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THE IMPACT OF SYSTEMATIC STRUCTURE OF
MADRASSAHS ON STUDENT'S OUTCOMES IN PAKISTAN:
DO THEY NEED STRUCTURAL REFORMS?

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Abstract: This study investigates structural influence of the Madrassah system on effectiveness of its students in terms of civic health, system thinking and professional development. The researchers constructed the instrument of survey after rigorous literature review, frequent interaction with scholars, clerics and policy makers. The survey was administrated to 600 Madrassah's students from different schools of thought. By applying T-test and Kruskal Waliss Rank Test for measurement of effectiveness and Structural Equation Modeling (SEM) methodology the researchers has explored the relationship between the variables, and later analyzed with the help of selected model. Findings of the study demonstrate that education system followed in Madrassahs does not seem to be effective and need-based in contemporary times. Indicators of Madrassah structure such as curriculum and openness negatively influences the students while pedagogy positively influences the effectiveness of students of Madrasah in Pakistan. In the end, it is recommended that curriculum and pedagogy of Madrassah should be reformed and updated in accordance with knowledge-based economy. This will not only upgrade the poor segment of society but also bring together the variety of individuals close enough to understand each other.

Key Words: Madrassah Education System, Structural Influences Behavior, Students' Outcomes, Educational Reform, Civic Health, System Thinking, Professionalism

Introduction

Education is imperative for the development of any society, thus, the role of educational institutions is central in ensuring this development.¹ In traditional societies like Pakistan, religion has a wider connectivity and deeper penetration in the socio-political dynamics of society.² Similarly, Islamic religious educational institutions called '*Madrassahs*' have witnessed sharp quantitative growth in Pakistan over a period of time.³ *Madrassahs* have been widely acknowledged as distinctive feature of Muslim societies for centuries, but in recent times, they incur gamut of responses from public. Most of the *Madrassahs* draw inspiration from the religion (Islam) and claim to be the inheritors and custodians of religious education.⁴ *Madrassahs* try to establish their legitimacy by linking the teachings of Islam religion with them.

It is evident that education has been given immense importance in Islam as the Holy Prophet (PBUH) highlighted the significance of seeking knowledge by saying, "Seek knowledge though you may have to travel to China" (Hadith-e-Zaeef)⁵ and "the ink of pen of a scholar is better than the blood of a martyr." In the early days of Islam, mosques were used to be the central place to impart knowledge to Muslims, which later on grew to become *Madrassahs* in 11th century,⁶ as institutions of learning in the Islamic world. Since then, a *Madrassah* has been considered as an epitome of religious and worldly education as well as a hub of social, economic and political activities in Islamic history.

Today, in most of the Islamic countries *Madrassahs* exist as part of a broader educational infrastructure. In Indian and Pakistan, *Madrassahs* have been in existence for centuries. In 1947, after independence, about 189 *Madrassahs* were inherited by Pakistan.⁷ By 2012, this figure enhanced to 12,900 *Madrassahs* with an estimated 1.9803 million students enrolled in them.⁸ The literacy rate in Pakistan is 60 %, out of which almost 50 % of students are directly and indirectly associated with *Madrassah* system in Pakistan. In other words, 50 % of educated youth portion associated with *Madrassahs*. This youth belong to the lower economic class of society.⁹ These are only confined to religious education and can only be employed in religious sectors (*Imam Masjid and Khadibs of Mosque* etc.).¹⁰

In order to involve religious scholars in the political system, the government created an Auqaf Department to regulate *Madrassahs* and bring religious institutions under state control by integrating them in the formal sector.¹¹ After a few years, the clergy was excluded from political system, public policy, and decisions making in Pakistan. It is not capable enough to interpret Islamic principles in the contemporary context.¹² Therefore; *Madrassahs* do not hold the same prominent position in our

society as they once did because they are largely drifted away from their prime objective of imparting need-based and market-oriented education.

Besides a few exceptions, there is an agreement among observers that most of the *Madrassahs* in South Asia follow obsolete curricula,¹³ impart superstitious concepts,¹⁴ teach antiquated social values,¹⁵ and produce a workforce without the skills necessary to become active participants in society.¹⁶ Emphasis is put on the rote learning rather than the critical study of the Quran, and considerable prestige is still attached to becoming a hafiz—knowing the Quran by heart.¹⁷ Although *Madrassahs* perform an important service through imparting education to mostly poor segment of the society in Pakistan, yet at the same time, they are not able to contribute effectively in changing the social status of the deprived members of society struggling to improve their quality of life.

Previous literature about *Madrassahs* only focused on education system of *Madrassahs* and its link with extremism, terrorism, and the need for reform. There is no empirical study about the *Madrassah* system and its impact on the students' output in Pakistan. As a result, the issue of *Madrassah* education and its impact on the students' outcome has remained controversial and open to further investigation. The main objective of the current study is to investigate structural influences on the *Madrassah* students: the *Madrassah* structural influences on the outcome of the students in terms of civic health, system thinking and professional development. The study will also redefine scope of influence or suggest how to improve structure of *Madrassah* in terms of imparting need-based and market-oriented education to their students.

Objectives of the Study

The main objectives of the study are:

- To evaluate the outcomes of students of *Madrassahs* within the perspective of existing knowledge-based economy;
- To find out whether *Madrassahs'* students are capable or not with regard to needs and orientation of the market;
- To explore the significant impact of structural indicators of *Madrassahs* on the outcomes of the students in Pakistan.

Literature Review

The word *Madrassah* is an Arabic word which means school, but in its contemporary meaning, a *Madrassah* is an educational institution: primary, secondary, or advanced, offering lessons in Islamic subjects.¹⁸ It is observed that in Pakistan, Bangladesh and India *Madrassah* usually refers to Islamic religious schools at the primary and secondary levels. It can be

said that the *Madrassahs* impart education that fulfill spiritual needs of the society. The *Madrassah* institutions can be divided into four categories.¹⁹ One is *Maktab* which is primary or part-time religious or Quranic school. It focuses on Quranic recitation and memorization. Its terminal certificate is known as 'Batavia'. The second type of *Madrassah* is called *Thatani/Khasa* (Secondary Level).²⁰ The third category of *Madrassah* is called *Dar-al-Alum* which includes higher secondary and graduation level called *Wustani/Aliya* (Bachelor's Degree). The fourth category is called *Jamia* which is equivalent to a university imparting higher qualification up to post-graduation and specialization level called *Foqani/Almiya* (Master's Degree).²¹ In other words, these four types of *Madrassahs* can be compared with the present secular education system which is comprised of primary, secondary, higher secondary and university levels.

The notion of existing *Madrassah* structure did exist in earlier days of Islam.²² While discussion about the separation of education between religious and non-religious is not a new phenomenon, yet its mention is hardly ever noted in the Islamic education history before the British rule in subcontinent. It has been discussed in previous literature that earliest *Madrassahs* were established in 8th century and used to be the center of learning including subjects of science, administration, arts, and religion. It is evident that in the early days of Islam, *Madrassahs* were the source of religious as well as need-based and market-oriented education²³. It is argued that the development of current *Madrassahs*' curriculum can be traced back to late 17th century when Mullah Nizamuddin Sehavi set up a *Madrassah* at Firangi Mahal, Lucknow, India. Its comprehensive curricula was named as *Dars-e-Nizami*.

It contains "revealed sciences" (*wahhi*) and "rational sciences" (*ma'qulat*).²⁴ The revealed sciences cover the study of the Holy Quran, Hadith, and Islamic jurisprudence, whereas the rational sciences encompass Arabic language and grammar, Persian language and grammar, logic, rhetoric, and philosophy. Although the *Madrassahs*, established in 17th century in subcontinent, played a significant role in religious education, yet in reality this system has restricted the thinking minds and output of its students.

During the colonial rule in subcontinent, *Madrassahs*' role was limited to only *Fiqh*.²⁵ The main reason of its limitation to only religious education was the replacement of Persian as official language by English. In the consequence of replacement of Persian, the people of *Madrassahs* were totally isolated from governmental jobs, public policy making, administration and management of the country. The British rule in subcontinent worsened the situation of *Madrassahs*' students by closing the door of official jobs. Later, in order to preserve its core, *Madrassahs* it got limited to sect-based curricula only. Over a period of time, the populace connected with *Madrassahs* had created an aura around them and tended to stay within it. As a result, two categories of educational system

developed: one Islamic, the other secular.²⁶ This separation restricted the poor segment of the society to only religious sector, and isolated them from public and private sector of the country.

After the 9/11 terrorist attack in USA, *Madrassahs* received imperative position at international level, due to the general perception that *Madrassahs* create a bulk of extremists and terrorists.²⁷ There are impartial views of researchers and analyst that although all *Madrassahs* do not have a direct link with terrorism and extremism, approximately 10-15 % do have such link.²⁸ It is because that *Madrassahs* have not realized the importance of need-based education. Its sect-specific Islamic curricula without any integration with sciences, arts, and humanities set them apart from the secular education system.²⁹ Before the terrorist attack on USA, although *Madrassahs* were imparting specific type of education, yet they were believed as peaceful and respectful. But after this incident, the global perception about *Madrassahs* has changed to a negative one.

Some of the religious figures who have access to the power corridors are driven by political expediency. They maintain their domains through generations as in the case of tribal leaders and by design keep their people unaware and uneducated in apprehension of any possible resistance in case they get enlightenment. At lower level as well, the *Madrassahs* are run as dynastic regimes.³⁰ Any effort of modernization is considered as an attack on religion without giving any deliberation to the idea and its intent. This is done to maintain the status quo since they fear that there will be loss of existing status.³¹ Well educated and qualified people will take over their domains, which they have preserved over generations following the same system.

About the current situation of *Madrassahs*, Walt Kelly said in his famous book *Pogo* (cited in Senge, 1994):³² “we have met the enemy and he is us.” Basically backwardness of educational philosophy of *Madrassahs* is widely perceived as the main barrier in advancement of students’ outcomes and their quality of life.³³

“Muslim civilization and culture also dominated the world when Muslims were on top of every field of education i.e. science, mathematics, philosophy, astronomy, law, literature so on and so forth. It was the time when *Madrassahs* produced luminaries such as Alberuni, Ibn Sina, al-Khwarizmi etc. Both Muslims and non-Muslims used to study in *Madrassahs* exactly the way people now prefer to study in Harvard and Oxford Universities”.³⁴

The only difference is that Madrasah were governed by religious scholars, whereas current secular education system is governed and administered by the government. Islam is complete code of life and not

limited only to sectarian and religious thoughts. It is not confined to one profession like religious sector and institutions. However, the present structure of *Madrassahs* makes them professional institutes from the very beginning. It is predefined that students who are admitted even at primary level will be getting only religious education, leaving no other choices of professions but only Islam as profession.³⁵ No one is able to join any other profession since the curricula of basic education in *Madrassahs* is not designed to cater for such options. If such choices are not accounted for then it is impossible to establish modern education system capable of taking on all challenges and standing on equal footing with other conventional institutions.

Due to these circumstances, the students of *Madrassahs* are ineffective in the current knowledge-based economy. It is actually the influence of systematic structure of *Madrassahs* on students' behavior and proficiency. In 1994, Senge presented a theory 'structural influences behavior', where he argued: "different people in the same structure tend to produce qualitatively similar results. When there are problems, or performance fails to live up to what is intended, it is easy to find someone or something to blame. But, more often than we realize, systems cause their own crises, not external forces or individuals' mistakes."³⁶

According to this theory, there are three main factors involved in the current *Madrassahs*, such as Systematic Structure (generative), Patterns of Behavior (responsive) and Events (reactive). The existing specific systematic structure of *Madrassahs* was generated after the colonial rule in subcontinent.³⁷ The main purpose of the exiting generative structure of *Madrassahs* was to restrict its sphere to only religious thought, especially Fiqah and other related knowledge. In consequence of exiting generative structure of *Madrassahs*; thinking, actions and outcomes of *Madrassahs*' students (patterns of behavior) are kept limited to only religion and they can only be employed in religious sectors as khateeb or imam.³⁸ As a result, it creates different conflicting narratives: terrorism and extremism (events) in society which further fuels fraction, frustration and conflict in the society.³⁹

Unfortunately, defenders of the existing *Madrassah* system still view its traditional approach as a way to preserve Islamic heritage⁴⁰ and obscure any drive of modernization under the debris of medievalism. They refuse to embrace any idea that does not appear compatible with their domain of reasons and intellect.⁴¹ Although *Madrassahs* perform an important service in Pakistan, yet at the same time, they cannot contribute effectively in changing the social status of the deprived members of society struggling to improve their quality of life.

The poor children join *Madrassahs* with a great ray of hope for advancement but it often does not come true, since *Madrassahs* fail to bring them in the mainstream and at par with the other students or professionals in society. As result, it shows that systematic generative

structure of the *Madrassahs* leads students' outcome toward ineffectiveness. It is, therefore, need of the hour that measures to improve the *Madrassah* education should be adopted which could lead to the sustainable growth of the underdeveloped and impoverished community.

Hypothesis

This study is based on three main hypotheses:

H1. Curriculum of *Madrassahs* significantly influences the effectiveness of students in Pakistan.

H2. Pedagogy of the *Madrassahs* significantly influences the effectiveness of students in Pakistan.

H3. Openness in religious thoughts of the *Madrassahs* structure significantly influences the effectiveness of students in Pakistan.

Methodology

Research Design

The research design of the current study is involved a hypothesized cause and effect relationship, in other words, with regard to current model, the existing *Madrassah* structure cause the deficiencies (effects) in students in terms of best system thinkers, good citizens of the country and sound professionals in their fields. For this purpose, the researchers used structural equation modeling for examination of relationship among the several latent variables such as curriculum, pedagogical practices, and openness in thoughts, system thinking, civic health and professionalism in the students of the *Madrassahs*. The current model is supported by theory "structural influences behavior," which is not only sphere of academic world (learning organization), but also proved by the observations of real-world behaviors (beer game) (Senge, 1994). The researcher also used T-test and Kruskal Wallius rank test for measurement of effectiveness on the basis of standard value 4 (agree) which shows that if the *Madrassahs* are meeting the standard value or near to standard (significant difference), it elaborate that it is effective and respondent are admitting this fact.

Questionnaire

The instrument has been developed in Urdu through previous literature review. Most of the concepts have been taken for questionnaire development from different studies, such as.⁴² The content validity was established through correction and reviews by the public policy makers about the *Madrassah* and policy makers of ministry of education. The instrument was edited, more items were added and some items were excluded from the questionnaire. The questionnaire was then reviewed by three Ph.D. scholars for clarity, accuracy and authenticity of the instrument. To measure items a 1-5 Likert scale was used (where 5 = strongly agree, 4 = agree, 3 = neutral, 2 = disagree and 1 = strongly disagree). After the

completion of observations by review, necessary amendments in questionnaire were made and formed for pilot testing. Initially, the reliability was checked from the data collected from a sample of 40 respondents (eight respondents from each of major school of thoughts i.e. Bareilvi, Deobandi, Jamat-e-Islami, Shia and Sulfi) from Rawalpindi and Islamabad. Cronbach's alpha was calculated to analyze the reliability of the constructs of instrument. Alpha values from 0.70 or more are considered as good indicator of reliability. The Cronbach's alpha values for all were from 0.71 to 0.87, therefore, it suggests good reliability. A total of sixty two (62) items were the part of the questionnaire.

Sample

Stratified non-probability sampling technique was used for sample selection. Total population of *Madrassahs'* students is divided into five homogeneous subgroups (strata) such as Bareilvi, Deobandi, Jamat-e-Islami, Shia and Salafi in Pakistan. These strata are mutually exclusive with each other in terms of ownership (school of thought), control, religious ranking, Fiqah and working conditions. Then Non-probability (convenience) sampling was used within each stratum for selection of sample. Sample of the study comprised of 600 respondents from different schools of thoughts. They were studying in final stage (Dora-e-Hadith) and completed 6 years education after matric which is equal to bachelors degree. This includes 150 students (25%) from Bareilvi school of thought, 150 students (25 %) from Deobandi school of thought and 100 students (16.67%) from each other schools of thoughts such as Jamat-e-Islami, Shia and Salafi as shown in Table 1. Questionnaires were self delivered and collected from each respondent by visiting in *Madrassahs*. SEM analysis is very sensitive to the ratio of sample size to the number of predictor's variables. As a result it is suggested that 300 observations should be available for the study.⁴³ In the current study, there are 600 observations available for SEM analysis.

Data Analysis and Results

Reliability and Validity of Instrument

It is mandatory for variables and their dimension to check validity and reliability analysis before their use in the model. Validity tests were executed in four phases: unidimensionality and reliability, convergent validity and discriminant validity. Unidimensionality checks extent to which the different elements in a construct measures are in similar construct. Unidimensionality was checked by using Confirmatory Factor Analysis (CFA) and Comparative Fit Index (CFI). The reliability of the scales was checked by calculating Cronbach's alpha value for each of the variables. Reliability and validity of the instrument was checked and shown in Table 2 which demonstrates that variables of the instrument are suitable for the model or further analysis.

Furthermore, discriminate validity is the extent to which the different latent variables in an instrument and their items are unique enough to be differentiated from the other variables and their items.⁴⁴ This type of validity can be checked if the square root of Average Variance Extracted (AVE) of a latent construct is greater than its correlation with other latent variables.⁴⁵ Moreover, if AVE is greater than 0.50 it also shows good convergent validity. The square root of AVE are shown diagonally in Table 3 and value of all the constructs are greater than the absolute value of its correlation with other latent variables hence confirm discriminant.

Findings of the Study

Madrasahs' Students' Effectiveness

The result of (Table 4) T-test depicts that *Madrasahs'* students are ineffective since respondents believe that they lack in the dimensions of effectiveness. Bulk of the students agreed that most of them did not go for higher education in Islamic Studies in local or foreign universities, and those who opted for further education lag behind as compared to the students of conventional schools/colleges. They are also not been able to join professional colleges. They seldom go for higher education and tend to adjust themselves in the existing religious sphere. Few students do join Islamic Studies in local colleges and universities after getting the equivalence certificates. However, there is hardly any student of *Madrasahs* who goes for higher studies abroad either in Islamic or any other contemporary studies. The *Madrasah* students, who take on subjects other than Islamic one, normally lag behind others. These students suffer from a lot of difficulties while competing with the mainstream students, especially those who are schooled in English. In order to make up for the deficiencies and bridge the gaps, they have to make an extra effort at their own by taking additional coaching classes/courses.

A large number of students of *Madrasahs* agreed that they were not able to join the government and private sectors except for khateeb or lower level workmanship which did not warrant any educational qualification. The post degree employment of *Madrasahs'* students is narrow and predestined. In most of the cases they join only religious sector. They become Imam, Moallum, Khateeb, Mufti etc. after completion of *Madrasah* degrees.⁴⁶ The religious services of the society on deaths and marriages etc. are offered by them. These services can otherwise be fulfilled by any good Muslim. No other professionals like doctors, engineers, scientists etc. are produced. Even these students rarely become teachers of Islamic Studies in conventional colleges/universities, especially in the public sector. The small number which is able to join conventional schools and colleges can do so after getting degrees from the mainstream institutions.⁴⁷

Research is considered as the most important tool of education in the present day environment but there is no trend of carrying out any kind of research in *Madrassahs*. They have the general perception that whatever research is being carried out by their predecessors centuries ago hold good and equally applicable in present environment. Besides, they are not even capable of conducting any fresh research. This tendency has seized their ability to analyze, correlate and apply logical without rigidity. Presently *Madrassahs* are not playing an effective role which is required to reduce sectarian divide and conflicts in society.⁴⁸ Majority of the students consulted during the course of research believed that *Madrassahs* have great contribution in promoting literacy among the Muslims but it is fact that education system followed in *Madrassahs* is not effective and need based for the present time.

Model Fitness

Six model fit indexes (GFI, AGFI, NFI, CFI and RMSEA) were considered to check the fitness of the model.⁴⁹ It is concluded that on the basis of observed values obtained model has suitable fitness as shown in Table 5.

Findings and Hypothesis Testing

The model was checked by using data received from 600 respondents from different schools of thought. SEM path analysis was used to test the hypothesis therein. Figure 1 shows the standardized regression coefficients of hypothesized paths and also the loadings of latent indicator of variable. Beta coefficient of curriculum regarding system thinking, civic health and professionalism are -0.129, -0.243 and -0.237 respectively significant at 99 % confidence level ($p < .001$). H1 assumed that curriculum of *Madrassahs* significantly influences students' effectiveness. Results of SEM support the hypothesis 1 but this influence is negative. All the dimensions of contribution to curriculum are significant. Similarly, beta coefficient of pedagogy regarding system thinking, civic health and professionalism are 0.354, 0.416 and 0.482 respectively significant at 99 % confidence level ($p < .001$). H2 assumes that pedagogy of *Madrassahs* significantly influences effectiveness of students. Result of SEM supports the this hypothesis but this influence is positive. All the dimensions of contribution to measurement of pedagogy are significant. Openness in religious thoughts: beta coefficients regarding system thinking, civic health and professionalism are -1.214, -1.826 and -1.684 respectively significant at 99 % confidence level ($p < .001$). H3 assumed that openness in religious thoughts significantly influences students' effectiveness. Result of SEM supports the hypothesis 3 but this influence is negative. All the dimensions of contribution to measurement of openness are significant. All the hypotheses are accepted on the basis of result which are shown in Table 6.

Discussion

Existing literature supports the findings of this study. Result of SEM illustrate that curriculum of *Madrassahs* negatively and significantly influences the effectiveness of the students in terms of system thinking, civic health and professionalism. It also demonstrates that curriculum of the *Madrassahs* is not capable of creating the system thinking in students, improving the civic health such as civic engagement, political participation, social connectedness, and personal development regarding professional traits like intellectual capabilities, logical thinking, practical work competencies and communication skills. This is also confirmed by the previous literature on *Madrassahs* and its effects on students' effectiveness.⁵⁰ It can also be deduced from the results that contents of *Madrassah's* curriculum do not contain the subjects which create analytical development, synthesis development and intellectual development in students.

Curriculum of the *Madrassahs* also excludes subjects like mathematics, statistics, creative arts, language, and technological education. Subjects of Social Sciences such as society & environmental education, political science, geography, history, information and communication are also not included in the contents of curriculum in *Madrassahs*.⁵¹ Since *Madrassahs* do not cater for diverse fields which the students chose to join after degree, these become professional institutes from the very start leaving behind no choice for students. By following the existing curricula, the employment opportunities for students are scarce and do not help students become extrovert.⁵² The curricula is not in accordance with the international standards followed in other *Madrassahs* of the world. In other *Madrassahs*, such as Al-Azhar University, almost all the religious and no theological subjects are taught.

The pedagogy of *Madrassahs* significantly influences the effectiveness of the students in terms of system thinking, civic health and professionalism. This is also confirmed by previous literature on *Madrassahs* and its effects on students' effectiveness.⁵³ *Madrassahs* have typical class room management and organization. Teaching is conducted like a regular school classroom without any proper divisions of levels. In most of the cases, students from different levels sit in the same class and one teacher gives those lessons separately in accordance with the prescribed curriculum.⁵⁴ However, there is no monitoring system of teachers to check their teaching abilities. Students of different ages study in the same class and teachers do not cater much for individual difference in learning. Teaching hours are much longer than the regular schools.⁵⁵ They are spread from sunrise to sunset, with lunch, prayer and afternoon breaks, since *Madrassahs* also provide boarding and lodging. Most of the teachers are untrained and there is no provision of training: pre-service or in-service. There is neither any orientation program nor any *Madrassah* Teacher Training Institute.⁵⁶ As a result of untrained teachers, the educational objectives of *Madrassahs* remain unfulfilled.

Openness was the recurrent subject of objections and disagreement in general discussions. Openness may take many forms, including active or passive, overt or covert, individual or organized, aggressive or timid. Openness in religious thought significantly, but negatively, influences the effectiveness of students in terms of system thinking, civic health and professionalism. It demonstrates that inflexibility in interpretation of Islamic thoughts and lack of updated scientific knowledge are the main hurdles⁵⁷ in the way of progress regarding creation of system thinking, civic health improvement and professional skills development in terms of the field work. Openness in thoughts and personality stems from some attributes like authority *Madrassah*, risk of overload in current tasks due to change, lack of skills and experience, job security, disagreement with the modernization and skepticism about the need for change.⁵⁸ It is also influenced by some other dimensions like resistance to change,⁵⁹ belief on fundamental thoughts, focus on only religious values,⁶⁰ and least interaction with modern civil society actors.

Openness in thoughts help maintain status quo since *Madrassahs* fear they will lose their existing status and respect, and the quality of life. They also feel that there will be a loss of power, control and influence. The other individuals will take over their domain and will hurt their interests. They are often careful to camouflage this by claiming that *Madrassah* reforms are supposedly counterproductive or 'anti-Islam.'. They do not believe in any modern *Madrassahs* education system, nor they believe such modern model ever existed in modern times. At times, those who run *Madrassahs*, also get under peer pressures, and under pressures from society. They believe if they support the modernization of *Madrassahs* there will be strong reaction against them threatening their very survival. On the face of it, they show resistance along with others even if their thoughts correspond to the idea of modernization.

Conclusion

This study has investigated whether the *Madrassah* structure influences the effectiveness of students in Pakistan or not. The study is based on the theory of structure influences behavior.⁶¹ The structure of *Madrassahs* is measured through three main variables such as curriculum, pedagogy and openness in religious thoughts. The effectiveness of students of *Madrassahs* is measured in terms of best system thinker, good citizen of country and professional in his field. Data was collected from 600 respondents from different schools of thought such as *Barelvi*, *Deobandi*, *Jamat-e-Islami*, *Shia* and *Salafi* in Pakistan. The results of structural equation modeling exhibit that curriculum and openness in religious thoughts negatively and significantly influence the students' effectiveness in terms of best system thinker, good citizen of country and professional in his field.

Similarly, pedagogical practices positively and significantly influence the students' effectiveness in terms of best system thinkers, good citizens of the country and sound professionals in their fields. No nation in the world can progress in an intellectual and scientific void. With the underlying currents of knowledge, it can assist them to develop a sense of creative thinking and productive activities and engaged living. Reforms in the educational system of *Madrassahs* in Pakistan can help their students adopt more productive course by accessing the mainstream of professions. This will not only upgrade the poor segment of society but also bring together the variety of individuals close enough to understand each other. The students of *Madrassahs* will get equal opportunities to progress and become more useful members of society in terms of modern workforce, as well as spreading the light of Islam by imparting it to all segments of the society.

Recommendations

In light of statistical results, theoretical discussion, and support of hypotheses H1 to H3, recommendations are offered to improve the educational standard of *Madrassahs*.

First, the *Madrassah* system should be reformed in terms of curriculum in Pakistan because the existing curriculum only focuses on religious education and inculcates only religious thoughts in the students. New subjects like sciences, arts and humanities etc. should be included in the contents of its curriculum. At the primary level, English and mathematics should be introduced. Pakistan/social studies, elementary science and computer science should also be integrated at secondary level which should be taught along with the religious curricula. Slowly and gradually, *Madrassahs* should raise its level equivalent to degree awarding college or the university. The HRD ministry of India has also provided that *Madrassahs* may opt either to introduce modern subjects in their syllabus or get affiliation from the state boards or the students of these *Madrassahs* may take examinations for open schools.⁶²

Second, teachers should use existing teaching aids/tools for effective teaching to the students. Modern technical equipment such as computers, CD/DVD players, multimedia, audio visual aids, laboratories and libraries etc. should be made available to *Madrassahs*. Teachers must be trained to operate these modern technical devices for pedagogical purposes. The tools of effective learning as discussions, demonstrations, presentations, simulations, tutorials, seminars etc. must also be kept in practice. It is necessary that training workshops should be carried out *Madrassahs'* teachers. There are a number of free teacher training workshops which are being organized by the government and non-government sectors but *Madrassahs'* teachers often stay away from such activities due to their set perceptions. They should be encouraged to join such workshops and take the memberships of teacher training institutes for better training,

learning and interaction. In India, workshops for the training of teachers of *Madrassahs* are being organized under *Madrassahs* education boards and other conventional educational boards. Activities on similar lines can also be started in Pakistan.

Lastly, the openness in religious thoughts must be addressed intelligently through intellectual debates and seminars on different matters of fear and skepticism about change and conflict.

Annex

Table 1: Sample of the study

Category	Frequency	Percentage
Gender		
Male	400	66.67
Female	200	33.33
School of Thought		
Bralevi	150	25
Deobandi	150	25
Jamat-e-Islami	100	16.67
Shia	100	16.67
Sulfi	100	16.67

Table 2: Uni-dimensionality, Convergent Validity and Reliability

Factor	Indicators	CFI	Loading	Cronbach's alpha
Curriculum	Analytical Development (CR1)	0.994	0.626	0.752
	Synthesis development (CR2)		0.852	
	Intellectual development (CR3)		0.835	
Pedagogy	Instructor attributes (PDG1)	0.986	0.803	0.781
	Class Rooms Standard (PDG2)		0.661	
	Learning Environment (PDG3)		0.768	
Openness	Openness in religious thoughts (RGD1)	1	0.678	0.871
	Fundamental Norm and Values (RGD2)		0.636	
	Power and control (RGD3)		0.745	
Civic Health	Civic Engagement (CH1)	0.938	0.681	0.821
	Civic Participation (CH2)		0.751	
	Social connectedness(CH3)		0.745	
System Thinking	General accepted Behavior (ST1)	1	0.661	0.734
	Seeing problem as whole (ST2)		0.751	
	Seeing problem in circular relationship (ST3)		0.768	
Professionalism	Intellectual Capabilities (PRF1)	0.912	0.84	0.712
	Rational thinking (PRF2)		0.84	
	Practical work competencies (PRF3)		0.671	
	Communication skills (PRF4)		0.803	

Source: Author's calculation

Table 3: Discriminated validity

	CR	AVE	Curriculum	Pedagogy	Openness	System Thinking	Civic Health	Professionalism
Curriculum	0.9	0.6	(.506)**					
Pedagogy	0.87	0.75	.836**	(.584)**				
Openness	0.82	0.66	.533**	.534**	(.509)**			
System Thinking	0.86	0.68	.714**	.677**	.689**	(.506)**		
Civic Health	0.84	0.56	.784**	.692**	.695**	.508**	(.508)**	
Professionalism	0.81	0.65	.628**	0.782	0.451	0.891	.695**	(.728)**

Note: **. Correlation is significant at the 0.01 level (2-tailed); Source: Author's calculation

Table 4: Summary of result about effectiveness

Effectiveness	T	Df	Sig.	Difference	Negative rank	Positive rank
Madrasah students join universities for higher studies	-3.99	599	0.000	-0.407	6%	94%
Madrasah students go abroad for higher studies	-6.18	599	0.000	-0.594	3%	97%
Madrasah students join professional colleges	-7.49	599	0.000	-0.640	1%	99%
Madrasah students become teachers in colleges	-2.64	599	0.011	-0.194	2%	98%
Madrasah students become teachers in universities	3.54	599	0.001	0.160	2%	98%
Madrasah students are able to join government jobs	-5.62	599	0.000	-0.404	5%	95%
Madrasah students are able to join professions in private sector	-2.95	599	0.005	-0.215	10%	90%
Madrasah are major source of resolving conflicts in society	-2.83	599	0.007	-0.237	22%	78%
Madrasah students conduct researches in various fields	-2.13	599	0.039	-0.111	8%	92%

Note: Negative ranks: variables for which standard value (4=agree) is Less than respondents opinion

Positive ranks: variables for which standard value (4=agree) is greater than respondents opinion

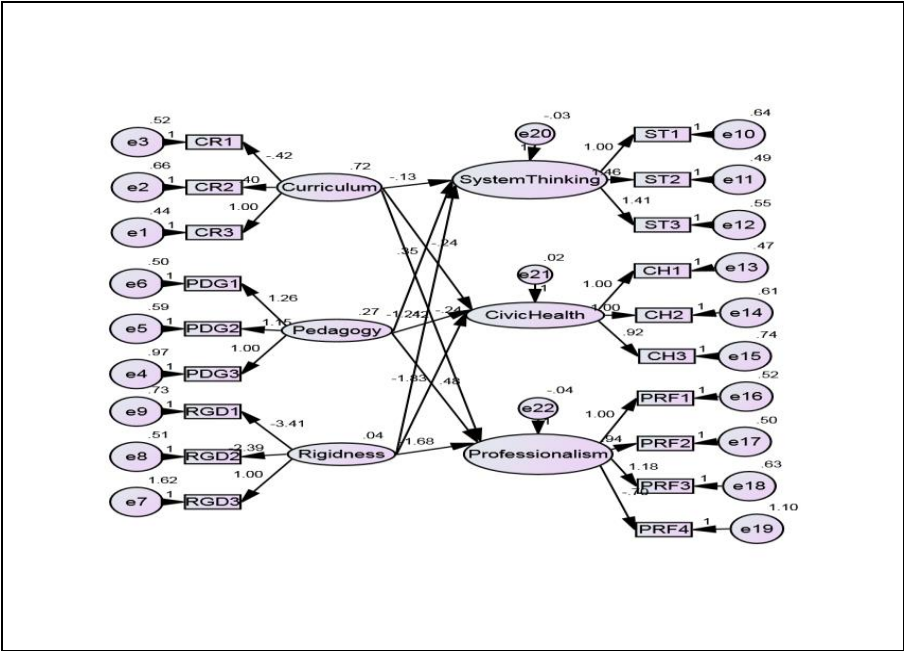


Figure1: Model of Madrassahs Structure influence on effectiveness of Students

Table 5: Summary indexes about the model fitness

Indexes	Standard value	Observed	
χ^2/df	≤ 3.00	1.67	Wheaton et al. (1977) and Carmines and McIver (1981)
GFI	≥ 0.90	0.92	Jöreskog and Sörbom (1984) Jöreskog and Sörbom (1984)
AGFI	≥ 0.80	0.87	Jöreskog and Sörbom (1984) Jöreskog and Sörbom (1984)
NFI	≥ 0.90	0.95	Bentler & Bonett (1980) and Bollen (1989b)
CFI	≥ 0.90	0.9	Bentler (1990)
RMSEA	≤ 0.080	0.056	Browne and Cudeck (1993)

GFI = goodness-of-fit index; AGFI = adjusted goodness-of-fit index; NFI = Normed fit index; CFI = comparative fit index; RMSEA = root mean square error of approximation

Table 6: Summary of Regression Weights

Dependent Variables	Independent Variables	Estimate	S.E.	C.R.	P
System Thinking	<--- Curriculum	-0.129	0.022	-5.802	***
Civic Health	<--- Curriculum	-0.243	0.035	-7.011	***
Professionalism	<--- Curriculum	-0.237	0.031	-7.566	***
System Thinking	<--- Pedagogy	0.354	0.049	7.284	***
Civic Health	<--- Pedagogy	0.416	0.058	7.223	***
Professionalism	<--- Pedagogy	0.482	0.057	8.438	***
System Thinking	<--- Openness	-1.214	0.313	-3.878	***
Civic Health	<--- Openness	-1.826	0.454	-4.021	***
Professionalism	<--- Openness	-1.684	0.419	-4.022	***
CR3	<--- Curriculum	1			
CR2	<--- Curriculum	0.398	0.052	7.708	***
CR1	<--- Curriculum	-0.424	0.051	-8.341	***
PDG3	<--- Pedagogy	1			
PDG2	<--- Pedagogy	1.149	0.115	9.964	***
PDG1	<--- Pedagogy	1.258	0.124	10.134	***
RGD3	<--- Openness	1			
RGD2	<--- Openness	-2.39	0.589	-4.057	***
RGD1	<--- Openness	-3.413	0.836	-4.084	***
ST1	<--- System Thinking	1			
ST2	<--- System Thinking	1.461	0.152	9.595	***
ST3	<--- System Thinking	1.411	0.151	9.364	***
CH1	<--- Civic Health	1			
CH2	<--- Civic Health	0.995	0.078	12.783	***
CH3	<--- Civic Health	0.923	0.08	11.564	***
PRF1	<--- Professionalism	1			
PRF2	<--- Professionalism	0.935	0.077	12.186	***
PRF3	<--- Professionalism	1.183	0.091	12.95	***
PRF4	<--- Professionalism	-0.696	0.091	-7.616	***

Notes

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