

Development of Islamic Work Ethics Measurement Tool in Health Professional Education in Pakistan

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Islamic Work
Ethics
Measurement
Tool in Health
Professional
Education

ABSTRACT

Objective: To develop a data collection instrument that can measure the observance of Islamic Work Ethics in health professional academicians, because lack of such a questionnaire was observed in the academic literature.

Study Design: A mixed-methods exploratory study

Place and Duration of Study: This study was conducted at the Riphah International University and HITEC-IMS, Taxila during a period of 6 months from April to September 2021.

Materials and Methods: A tentative questionnaire was designed by combining the qualitative data from focus group discussions with literature. The tentative questionnaire was then refined during the subsequent stages of a modified Delphi study, conducting cognitive pre-testing interviews and pilot testing of the novel instrument.

Results: The tentative questionnaire developed via Delphi study was then refined by conducting cognitive pre-testing interviews to ensure the prospective respondents easily and clearly understood the questionnaire items in the same manner as the primary researcher designed them. Pilot testing of the novel instrument was then performed to establish its reliability.

Conclusion: A data collection instrument was developed following the guidelines as put forth in the academic literature. The instrument developed is reliable and fit for purpose. The instrument can be utilised to measure the observance of Islamic work ethics in health professional academics, and necessary actions can be taken to reinforce ethical behaviours and remedy unethical behaviours.

Key Words: Islamic work ethics, measurement tool, medical education.

Citation of article: Khan FM, Khan YH, Yasmeen R. Development of Islamic Work Ethics Measurement Tool in Health Professional Education in Pakistan. Med Forum 2022;33(1):35-39.

INTRODUCTION

The rising incidence of ethical misconduct in the medical profession has provoked a global response in stressing the need for ethics education and inculcation of ethical behaviours^{1,2}. A study in India reported that the observance of professional ethics is even lower among dental professionals than their medical counterparts³. It is the need of the hour to remediate the rising unethical behaviours and practices, especially in the face of increasing social accountability.

In developing countries like Pakistan, there has been a growing rift & miscommunication between doctors and patients, leading to increased dissatisfaction in patients.

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Received: October, 2021
Accepted: November, 2021
Printed: January, 2022

Some of it can be attributed to the lack of resources and facilities in our healthcare setup, but the doctors are not blameless in this matter. The mindset of health professionals has increasingly become materialistic, and the moral and ethical standards have been on a gradual decline over time. A study investigated the level of awareness of medical ethics among the health professional staff of a tertiary care hospital in Lahore. The study reported a general lack of awareness regarding medical ethics in all respondents ranging from house officers to consultants⁴. In addition, the physicians had poor knowledge about patient autonomy and patient rights; a result echoed in another study which proposed that patient's wishes may not be respected by health professional staff at all times⁵.

The studies regarding the work ethic mainly come from the USA and Europe, relatively few studies are conducted in developing countries, and thus further research is needed. In addition to the insufficient work ethic studies in developing countries, research regarding Islamic work ethic (IWE) and its implications in the workplace are limited⁶.

The field of measuring Islamic work ethics is relatively nascent compared to that of Protestant work ethics, and hence relatively minor work has been done in the field. The most cited work is that of Mr. Ali⁷.

However, most of the studies use Mr. Ali's questionnaire as such, without any further exploration. Moreover, there were additional deficiencies in Mr. Ali's questionnaire, namely that it was under the heavy influence of both Marx Weber's work on Protestant work ethics and Arabic culture. Hence, a study sought to construct a questionnaire free from protestant religious and Arabic cultural biases⁸. However, this new questionnaire was developed in Indonesia. Moreover, the pilot study used for quantitative data analysis was done in the banking sector with respondents being employees of Islamic banks, so its generalize-ability to the milieu of cultural and organisational settings of Pakistan's medical sector is questionable.

MATERIALS AND METHODS

The study is of a mixed-method, exploratory design that is typically utilised for questionnaire development. The research project follows the guidelines and 9 step process laid down in AMEE guide regarding development of questionnaires¹⁷ as shown in Figure 2. The research methodology consisted of the following sequential steps, following the guidelines of the literature, starting from a comprehensive literature review that informed and guided the focus group discussions, which led to creating a tentative questionnaire upon which expert consensus was achieved during a modified Delphi study. Next, the questionnaire was refined by conducting cognitive interviews. Lastly, the reliability of the questionnaire and correlation among Islamic ethical constructs was established through the pilot study.

Place & Duration of Study: A multi-centre study was conducted at Riphah International University and HITEC - Institute of Medical Sciences, Taxila. The study duration was six months from April to September 2021.

Sampling: Purposive sampling, homogenous sampling subtype was performed technique was chosen to include knowledgeable experts regarding Islamic ethics, medical education, and questionnaire construction.

Declared population was health professional academicians of PMC recognised private and public sector medical & dental teaching institutions.

Inclusion Criteria:

1. Educational leadership, as defined as principal, vice principal and dean of medical institutions.
2. Educational experts as defined as members of DME departments of medical institutions.

Exclusion Criteria: Early career positions in academia, as defined as demonstrators and registrars.

Sequence of Mixed Methods: An alternating sequence of qualitative and quantitative data collection and data analysis processes were performed. Both qualitative and quantitative processes had equal importance, and

the results of one process guided and informed the next step in the research process.

Literature Review & Formation of Qualitative Questionnaire For Focus Group Discussions

Islamic ethical constructs of Unisation/Tawheed, Itqan/Ihsan, Amanah/Adl, Consultation/Shura and Dignity were identified from the literature. The databases of Google Scholar, PubMed, Research Gate, ERIC and Pakmedinet were utilised, Pakmedinet is a database that indexes all the research work performed in the local context of Pakistan. The keywords utilised were 'Islamic Work Ethics', 'Islamic Work Ethics Measurement', 'Islamic Professionalism', 'Islamic Medical Ethics', 'Snowball search method', 'Snowball literature review'. The search queries were carried out using keywords and phrases using the Boolean operators (i.e., 'AND' and 'OR') in various combinations. Wherever possible advanced search options were utilised to search in publication title and abstract preferably.

Focus Group Discussions: Focus group discussions were conducted because they allow for an in-deep exploration of a wide range of views and knowledge; they also allow for a healthy discussion among the participants, which results in multiple perspectives on a topic being presented and explored⁹⁻¹¹.

Modified Delphi Study: A modified Delphi study was conducted to achieve consensus amongst the expert panel on the inclusion of tentative questionnaire items in the questionnaire. Delphi study consensus achievement is defined as 80% agreement of respondents on questionnaire items after a maximum of three rounds.

Conduction of Cognitive Pretesting Interviews: Cognitive pre-testing is performed to collect evidence for response process validation. The process assesses how the prospective respondents understand and interpret the questionnaire and response items. The objective of the cognitive pre-testing process is to ensure that respondents understanding of questionnaire items is the same as the questionnaire developer's and that there are no misinterpretations or confusion in the respondents regarding the questionnaire and response items¹².

Pilot Testing of Newly Developed Questionnaire:

Pilot testing was performed to establish the reliability & internal consistency of the newly developed instrument via measurement of Cronbach α and to observe the correlations such Item-Total correlation and Pearson's correlation between the various Islamic ethical constructs present in the instrument. Measures of dispersion were also calculated from the data collected. The statistical analysis was performed on SPSS version 26.

RESULTS

Development of Preliminary Questionnaire through Literature Review and Focus Group Discussions: Two focus group discussions with six members each were conducted to further elaborate upon the Islamic ethical constructs identified in the literature review phase. First, the expert panel described the possible sub-themes of constructs identified from the literature. Second, the ethical behaviours described by the expert panel underwent qualitative analysis; during the first cycle of coding, 80 codes were identified, which subsequently condensed and merged into 30 codes in the second cycle of coding. Finally, tentative questionnaire items were synthesised from a combination of qualitative data from focus groups and literature.

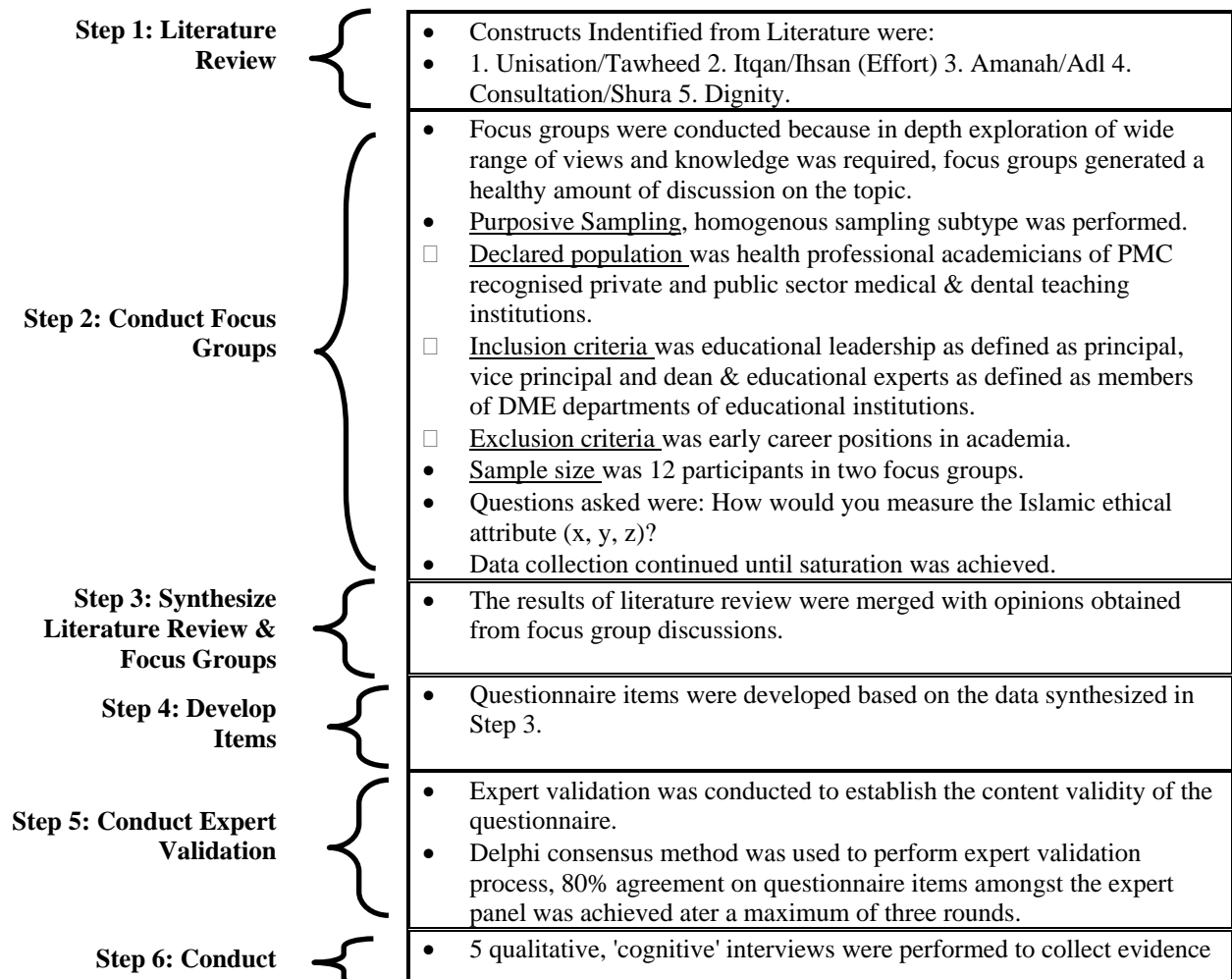
Cognitive Pretesting Interviews: The panel consisting of five faculty members gave feedback that 51 questionnaire items were clearly worded and easily understandable, while 15 questionnaire items were rephrased to make their meaning clearer and more evident.

Table No.1: Modified Delphi Study Results

No. of Items Achieving Consensus	No. of Items Not Achieving Consensus	Response Rate
1st Round		
63	5	62% (33 out of 53)
2nd Round		
3	2	84% (28 out of 33)

Table No.2: Statistical Analysis

Statistical Analysis	Value
Reliability	
Cronbach α	0.9
Item Total Correlation	0.2-0.7
Pearson's Correlation	
Correlation of Unisation/Tawheed with Itqan/Ihsan; Amanah/Adl	.603; .569
Correlation of Itqan/Ihsan with Amanah/Adl; Consultation/Shura; and Unisation/Tawheed	.557; .555; .603



Cognitive Interviews	<ul style="list-style-type: none"> of response process validity. Probing questions were asked from participants and qualitative pre-defined codes were assigned to questionnaire items based on participants responses.
Step 7: Conduct Pilot Testing	<ul style="list-style-type: none"> The questionnaire was disseminated to declared population and statistical tests were applied on the data received. Reliability of instrument was measured by calculating the Cronbach α co-efficient. Statistical analysis was performed on SPSS version 26.

Figure No.1: Research Methodology, adapted according to AMEE Guide No. 87.^{8-12, 20-22}

Pilot Study: The newly developed instrument was field-tested at both research sites, namely Riphah International University and HITEC-IMS, Taxila. The sample size was thirty-four respondents, with guidance from literature^{13,14} and valuable feedback from Riphah’s faculty members. The reliability of the instrument was established via the measurement of Cronbach α in SPSS version 26. In addition, means of dispersion, Item-Total correlation and Pearson’s correlation amongst the Islamic ethical constructs was also measured as shown in Table 2.

DISCUSSION

The Delphi study is an iterative approach for achieving content validity for a new questionnaire. First, evidence for the instrument's content validity was gathered in the form of feedback from a panel of five medical education experts as part of a modified Delphi study under the guidance of literature^{15,16}. The validated questionnaire was then sent to a panel of fifty-two experts during the first round of modified Delphi study to achieve consensus on the inclusion of questionnaire items in the questionnaire. Results were obtained from the modified Delphi study on a 5-point Likert scale.

Cognitive pre-testing interviews were also conducted to establish the response process validity of the instrument by ensuring that none of the questionnaire items were ambiguous or hard to understand for the prospective respondents.

Item-Total correlation is a test of reliability and internal consistency. The values range from 0.2 to 0.7, which is within acceptable limits and indicates a good relationship of items with constructs and subconstructs¹⁷.

There is a strong correlation between Islamic ethical constructs of Unisation/Tawheed and Itqan/Ihsan; Amanah/Adl because Pearson’s correlation value is 0.5 or more¹⁸. The strong correlation signifies those respondents who believe in Tawheed also tend to be more hardworking and facilitatory to other people and are just and fair in their dealings.

Practical Applications of Instrument / Strength of Study
The data obtained from the instrument's administration will help recognise the ethical and unethical behaviours being performed. Subsequently, an ethics course may

be designed to reinforce ethical behaviours and perform remedial actions for unethical behaviours identified in a given population.

An example of such an Islamic bioethics course is “The Fiqh of Medicine” online course conducted by Al Balagh academy in the UK. The course discusses the relationship of medical fiqh with Islamic bioethics and includes the topics within Islamic theology, Usul Al-fiqh, epistemology and fiqh of modern-day medicine and exemplified by practical application of these topics on contemporary medical cases.¹⁹

Recommendations: It is recommended for future researchers to apply the novel questionnaire in different contextual settings and adapt the questionnaire for its applications on clinicians to broaden its scope.

CONCLUSION

The final questionnaire developed comprises sixty-six questionnaire items measuring five Islamic ethical constructs on a 5-point Likert scale, and it is meant to measure the observance of Islamic ethical values in health professional academicians. The instrument has good content validity, and it has high reliability to serve its function. Moreover, the data obtained from the administration of the instrument can highlight the deficiencies in the ethical environment of our workplaces and the daily practices performed in it, and efforts can be made to address the deficiencies identified.

Acknowledgments: Mr. Sohaib Zafar provided invaluable help during the formation of initial questionnaire by imparting his knowledge about the vast domain of Islamic Ethics.

Author’s Contribution:

Concept & Design of Study: Faizan Munir Khan
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 Revisiting Critically: Faizan Munir Khan, Yawar Hayat Khan
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Conflict of Interest: The study has no conflict of interest to declare by any author.

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