from performing indecent acts. For example, an adolescent who has shame will be careful to do anything that makes his/her parents shameful.

Factor 3 was labelled Safeguarding one's view. It consists of 4 items. The items in this factor were meant to assess whether individual Muslims safeguard their eyes from watching or looking at things that are forbidden by Islam. The items related to guarding one's view imply the need for holding one's gaze from looking at forbidden things based on the Islamic principles. The man is responsible for everything he was gifted with. He has to use whatever given by Allah SWT properly. This is true as In Surah Al-Isra', Verse 36, "And do not follow that of which you have no knowledge, Verily! The hearing, the vision and the heart; and each of those man will be questioned about them (by Allah SWT)".

Factor 4 was labelled Safeguarding one's chastity. It consisted of 4 items. This group of items measured individual activities related to the protection of progeny, which includes the protection of offspring and the reproductive system. According to Islamic teaching, those who have high shame will protect their chastity in order to maintain their dignity and avoid themselves from indulging in an indecent behavior in public and seclusion. Both are contrary to the principle of the protection of human dignity and the act of adultery and extramarital pregnancy clearly an act that can damage the purity of lineage in Islam.

Finally factor 5 consisted of 3 items. It was labelled Modest Self-presentation. The items were meant to assess the individual way of dressing. According to mainstream or orthodox Islamic teachings, Muslims are encouraged to dress in a modest fashion. Modesty in dress means a type of body concealment concerning the erogenous zones (zones of the body with sexual significance), which are context and culture dependent. Immodest reveals parts of the body that are considered "inappropriate" or imbued with sexual significance depending upon the cultural context (Henkins, 2003). The cultural context here refers to the Islamic code of dress which requires individual to dress by covering their awrah.

The finding suggests that there are five underlying dimensions of MMEI's shame construct. The dimensions are positive speech, sensitive to others' judgment, guarding one's view, safeguarding one's chastity/dignity and dress modestly.

Guilt Construct

In order to justify the use of principle component analysis, one of the important assumptions to be assessed is the intercorrelations among the items. Barlett Sphericity Test was statistically significant, $\chi^2(210) = 5265.85, p = .001$ the variables were highly correlated to one another. The measurement of sampling adequacy (MSA) for each item showed that all of the values were greater than .80. Kaiser-Meyer-Olkin Measure of Sampling Adequacy was .894. Thus, there was evidence for the overall measurement of sampling adequacy fulfilling the requirement of at least .50 (Hassan & Bakar, 2009).

Beginning with 40 items, a varimax rotation was conducted, resulting in four factor solutions with eigenvalues greater than 1. The result showed four factors were extracted with 56.10% of total variance explained in Table IV. This indicates that five underlying dimensions explain more than 60% of the variance among the 19 variables. Based on the contents of the items (Table IV), the factors were labelled accordingly.

Factor 1 was labelled Fear of Punishments which consist of 5 items. Guilt results from the violation of internalized moral norms and would create the expectation of punishment. This factor was meant to assess individual deeds that indicate awareness in fulfilling responsibilities as khalifah of Allah in forbidding evil characterised by the fear of Allah SWT and His punishment, desires His Paradise and wishes to attain His good pleasure. This fear will deter him from committing any vices and deter him from disobeying Allah SWT.

Factor 2 was labelled Care for Others. Factor 2 consisted of 7 items. This factor aimed to measure an understanding and internalization of responsibilities and leads to maintenance of harmonious relationship toward the Creator and other human beings, including parents, friends and neighbours. Islam emphasizes the maintenance of harmonious relationship between fellow being.

Factor 3 was labelled God Consciousness which consist of 4 items. The group of items that belongs to this factor indicates the internalization of the concept of Ihsan. Ihsan is to adore Allah as though thou do see Him for even if thou do not see Him, He nonetheless sees thee. Guilt or *al-Nadam*, signifies one's guilt over wrongdoing and righteous indignation at moral transgression (such as Qur'an 4:17, "Allah SWT accept the repentance of those who do evil in ignorance and repent soon afterward; to them will Allah SWT turn in mercy"). The nature and intensity of guilt are thus represented by one's conscience, which, in turn, is governed by one's moral values (Syed and Ali, 2006).

Factor 4 was labelled as Forgiveness which consists of 3 items. This factor was meant to assess the willingness of an individual to apologize and asking for forgiveness not only to the fellow being but which might also be extended to Allah SWT reflected through repentance (*Tawbah*). In Islam, able to forgive the mistakes of others is one of the characteristics of the righteous (*Muttaqin*). A person, however, cannot use their nature as an excuse to cover up his or her mistakes. Guilt motivates one to seek redemption, or it can leave one feeling

hopeless. Guilt (*nadam*) is the sign of repentance. There is a difference between positive and negative guilt. Positive guilt leads one to remorse, seeks others and God's forgiveness. While negative guilt leads to more destructive and sinister feelings and distances one from God. The Islamic psychology of personality nurtures a healthy sense of guilt, and not a pathological guilt that hinders spiritual development (Thorndike, 1997). The results of the final factor solution are illustrated in Table IV.

Table IV
Rotated Component Matrix

Component	Fear of Punishments	Care for Others	God Consciousness	Forgiveness
GU3	.743			
GU7	.784			
GU12	.706			
GU14	.505			
GU4	.833			
GU5		.601		
GU13		.671		
GU15		.656		
GU18		.528		
GU28		.724		
GU30		.679		
GU40		.546		
GU1				.758
GU2				.824
GU38				.578
GU11				
GU34				
GU19			.635	
GU23			.750	
GU24			.725	
GU39			.693	
Eigenvalue	3.451	3.182	2.834	2.314
% Variance	16.433	31.586	45.083	56.103

Note: N=640. Principal Component Analysis. Varimax Rotation with Kaiser Normalization

The finding suggests that there are four underlying dimensions of MMEI's guilt construct. The dimensions are fear of punishment, care for others, God consciousness, and forgiveness.

Discussion

Prior to the construction of the Muslim Moral Emotions Inventory, EFA was used to assess the strength of the relationships between variables, to identify the number of factors present in the data and to identify items that did not load any factors or that were loaded on more than one factor. The results of EFA revealed the existence of several factors or dimensions generated from each construct of the developed instrument. The result suggests that there are five underlying dimensions of shame construct among Muslim youth. The

dimensions are positive speech, sensitive towards others' judgment, guarding one's view, safeguarding one's chastity/dignity and dress modestly. The second construct, Guilt represented by 4 underlying subconstructs, namely, fear of punishment, care for others, God consciousness and forgiveness.

MMEI is somehow reflect the use of the functionalist approach as it takes into account the moral emotions of shame and guilt as a highly functional value. Shame does not necessarily be considered as maladaptive emotions as what has been suggested by TOSCA. Both guilt and shame can be adaptive and/or maladaptive depending on the individual's evaluation of the situation. Shame is essential to moral life by feeling flawed or defective against the moral transgression did by the person, shame act as a meant to help the person to learn from his/her own mistakes. It is also true for guilt. Both of these emotional reactions would likely promote higher efforts to avoid doing the same mistakes in the upcoming situations. Thus, to fit in the society one's need to take into account what is considered good by a society and the religious teaching.

The quality of a Muslim is not only measured through performing all the religious rituals but also through the social deeds (Herijanto, 2017). The social deed emphasizes on the principle of *Amar Ma'ruf Nahi Munkar*, or commanding the good and forbidding the evil. Others' gaze or known as social signal will prompt toward shame. Islam also recognizes the signaling function of moral emotions which is imprinted in human nature. Moral emotions work in a way that they gives a signal whenever the individual's behavior is disapprove by the other persons as it create uncomfortable feeling in the heart. However, if the feeling of guilt is overwhelmed, a person can feel hopeless which can leads to suicidality. This comes from the belief that one's sin is too big to be forgiven in addition to lower self-esteems and greater anxiety (Liu, 2015). Thus guilt can actually motivate an individual to seek redemption or it can leave one feeling hopeless and depress. In the light of the above discussion, shame should not be regarded as totally maladaptive while guilt as totally adaptive. Based on the Quran and Sunnah, both can be adaptive and maladaptive. This Islamic understanding of shame and guilt is significant in uncovering the other "face" of shame and guilt.

Conclusion

In conclusion, the study suggests that there are five underlying dimensions of shame construct among Youth from three different institution in Malaysia. The dimensions are positive speech, guarding one's view, sensitive towards others judgment and modest self-presentation. While, for the guilt construct, the study reveals that there are four underlying dimensions of guilt construct, namely, fear of punishment, care for others, God consciousness and forgiveness. The present study findings, though exploratory, hope to further our understanding of moral emotions in a broader context. Shame and guilt had been identified as the motivational forces of moral behaviour. Although shame has been recognized as maladaptive in Western countries this is not true for the Asian population especially for Malaysians Muslim. Accordingly, instruments such as the MMEI can help to identify the dimension of adaptive shame and guilt and can be useful toward inculcating the adaptive shame and guilt among youth and other.

Limitation and Study Forward

Several limitations should be noted when interpreting the results of this study. The data was collected among Muslim youth in Malaysia only. Therefore, this limits the generalizability of the findings in several ways. First, since the researcher opted to concentrate on Malaysian Muslim youth only, the results cannot be generalized to the general population especially to other Muslims populations from different countries. A larger sample size may provide more conclusive data in future studies.

This study also has limitations in the use of a self-report questionnaire. Although the measure used in this study demonstrated adequate reliability and validity, the self-report questionnaire assesses what participants believe to be true or what they are willing to communicate. The exclusive use of a self-report measures to assess moral emotions could lead to response bias, particularly given the context and timing in which the respondents were asked to rate their level of emotions. Incorporating an interview in future studies may add a richer dataset to the self-report measures and accords better insight into the youths' moral emotions. Sometimes the reliance on self-reports alone may represent the desired rather than the real experience and feeling (Breslavs, 2013).

It is acknowledged that there are limitations inherent in cross-sectional research as well as data collection. Therefore, this study should be regarded as exploratory yet highly promising. Future studies using longitudinal design will be useful to gain a deeper understanding of moral emotion.

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