Muslim Youth and Challenges of Development in the Globalized World

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Abstract

Youths are the shining hopes of a society. Through them the society realizes its hope and aspiration. This is because they are endowed with natural qualities which enable them to face challenges. They have the energy and power to explore possibilities. They have courage to make sacrifice for the realization of societal dreams. The Ottoman Empire which was at the centre of interactions between the Eastern and Western worlds for over six centuries was dissolved in the aftermath of World War I; the collapse of the empire led to the emergence of the new political order in Turkey itself, as well as the creation of modern Balkan and Middle Eastern states.[1] This historic development marked the beginning of degeneration for the Muslim World which had to contend with endless challenges up till today. The challenges became more acute following the emergence of the concept of globalization within the last couple of decades. Thus, Muslim Youths, instead of being the pioneers in educational and cultural development, they are rather, the perceived focal point of 'radicalization' and 'international terrorism'.   What is the definition of the Muslim Youths and how can they be contextualized in this modern globalized world? These and some other related issues are subjects of analysis in this paper.

Keywords: Muslim Youths, Islamic history, Globalization, Radicalization, International Terrorism and Challenges of Development

Introduction

Youth is a period between childhood and adult age bracket. Youthful age is filled with certain characteristics which include vigor, enthusiasm, curiosity and exuberance. When a person attains youthful age, he is said to have attained a benchmark of his life developmental process.

Youths have been described as 'having easy tendency for adapting progressively to new order and positively withdrawal from the archaic and antiquated orders.'[2] They have unquenched thirst to discover the world around them, which is manifested in their ceaseless struggle to fill their tabular-raza with variety of knowledge including science and arts. It is always very easy to observe in the youths the traits of innocence, sincerity, courage, commitment and fearlessness in facing the rigors of life. That explains why Prophet Muhammad (May the peace and blessings be upon him) was quoted to have said: "I am counseling you to be good to the youths. They are the most tenderly benefits. When Allah raised me up with the magnanimity of Hanifa (the religion of Prophet Ibrahim), the youths supported me while the old people deserted me." He then recited the words of Allah which states that: "After the passage of time, they became hard-hearted and most of them are transgressors." (Bukhari).

Sayyid Abul A'la Maudoodi has rightly observed in one of his treatises that: "The Challenges of the Modern Time and the Youth" stated that: "Youth can be described as a flaming blood that has front-runner tendency for the acquisition of whatever is modern. He is always present and ready for anything that he feels is worthy of acquisition. He will not hesitate to make personal sacrifice in the course of acquiring such thing, closing his eyes as to whether or not the consequence is good or evil. The power and energy of youth is like a sharp sword which can be used by its owner either in fighting in the cause of Allah, or for highway robbery."

Therefore, youths are the dependable group in all the facets of human endeavors that guarantees the achievement of the much desired goals and aspiration of a community. It must always be remembered that man is endowed by the Creator to perform certain role at a particular point in time in his various biological development. In other words, whatever his age, a person is destined to play certain roles according to the qualities endowed him by his Creator – Allah at that age in question. Thus the Holy Qur'an says: "ومنكم من يرد إلى أرذل العمر لكيلا يعلم من بعد علم شيئا", meaning that: "and among you there is he who is brought back to the miserable old age, so that he knows nothing after having known."[3]

As we talk of positive side of the youth, as the corner-stones of the future and the most outstanding pioneers of progress in the human life, it must also be noted however, that youthful age portend certain dangers. Youths are vulnerable to negative tendencies. Youthful exuberance, if not properly cultured and refined, could lead a young man to be influenced by devilish leaning and inclination.

Shortly after his arrival to this world and in the course of time, a child begins to show biological changes. At the point of attaining youthful age, he begins to manifest, physical, psychological mental and sociological

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characteristics. In other words, certain divinely pre-arranged programs begin to influence his development as a man, pointing to what he might be in life. This is the critical stage in human development. This is because whatever he is exposed to at this stage will form part and parcel of his personality and shaped him for his future in his society. Whether he is going to be a 'holy man', or a 'notorious armed or pen-robber', his biological thesis will submit to the antithesis of his environment. Thus the Holy Qur'an states that: "ونفس وما سواها فألهمها فجورها

وتقواها , قد أفلح من زكاها وقد خاب من دساها" :meaning

> "By the Nafs (Adam or a person or a soul), and Him Who perfected him in proportion; then He showed him what is wrong for him and what is right for him. Indeed he succeeds who purifies his own-self (i.e. obeys and performs all that Allah ordered, by following the true Faith of Islamic Monotheism and by doing righteous good deeds). And indeed he fails who corrupts his own-self (i.e. disobeys what Allah has ordered by rejecting the true Faith of Islamic Monotheism or by following polytheism or by doing every kind of evil and wicked deeds).[1]

This is the stage of life where the role of the three agents of child education assumes critical dimension particularly the home – which is the first contact after birth. The three agents here are, the home (including the community where the child is born and reared), the mosque and of course, the school.

Definition

According to psychologists, 'youth' is a middle stage of life between infancy and middle age. In other words, a 'youth' is a person who has attained an age of a young man or young lady.[2] Some educational psychologists have tried to be specific by defining the age of youth in terms of number of years. According to them, youth is an age between about thirteen (13) and forty (40). It must be stated that definition of 'youth' in terms of number of year might not be so easy considering, among other things, affinities and peculiar nature of different definitions from one society to another; and, in fact within a country, from one environment to another. For instance, a youth in the urban area might not be so defined in the rural area in some countries. It must be noted also, that determining the age of youth is subject to certain prevailing factors at a particular point in time and place; and most especially by variety of sociological determinism.

Anthropology (study of mankind especially is society and culture)[3] reveals that a person who is at age 30 may be seen as an old man, while another person who is at age 60 may be seen as youth. All depends on mental perception toward the particular personality. For instance, a person who is old in terms of age may be naturally endowed with good health and mental alert and physical shape. Such a person may be mistaken for a youth especially by those who are ignorant of his bio-data. Another person on the other hand, may be young in age, but defective in biological and mental disposition. Such a person may be mistaken for an old man.

The life history of notable men of Islam provides practical examples. While others at their ripe ages went on retirement from life activities, many pioneers in the field of Islamic learning and Da'wah (propagation) had continued to engage in the struggle for truth and justice until the last moment of their life. Prophet Muhammad for instance, began his mission at little above forty year of age. He continued in the struggle to establish truth and justice to the extent that he led the Muslims in the Battle of Tabuk which was one of the severest battles fought by the Muslims. He was over sixty years of age at that time.

Qur'anic and Theological definition of 'Youth'

The Arabic translation of the word 'youth' is شباب (al-Shabab). Interestingly, the Holy Qur'an did not use the word 'al-Shabab' to describe 'youth'. It instead used the word فتي ('fatah) for male youth and فتاة (fatat) for female youth. This is clear when we look at a number of verses in the Holy Qur'an.

For example the Qur'an says:

"They said: We heard (fatah) a young man talking against them, who is called Ibrahim (Abraham)."[4]

"(Remember) when (al-fityat is the plural form of fatah) the young men fled for refuge (from their disbelieving folk) to the Cave…[5]

"And (remember) when Musa (Moses) said to (fatahu) his boy-servant….[6]

"And women in the city said: "The wife of Al-'Aziz is seeking to seduce (fataha) her (slave) young man…[7]

About female youth, the Qur'an says:

"And whoever of you have not the means wherewith to wed free, believing women they may wed ('fatayatikun

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[1] Qur'an 91 (Sura al-Shamsh) verses 7-10. Translation by Dr Muhammad Taqi-Ud-din Al-Hilali, and Dr. Muhammad Muhsin Khan, (1419H), King Fahd Complex for the Printing of the Holy Qur'an, Medinah, K.S.A. pp. 837-838.
[2] الشباب ومشكلات من منظور إسلامي ,Muhammad Taofiq Ibrahim Zanati, (n.d Matba'at Al-Narjis, Riyadh, p. 5.).
[3] The Oxford Pocket Dictionary. Oxford University Press.
[4] Qur'an 21 (Surat Al-Anbiyah) verse 60.
[5] Qur'an 18 (Surat Al-Kahf) verse 10.
[6] Qur'an 18 (Surat Al-Kahf) verse 60.
[7] Qur'an 12 (Surat Yusuf) verse 30.

al-Muminat, 'fatayah is the plural form of 'fatat') believing girls from among those (slaves) whom your right hands possess…[1]

"And force not your (fatayatikun) maids to prostitution, if they desire chastity…..[2]

Most Arabic lexicons mention the word 'fatah' to denote 'shab' (meaning youth). This is because the two words carry the same meaning. But the word 'shab' signifies 'power' and the word al-Shabab is symbol of power. It also signifies bravery. Al-Qutaibi says that the word 'al-fatah' is not only synonymous with the word 'al-Shab' but also signifies a complete formation of manhood.[3]

Qur'anic Definition

The Holy Qur'an is specific about age parameter of youth. It says:

"وإذا بلغ الأطفال منكم الحلم""When your child attains the age dreaming" i.e. to say that when a boy begins to dream of having intercourse with his opposite sex that results to wet-dream.

In another excerpt, the Qur'an says: "…till when he attains full strength and reaches forty years…."[4]

The combined effects of the two verses, according to the majority view of Islamic scholars are that once a child grows to the stage of having wet-dreams he becomes a 'Mukalaf', that is to say the age of puberty or the age of legal responsibility. And, in case of a female child, once she begins to have her menstrual period, she thus, attains the age of puberty. This point is supported by Hadith of the Prophet (peace and blessings of Allah be upon him) where he said: "Three people are forgiven (in recording bad deeds against them). They include, an insane person, who is mentally deranged until he is cured of his mental ailment, the sleeping person, until he wakes up; and young person until he begins to have wet-dream". [5]

The two verses therefore, appear to be valid proof of the fact that youthful age falls within the age-bracket of thirty (30) and forty (40) when the muscles and other biological organs, as well as psychological, physiological and mental composures of a child have become fully developed. That is a stage when a man or woman is capable of taking decision on issues or initiating actions on his or her own.

Youths and History of Islam

Youths played significant roles in the propagation and spread of Islam across the globe. The Holy Qur'an, Sunnah and Islamic literatures attest to this fact. As earlier stated, the Prophet, himself, a youth was divinely called to the mission of Islam – at an age little above forty. Likewise, his Noble Companions that were with him at that critical early period of Islam. It may not be possible to delve extensively into the roles played by those youths in this paper. Suffice to mention view of them for elucidation. When Prophet Muhammad (pbuh) was instructed to proclaim the Oneness of Allah against the worship of idols, the powerful figures in Makkah vehemently opposed him.   The crops of followers that listened and accepted his teachings were the youths. They include, Abu Bakr, his bosom friend, Ali, Othman and a number of others.

At the peak of Makkans' persecution, the Prophet was instructed to emigrate to Madinah. All available evidence showed that the Quraysh had plotted to kill him rather than to allow him to emigrate to Madinah where he might entrench the forces of Islam for a resolute stand.[6] By special Grace and Protection of Allah, the Prophet and his friend, Abu Bakr, were able to escape the dastardly acts hatched by the Makkan cabals. The role played by a number of youths in this historical event was monumental. These youths include, 'Ali ibn Abu Talib who remained behind the Prophet in his private apartment. By this act, Ali put his life in a very serious and dangerous risk as he could be killed by the blood-thirsty Makkans. Abdullah ibn Abu Bakr, his two sisters, 'Aishah and Asma and 'Amir ibn Fuhayrah (private assistant) were members of Abu Bakr household. These youths provided different services for the duo while hiding in the Cave of Thawr. While one was bringing food and water, another was collecting information from Makkah to enable them know what was the Makkan' plan while another was gracing around the cave so as to cover the footsteps of these young people from the observation of the Makkah who might and even certainly came to search for them in the area. These young people put their life at risk as the Makkan cabal's network was very comprehensive and extensive that any of them could be detected, arrested and killed. There are numerous others who made remarkable sacrifices in promoting the nascent Islam in Makkah and when later the Muslims settled in Madinah.

Going deeper in the history, youths had continued to carry the banner of Islam to every nook and cranny of the world. One of them was Muhammad ibn Al-Qasim who single-handedly led Muslim armies and succeeded in conquering many territories for Islam including India sub-continent.[7] He was only seventeen years old when

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[1] Qur'an 4 (Surat Al-Nisa) verse25.
[2] Qur'an 24 (Surat al-Noor) verse 33.
[3] Lisanul Arab.
[4] Qur'an 46 (Surat Al-Ahqaf) verse 15.
[5] The Hadith is variously reported in the Bukhari and some other books of Hadith.
[6] Haykal, M.H., *The Life of Muhammad*, Islamic Publication Bureau, Lagos, (1982), p. 163
[7] الشباب ومشكلات من منظور إسلام ,Muhammad Taofiq Ibrahim Zanati, (n.d Matba'at Al-Narjis, Riyadh, p. 32.

these historical achievements were made.   Similarly, Qutaibah al-Bahili was also a great warrior who consolidated the position of Muslims in India and also conquered many territories including, Bukhara, Samarqand in Russia. His conquest was extended to the far-east and entered into the China. Oqbah ibn Nafi' was also a youth who conquered territories for Islam to the point of reaching the Atlantic Ocean where he was reported to have stood before the sea and declared that: "I swear in the Name of Allah, if it had come to my knowledge that there was a land beyond this ocean, I would have advanced further to conquer such territory in the cause of Allah: O Allah the Lord of Muhammad! If not for this ocean I would have advanced further to capture the entire universe to ensure that Your words prevail on earth, O Allah! Be my witness!

When Sultan Muhammad al-Fatih assumed the throne of the Caliphate, he was just twenty-two years old. He ruled over Constantinople when he was twenty-four years old. When he was about to die, he handed over the mantle of leadership to his son counseling him to be God-fearing, and detribalized leader. He told him to govern people with sincerity and justice especially in the management of the public treasury.[1]

The above were examples of youths who have registered their names on the terrain of history. They spread the light of Islam to every corner of the world. They were successful because they adhered strictly to the moral principles of Islam. That explains why they were not misled by the glamour of materialism attached to the position of power which they occupied.

Now let us look at the youths of our present time. Before that however, it is pertinent to examine what is the concept of morality in Islam and what constitute moral decadence.

Muslim Youths and Development
Healthy development translates to hopes and aspirations for a nation of healthy, happy, and competent adolescents on their way to productive and satisfying adulthoods.[2] However, opinions differ on what constitutes "healthy, happy, and competent" adolescents as well as "productive and satisfying" adulthoods. The meaning of the endpoint of healthy adolescent development, healthy adulthood, fluctuates depending on the purpose and audience.[3] For some, economic self-sufficiency is the primary requirement: A gainfully employed individual, not reliant on public funds or services, is considered a "successful" adult. To others, psychological stability and well-being are critical.[4] One model of adult well-being lists six essential features, namely, i) Self-acceptance; ii) Positive relationships with others; iii) Autonomy; iv) Environmental mastery; v) Purpose in life; and vi) Personal growth (Ryff, 1996).[5]

From perspective of civic engagement theory, youths and development are broadly characterized as the attitudes, behaviours, knowledge, and skills that are aimed at improving society and are derived from the interest in contributing to the common good.[6] They imply an understanding of how society functions, and the acquisition of beliefs, competencies, and behaviours that allow citizens to work together to promote the well-being of the community.[7] Civil responsibility, or civic mindedness or civil identity[8] on the other hand is a characteristic of an individual's feelings of responsibility toward the community in which that individual is embedded, and the idea that every community member has a central role in contributing to the well-being of the local community and the wider society.[9] It has been argued that civic responsibility is strongly related to cognitive development; some of the cognitive abilities fundamental for civic participation are not fully developed until late adolescence, when young people acquire adult like competencies, that is, the ability to reason consequentially and "to deduce specific choices from general principles"[10] these capacities are fundamental for participating in the civic domain.[11]

Morality: An Index of Development Framework
Islam places the concept of morality within a number of parameters. It argued that the parameters are about seven in number. They include, i) God is the Creator and Source of all goodness, truth and beauty. ii) Man is a

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[1] Ibid.

[2] Roth, J.L., and Brooks-Gunn, J., What Exactly is Youth Development Program? Answer from Research and Practice, *Applied Development Science*, vol. 7, No. 2, Routledge, (2003), pp. 94-111; at p. 96 quoting from Roth & Brooks-Gunn, 2000.

[3] Ibid.

[4] Ibid.

[5] Ibid at p. 97.

[6] Lenzi, M.; Vieno, A.; Santinello, M.; Nation, M.; and Voight, A., The Role Played by the Family in Shaping Early and Middle Adolescent Civic Responsibility, *The Journal of Early Adolescence* 34 (2), (2014), p. 253.

[7] Youniss, J., Bales, S.; Christmas-Best, V.; Diversi, M.,; McLaughim, M., and Silbereisen, R., Youth Civic Engagement in the Twenty-first Century, *Journal of Research on Adolecence, 12, pp. 121-148;*

[8] Youniss, J.; McLellan, J.A.; and Yates, M., What we Know about Engendering Civic Identity, *American Behavioural Scientist, 40,* pp. 620-631.

[9] Lenzi, M.; Vieno, A.; Santinello, M.; Nation, M.; and Voight, A., supra.

[10] Joseph, A.;and, O'Neil, R.P., Growth of Political Ideas in Adolescence: The Sense of Community, *Journal of Personality and Social Psychology,* Vol. 4(3), (1966), pp. 295-306 at p. 302.

[11] Lenzi, M.; Vieno, A.; Santinello, M.; Nation, M.; and Voight, A., supra.

responsible, dignified, and honorable agent of his Creator. iii) God has put everything in the heavens and the earth in the service of mankind.   iv) By His Grace, Kindness, Benevolence and Wisdom, neither God expects man to perform impossible task or subject him to account for anything that goes beyond his capacity, nor does He forbid man to enjoy the good things of life; v) Adoption of principles of moderation, practicality, and equilibrium are the guarantees of high integrity and sound morality; vi) In principle all things are permissible for man except that which are clearly declared Haram in the text of the Qur'an and Sunnah which must be avoided; and what is singled out as obligatory, which must be observed; and lastly, vii) Man's ultimate duty in life is to serve God and be responsible to Him in all things. It follows that the man's highest goal in life is to achieve the pleasure of Allah that created him.[1]

In essence, the role of man is to promote what is right and fight against what is evil. Consequently, he must pursue what is true and abandon what is false, cherish what is beautiful and prudent, and refrain from those things that do not conform to the Islamic standard of morality. The second characteristic of these parameters is that man must be truthful, humble, simple, courteous, and compassionate in his daily endeavors.[2] It follows that man must always remember that arrogance and vanity, harshness and indifference, are not only distasteful and offensive to God, his Creator but, also, destructive to him and his environment.[3]

The objective of these parameters is to ensure that the Muslim's relationship with God is one of love and obedience, complete trust and thoughtfulness, peace and appreciation, steadfastness and active service. The sum total of all these is to achieve high-level of morality which, surely foster, sustain and reinforce the level of morality at the level of humanity.[4] And, truly these parameters were the guiding principles observed and upheld by those Muslim youths of the past who made tremendous and outstanding achievements while occupying positions of leadership.

Adherence to those Islamic parameters was the secret of the success of the early Muslims. During the era of glory, Muslims were aroused and burst the bounds of Arabia and threw themselves zealously into the task of the fuller working out of human destiny. Their leadership served as shining light and happiness for the world.[5] It gave the promise of turning humanity into a single divinely-guided society on account of the unique teachings of the Divine Book (the Qur'an) and the sacred Law (the Shari'ah) that had illumined all the avenues of life for them and had enabled them to progress towards a destination which they clearly envisaged.[6] They had not by themselves leapt into position of authority all of a sudden from the abysmal depth of degradation. The Qur'an had already beaten them into shape.[7] They have brought to a high level of nobility and purity through the tutelage of the Prophet of Islam who had conditioned them to a life of austerity and righteousness. He had instilled into their hearts the virtues of humility and courageous self-denial; he had purged them clean of greed and of striving after power, renown, or wealth.[8]

The historical success of the Muslim was later reversed when they allowed immorality and love for power and materialism crept into their ranks and files. Those who succeeded to the Caliphate after the first four Rightly Guided Caliphs were greatly lacking in the moral standard of Islam, except the Caliph 'Umar bin Abdul 'Aziz. The Umayyad and the Abbasid Caliphs failed woefully to fully conform to the moral standard of Islam.[9] The caliphs drew a line between religion and the state and thus moral decadence crept in. Before then, Europe had been harboring malice against their successes. They were particularly annoyed with Muslims' annexing of eastern wing of the Roman Empire and other Christian holy places. Now that they have become degenerated and weakened due to their neglect of the Islamic moral standard, the door was opened for them to deal blow on them. Thus, great armies of Crusaders were organized all over the Europe to attack the Muslim countries of Palestine and Syria. The Crusaders regained possession of Jerusalem in 1099 c.e. (492 A.H.) and overran the greater part of Palestine.

From that time onward, the Islamic political frontiers had continued to fall and become subjugated to the Western hegemony – from colonialism to neo-colonialism, and from globalization to world economic melt-down. Consequently, the family and community structures laid down by Islam had continued to be in the state of confusion from generation to generation. The entire world of the youths, Muslims and non-Muslims alike, had been greatly influenced by the Western political, social and economic values. All efforts to restore the past glory of Islam had not been significantly realized.

[1] Abdalati, H., Islam in Focus, Islamic Teaching Center, MSA, United State and Canada, (n.d.), p. 40.
[2] Ibid.
[3] Ibid.
[4] Ibid.
[5] Nadwi, A. H. A.,(1982), Islam and the World, Sh Muhammad Ashraf, Lahore, Pakistan, p. 70.
[6] Ibid.
[7] Ibid.
[8] Ibid.
[9] Ibid.

An Introspect into Muslim's Landmark in Science

Right from inception, Islam's claim of being an embodiment of everlasting source of knowledge and civilization was unequivocal. The Qur'an contains abundant proofs of this fact.[1] Human resource is an indispensable factor in determining social and economic growth. Human beings are active agents of growth who exploit natural resources, accumulate capital, build social, economic and political institutions and activate the growth process.[2] Youth is the most potential and viable human resources to a nation. They are volatile, enthusiastic, courageous and always ready to accept new ideas. For this reason, they are called change agent. Organized youth is major power in any society to bring about socio-economic changes.[3] In spite of the fact that Islam promotes an overriding interest in the overall welfare of mankind,[4] Muslims across the globe share a relatively higher incidence of poverty, low productivity and unemployment.[5] Thus, Muslim jurists are unanimous that the welfare of the people and their relief from hardships is the basic objective of the *Shari'ah* (*Maqasid Al-Shari'ah*).[6] Islam it is argued downplays monasticism and emphasizes human development not for the sake of accumulating wealth, but for the welfare of mankind.[7] The Qur'an states that all the natural resources are meant for the benefit of mankind.[8] Man should therefore maximize their utilities, enjoy the fruits of producing goods and services, and use them for meeting moral and social obligation.[9] Thus, optimum and efficient use of human resources is germane to accelerating growth and development as well as attaining aspirations of life. This needs development of human resources and their proper and efficient use which are highly emphasized in an Islamic economy.[10]

In the early 6th centuries, Muslims were renowned inheritors of the scientific tradition of late antiquity. They preserved it, elaborated it, and finally, passed it to Europe.[11] At this early period, the Islamic dynasty of the Umayyads demonstrated a deep interest in science. It was the century that were, for Europeans, the Dark Ages, were, for Muslim scholars, centuries of philosophical and scientific discovery and development. The Muslims at this time not only assimilated the ancient wisdom of Persia, and the classical heritage of Greece, but adapted their own distinctive needs and ways of thinking.[12]

The Islamic ability to reconcile monotheism and science proofs to be a first time in human thought that theology, philosophy, and science were finally harmonized in a unified whole.[13] Thus their contribution was one of the first magnitudes, considering its effect upon scientific and philosophic thought and upon the theology of later times.[14]   One of the reasons for such development of science is probably due to Gods commandment to explore the laws of nature. The idea is to admire all creations for its complexity - to cherish the creator for the ingenuity. Possibly holding to this belief, Islam's contributions to science had covered many roots of thought including mathematics, astronomy, medicine and philosophy.[15]

The Persian and India ancient scientific cultures were assimilated and became part of the Islamic heritage in the field of mathematics.[16] Some writers argue that at about year 600 A.H. - during the lifetime of Prophet Muhammad - an Indian Muslim mathematician developed the symbol cipher or zero and the system of placed notation. This invention, first mentioned in a Syriac text written in 662 AD, revolutionized the study of mathematics and made possible the great achievements of Muslim mathematicians.[17]

Mathematical vocabulary such as *algebra* and *algorithm* are actually borrowings from Arabic words that were later translated into Latin.[18] It was a Muslim mathematician who formulated the trigonometric function

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[1] Qur'an 96:1-5 (Surat al-Alaq) and similar verses therein.

[2] Sadeq, A.H.M., *Economic Development in Islam,* Malaysia Pelanduk Publications, (1991), 23

[3] Solaiman, M., and, Yasmin, S., Entrepreneurship Development for Rehabiliation of Muslim Youth – Investigating the Role of Islamic Bank Bangladesh ltd (IBBL), *Business Management Dynamics,* Vol. 1, No. 9, (2012), pp. 13-21, at p. 1.

[4] Qur'an 2:201

[5] See generally Mohammad, M., *Economics of Small Business in Islam,* Jeddah: Islamic Research and Training Institute, Saudi Arabia, (1995).

[6] Chapra, M.U., *Islam and the Economic Challenge,* London: International Institute of Islamic Thought, p. 1.

[7] Qur'an 57:27.

[8] Qur'an 2:22.

[9] Qur'an 28:77.

[10] Kurshid, A., *Economic Development in an Islamic Framework in the Islamic Perspective,* Leicester: The Islamic Foundation, (1979), pp. 223-240.

[11] Science : The Islamic Legacy: World's Fair Issue, (1987), p. 3.

[12] Hitti, K.P., *History of the Arabs*, New York: St. Martin's Press, (1970), p. 363. Aminuddin, A., *Islamic Contribution to Science,* a research paper written for the Department of Linguistic, University of Wisconsin-Milwaukee, for the Linguistic course 118; http://www.islamiccentre.org/index.php?option=com_content&view=article&id=32:islamic-contribution-to-science&Itemid=42 (accessed 27th February, 2014).

[13] Aminuddin, A., *Islamic Contribution to Science,* a research paper written for the Department of Linguistic, University of Wisconsin-Milwaukee, for the Linguistic course 118; http://www.islamiccentre.org/index.php?option=com_content&view=article&id=32:islamic-contribution-to-science&Itemid=42 (accessed 27th February, 2014).

[14] Hitti, K.P., supra at p. 580.

[15] Aminuddin, A., *Islamic Contribution to Science, supra.*

[16] Hitti, K.P., supra at p. 373.

[17] Science : The Islamic Legacy: World's Fair Issue, supra at p. 4.

[18] Aminuddin, A., *Islamic Contribution to Science,* supra.

explicitly. The word sine was actually the direct translation of the Arabic word *jayb*. An English mathematician Robert of Chester, who flourished in the middle of the twelfth century, was the first to use *sinus* equivalent to this Arabic *jayb* in its trigonometrically acception.[1]

Al-Khwarizmi composed the oldest book on mathematics, known only in translation. He presented more than 800 examples of the calculation of integration and equation, later anticipated by Neo-Babylonians.[2] In both trigonometry and Algebra Muslims were the pioneers – their very names reflecting their origin... al-Khwarizmi... firmly established this branch of mathematics.[3] They introduced it with the Arabic numerals into Europe and taught Westerners the most convenient convention of arithmetic concept. The zero and Arabic numerals lie behind the science of calculation as we know it today.[4]

Consequently, Islam turned out leagues of great scientists from generation to generation. Scientists within the Islamic civilization were of diverse ethnicities. Most were Persians,[5] Arabs,[6] Moors, Assyrians, and Egyptians. They were also from diverse religious backgrounds. Most were Muslims,[7] but there were also some Christians,[8] Jews[9] and irreligious.[10] A few examples of these great men suffice.

Jabir ibn Hayyan (ca. 8th – 9th centuries) was an alchemist who used extensive experimentation and produced many works on science and alchemy which have survived to the present day. Jabir described the laboratory techniques and experimental methods of chemistry. He identified many substances including sulfuric and nitric acid. He described processes including sublimation, reduction and distillation. He utilized equipment such as the alembic and the retort. There is considerable uncertainty as to the actual provenance of many works that are ascribed to him.[11]

Abbas ibn Firnas (810–887) was an Andalusian scientist, musician and inventor. He developed a clear glass used in drinking vessels, and lenses used for magnification and the improvement of vision. He had a room in his house where the sky was simulated, including the motion of planets, stars and weather complete with clouds, thunder and lightning. He is most well-known for reportedly surviving an attempt at controlled flight.[12]

al-Khwarizmi (ca. 8th–9th centuries) was a Persian mathematician,[32] geographer and astronomer. He is regarded as the greatest mathematician of Islamic civilization. He was instrumental in the adoption of the Indian numbering system, later known as Arabic numerals. He developed algebra, which also had Indian antecedents, by introducing methods of simplifying the equations. He used Euclidian geometry in his proofs.[13]

al-Battani (850–922) was an astronomer who accurately determined the length of the solar year. He contributed to numeric tables, such as the Tables of Toledo, used by astronomers to predict the movements of the sun, moon and planets across the sky. Some of Battani's astronomic tables were later used by Copernicus. Battani also developed numeric tables which could be used to find the direction of Mecca from different locations. Knowing the direction of Mecca is important for Muslims, as this is the direction faced during prayer.[14]

Abu Bakr Zakariya al-Razi (ca. 854–925/935) was a Persian born in Rey, Iran. He was a polymath who wrote on a variety of topics, but his most important works were in the field of medicine. He identified smallpox and measles, and recognized fever was part of the body's defenses. He wrote a 23-volume compendium of Chinese, Indian, Persian, Syriac and Greek medicine. al-Razi questioned some aspects of the classical Greek medical theory of how the four humors regulate life processes. He challenged Galen's work on several fronts, including the treatment of bloodletting. His trial of bloodletting showed it was effective; a result we now know to be erroneous.[15]

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1 Hitti, K.P., supra at p. 573

2 Hitti, K.P., supra at p. 379.

3 King, A. D., *Islamic Mathematical Astronomy*, London: Variorum Reprints, (1986), p. 214.

4 Hitti, K.P., supra at pp. 573-74.

5 Fisher, W.B., and others, *The Cambridge History of Iran* 4, Cambridge University Press, (1975), p. 396; Ghazanfar, S.M., *Medieval Islamic economic thought: filling the "great gap" in European economics,* Psychology Press, (2003), pp. 114-115; Ibn Khaldun, Franz Rosenthal, F., Dawood, N. J. *The Muqaddimah: An Introduction to History*, Princeton University Press (1967), p. 430; Schumpeter, J.A., *Historian of Economics*: Selected Papers from the History of Economics Society Conference, 1994, Laurence S. Moss, Joseph Alois Schumpeter, History of Economics Society. Conference, Published by Routledge, 1996, p.64

6 Ibn Khaldun, Franz Rosenthal, F., Dawood, N. J., supra.

7 Turner, H.R., *Science in Medieval Islam*, University of Texas Press (1997), p. 270; Hogendijk, J. P. *Bibliography of Mathematics in Medieval Islamic Civilization*, (January 1999); Sabra, A. I. "Greek Science in Medieval Islam". In Ragep, F. J.; Ragep, Sally P.; Livesey, Steven John. *Tradition, Transmission, Transformation: Proceedings of Two Conferences on Pre-modern Science held at the University of Oklahoma*. Brill Publishers. (1996). p. 20.

8 Lewis, B., *The Jews of Islam*, (1987), p.6

9 Zaimeche, S., Introduction to Muslim Science, (2003); Lewis, B., ibid.

10 Lewis, B., *What Went Wrong? Western Impact and Middle Eastern Response*

11 Masood, E. *Science and Islam A History*, Icon Books Ltd., (2009); Lagerkvist, U., *The Enigma of Ferment: from the Philosopher's Stone to the First Biochemical Nobel Prize*, World Scientific Publishing, (2005), p. 32;

12 Masood, E., supra pp. 71-73.

13 Masood, E., supra pp. 139-45.

14 Masood, E., supra pp. 74, 148-50.

15 Masood, E., supra pp. 74, 99-105.

al-Farabi (ca. 870–950) was a Persian/Iranian (born in Farab, Iran) rationalist philosopher and mathematician who attempted to describe, geometrically, the repeating patterns popular in Islamic decorative motifs. His book on the subject is titled *Spiritual Crafts and Natural Secrets in the Details of Geometrical Figures*.[1]

ibn Sina (Avicenna) (908–946) was a Persian physician, astronomer, physicist and mathematician from Bukhara, Uzbekistan. In addition to his master work, The Canon of Medicine, he also made important astronomical observations, and discussed a variety of topics including the different forms energy can take, and the properties of light. He contributed to the development of mathematical techniques such as Casting out nines.[2]

al-Zahrawi (936–1013) was an Andalusian surgeon who is known as the greatest surgeon of medieval Islam. His most important surviving work is referred to as al-Tasrif (Medical Knowledge). It is a 30 volume set discussing medical symptoms, treatments, and mostly pharmacology, but it is the last volume of the set which has attracted the most attention over time. This last volume is a surgical manual describing surgical instruments, supplies and procedures. Scholars studying this manual are discovering references to procedures previously believed to belong to more modern times.[3]

Ibn al-Haytham (965–1040), also known as Alhazen, was an Iranian scientist born in Basra, Iraq (during Iranian Buyid Dynasty). Later, he moved to Egypt as an adult. Hasan Haytham worked in several fields, but is now known primarily for his achievements in astronomy and optics. He was an experimentalist who questioned the ancient Greek works of Ptolemy and Galen. At times, al-Haytham suggested Ptolomey's celestial model, and Galen's explanation of vision, had problems. The prevailing opinion of the time, Galen's opinion, was that vision involved transmission of light from the eye, an explanation al-Haytham cast doubt upon. He also studied the effects of light refraction, and suggested the mathematics of reflection and refraction needed to be consistent with the anatomy of the eye.[4]

Al-Zarqali (1028–1087) was an Andalusian artisan, skilled in working sheet metal, who became a famous maker of astronomical equipment, an astronomer, and a mathematician. He developed a new design for a highly accurate astrolabe which was used for centuries afterwards. He constructed a famous water clock that attracted much attention in Toledo for centuries. He discovered that the Sun's apogee moves slowly relative to the fixed stars, and obtained a very good estimate for its rate of change.[5]

Omar Khayyam (1048–1131) was a Persian poet and mathematician who calculated the length of the year to within 5 decimal places. He found geometric solutions to all 13 forms of cubic equations. He developed some quadratic equations still in use. He is well known in the West for his poetry (rubaiyat).[6]

Al-Idrisi (1100–1166) was a Moroccan traveler, cartographer and geographer famous for a map of the world he created for Roger, the Norman King of Sicily. al-Idrisi also wrote the Book of Roger, a geographic study of the peoples, climates, resources and industries of all the world known at that time. In it, he incidentally relates the tale of a Moroccan ship blown west in the Atlantic, and returning with tales of faraway lands.[7]

Ibn al-Nafis (1213–1288) was a physician who was born in Damascus and practiced medicine as head physician at the al-Mansuri hospital in Cairo. He wrote an influential book on medicine, believed to have replaced ibn-Sina's *Canon* in the Islamic world – if not Europe. He wrote important commentaries on Galen and ibn-Sina's works. One of these commentaries was discovered in 1924, and yielded a description of pulmonary transit, the circulation of blood from the right to left ventricles of the heart through the lungs.[8]

Nasir al-Din al-Tusi (1201–1274) was a Persian astronomer and mathematician whose life was overshadowed by the Mongol invasions of Genghis Khan and his grandson Helagu. al-Tusi wrote an important revision to Ptolemy's celestial model, among other works. When he became Helagu's astrologer, he was furnished with an impressive observatory and gained access to Chinese techniques and observations. He developed trigonometry to the point it became a separate field, and compiled the most accurate astronomical tables available up to that time.[9]

What Went Wrong?

What were the causes of the decline of scientific culture in Islam, and why did the gap in modern science and technology become so great between the West and Islam?

Some writers suggest that in the nineteenth century, the Muslim world began to open a chapter in their decline in scientific culture which was caused by the negative attitude of Muslim theologians. Sachau says, `the

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[1] Masood, E., supra pp. 148-49.
[2] Masood, E., supra pp. 104-5.
[3] Masood, E., supra pp. 108-9.
[4] Masood, E., supra pp. 173-75.
[5] Masood, E., supra pp. 73-75.
[6] Masood, E., supra pp. 5, 104, 145-146.
[7] Masood, E., supra pp. 79-80.
[8] Masood, E., supra pp. 110-111.
[9] Masood, E., supra pp. 132-135.

fourth century (Islamic calendar) is the turning point in the history of the spirit of Islam. But for al-Ash`ari and al-Ghazali, the Arabs might have been a nation of Galileos, Keplers, and Newton.[1] E.G. Browne however, compares what he describes as al-Ash`ari's destructive influence to that of Jenghiz Khan and Hūlāgū.[2] George Sarton, agrees with them and describes al-Ash`ari and al-Ghazālī as scholasticism as obstacles to the progress of science in the Middle Age.[3] Sarton says that until the sixteenth century, developments in science were taking place both in the East and the West, but after that time Western science began to grow at an accelerated pace, while Eastern civilization remained at a standstill, or even deteriorated. He concludes that the essential difference between East and West is that the latter overcame scholasticism, while the former did not.[4]

A cross-section of writers however argue that though, it is true that the wide margin that exists between the Muslim World and the West in science had continued to increase after the sixteenth century, the assumption that the opposition of theologians to science was the cause of this cannot be said to be accurate. According to them, the real causes are both political and economic, as was demonstrated by Ibn Khaldun; the decrease of interest in the rational sciences and the continued interest in the study of the religious sciences are unrelated. The former was a symptom of the economic weakness of the Islamic states and of their decreasing political power. Had there been a need for science and technology, as was the case during the Golden Age of the Islamic Empire, the rational sciences would have continued to progress without interruption. In Islam, there was no single religious authority that controlled the whole educational system, and this left the system free and not dominated by orthodoxy. The rise of scientists and the flourishing of the rational sciences in the Golden Age reflected the prosperity of the empire and its strength, and the large number of mathematicians, astronomers, physicians, engineers and other kinds of scientists was in response to the needs of society and of the empire in that period. It conformed to the law of supply and demand.[5]

Be that as it may, and against the background of monumental feat achieved by the Muslims in the realm of science, *The New Atlantis*, a US-based Journal of Technology and Society published an article recently in which a grim yet accurate picture of the state of science in the Muslim world was shown. It revealed that India and Spain each produces more scientific literature than all of the Muslim countries combined; Muslim world contributions to science amount to no more than 1 per cent and is of lower quality. The spirit of science in the Muslim world, the magazine added, is as dry as the desert.[6]

It is noted that this is a sad reality that sharply contrasts with the Golden Age of Islamic advancement in science (800-1100), when the Muslim world was the beacon of innovation and triggered Europe's Renaissance and Enlightenment periods. What went wrong?

Historians have long maintained that following the unfortunate schismatic split of Muslim intellectuals into literalist and liberalist groups, a cross-section of these jurists steered the Islamic culture away from independent scientific inquiry towards religious fundamentalism. In a remarkable intellectual shift, they concluded that *falsafa* (philosophy, including logic, mathematics and physics) was incompatible with Islam.[7] Specific attention is focused on Al-Gazali book titled: *The Incoherence of Philosophers*, in which he is said to have "stabbed *falsafa* in such a way that it could not rise again in the Muslim world". Thanks to his unparalleled mastery of falsafa and Islamic law, he injected repugnance among Muslims for science that ultimately led to its decline and, in the process, the decline of Islamic civilisation.[8]

Muslim Youth and Challenges of Globalization
The word "globalization" literally refers to the emerging of an international network, belonging to an economical and social system.[9]   It is noted that one of the earliest uses of the term was in 1930 - in a publication entitled: "*Towards New Education*" to designate an overview of the human experience in education.[10] The term gained currency shortly after the Cold War to project and describe the world as becoming more interdependent in term

[1] Sayili, A., *The Observatory in Islam*, New York, Arno Press, (1981), p.410
[2] Browne, E. G., *Literary History of Persia*, 1, (1908), p. 286; see Sarton, G. *Introduction to the History of Science*, New York, Krieger, (1975), I, p. 626.
[3] Sarton,G., supra at pp. 28-29.
[4] History of Science and Technology in Islam, Factors Behind the Decline of Islamic Science After the Sixteenth Century, http://www.history-science-technology.com/articles/articles%208.htm (accessed 26th February, 2014)
[5] History of Science and Technology in Islam, Factors Behind the Decline of Islamic Science After the Sixteenth Century, http://www.history-science-technology.com/articles/articles%208.htm (accessed 26th February, 2014).
[6] Hassan, H., How The Decline Of Muslim Scientific Thought Still Haunts, http://www.thenational.ae/thenationalconversation/comment/how-the-decline-of-muslim-scientific-thought-still-haunt (accessed 26th February, 2014).
[7] Ibid.
[8] Ibid.
[9] "Globalization". Online etymology dictionary, www.etymonline.com/index.php?term=globalization as quoted by Cuturela, S., *Revista Română de Statistică – Supliment Trim* IV/2012, p. 137
[10] "Globalization". Oxford English Dictionary Online. September 2009. http://dictionary.oed.com/cgi/entry/50297775?single=1&query_type=word&queryword=Globalization&first=1&max_to_show=10.

of economical and informational spectrums.[1] Roland Robertson, a professor of sociology at the University of Aberdeen, was the first person to define globalization as "the understanding of the world and the increased perception of the world as a whole."[2] Martin Albrow and Elizabeth King, sociologists, define globalization as "all those processes by which the peoples of the world are incorporated into a single world society.[3] Anthony Giddens contends in his paper titled: "The Consequences of Modernity" that "...globalization can be defined as the intensification of social relations throughout the world, linking distant localities in such a way that local happenings are formed as a result of events that occur many miles away and vice versa."[4] In practical term, globalization involves spreading of ideas, practices and technologies, and it goes beyond internationalization and universalization; it is not simply the modernization or westernization. Certainly it is much more than market liberalization.[5]

Scholars have also provided a perspective interpretation of globalization in three distinct ways, namely, first, "as forces which are transforming the global market and creating new economic interdependency across vast distances. Petroleum put the Muslim world in the mainstream of the global economy. Second, as forces which are exploding into the information superhighway - expanding access to data and mobilizing the computer and the Internet into global service. This tendency is marginalizing Africa. The Muslim world is less central to informational globalization. Third, as all forces which are turning the world into a global village - compressing distance, homogenizing culture, accelerating mobility, and reducing the relevance of political borders."[6]

In effect, globalization trajectory bears strong impact on the entire development locally, regionally, and internationally in almost facets of human activities.[7] The impacts of globalization however, are both positive and negative.

Observers say that part of the positive impacts of globalization is the turning the world to a global village. Thus, economies of the world are being increasingly integrated as new technology and communication has brought people together.[8] It has also augmented intercultural relationship and interaction at global level - people are mingling with each other like never before even though the social, economic, and political changes that globalization has brought have been accompanied by some challenges.[9]

Experts also identify a number of negative impacts of globalization which *inter alia*, include child labour and slavery; growing gap between the rich and poor; employment disparity; cultural deterioration; rise in health risks; and most significantly and dangerously, rise in terrorism and criminal activities. All these negative tendencies are impacting youth globally and particularly the Muslim youth. But, here a little digression is required on the impact of terrorism and criminal activities. It has been argued that globalization may have inadvertently helped terrorists and criminals. At the heart of globalization is an idea that humans, materials, food etc. be allowed to travel freely across borders, but 9/11 was a ghastly reminder that people with evil intentions can use it as an opportunity and cause damage.[10]

Global Terrorism
It has been noted that "holy war" was coined in Europe during the Crusades, meaning the war against Muslims, and thus, has no a counterpart in Islamic glossary, and thus, Jihad is certainly not its translation.[11]

The Arabic word "jihad" literally means struggling or striving. It refers to effort and strive towards achieving a set goal - personal life, family life, profession and interrelation with others. Jihad can be carried out in different modes, namely, in speech, writing, lobbying or picketing, or preaching by inviting people to one's faith or belief. Islam is not restricted by geographical frontiers and boundaries. Likewise, its teachings extend to the welfare of society and humanity in general, an individual cannot keep himself/herself in isolation from what happens in their community or in the world at large, hence the Qur'anic injunction to the Islamic nation to take as a duty "to enjoin good and forbid evil."[12]

Like any other faith and ideology, Islam allows the use of force as a last resort towards attaining greater good or peace. Nations and communities adopts system of military formations, Army and armament set-ups for the sustenance and maintenance of peace, protection and security to their people. Islam and its adherents are not

[1] Inosemtsev Vladislav L. Age of Globalization.2008. Num. 1.The Present Day Globalization
[2] Roland, R., *Globalization: Social Theory and Global Culture* (Reprint. ed.), (1992) London: Sage. ISBN 0803981872
[3] Martin, I., and King, E., (eds.), *Globalization, Knowledge and Society* (1990), London: Sage ISBN 978-0803983243, p. 8.
[4] Anthony, G., *The Consequences of Modernity*, ((1991), Cambridge: Polity Press. p. 64.
[5] Cuturela, S., supra at p. 140.
[6] Mazrui, A., "God and Globalization: Religion in The Global Village", *Future Islam,* http://www.futureislam.com/inner.php?id=NTgyJuly, 2017) (accessed 04 July, 2017).
[7] Cuturela, S., "Dimensiunea Culturala a Globalizarii", (2009), Congress A.R.A., Sibiu, Romania
[8] http://www.buzzle.com/articles/negative-effects-of-globalization.htmlv (accessed 04
[9] Ibid.
[10] Ibid.
[11] Tai, K., "Islam, Terrorism, Radicalization of Muslim Youth and the Concept of Jihad" *Aksaa,* http://multifaiths.com/pdf/TerrorismIslamicperspective.pdf (accessed 05 July, 2017).
[12] Qur'an 3:104.

exceptions. Thus, Islam lays down clear and strict parameters in accordance with Divine laws and injunctions for the use of force and operation of military formations. That explains why the Prophet of Islam (pbuh) laid down rules and guidelines in this regard. For example, he specifically instructed that: Do not dishonour a treaty. Do not mutilate the dead. Do not kill women. Do not kill children. Do not kill the old. Do not kill those without weapons. Do not kill those engaged in worship (priests, rabbis etc.) Do not cut down trees. Do not burn crops. Do not poison wells of your enemies. Fight only those who come at you.

From the above, it can be seen that military action is a subgroup of Jihad and not its totality. This was evidenced in the speech of the Prophet Mohammad (pbuh) when, on returning from a military campaign, he told his Companions that: "This day we have returned from the minor jihad (war) to the major jihad (self-control and betterment)." It follows that Jihad is not a declaration of war against other religions and certainly not against the Christian and Jewish faiths. Unfortunately some media and political groups want innocent and uniformed individuals to see it that way. Islam does not nurse grudge against or fight other religions as it considers Christians and Jews as fellow in the heritage of the Abrahamic traditions in the worship of God according to the path followed by Abraham (pbuh). One can also understand the philosophy of Jihad in a saying of the Prophet of Islam (pbuh) when he declared that: "The best Jihad is saying a word of truth in the court of a tyrant ruler".

It is a fact of history that a cross-section of adherents of all traditions, religious or political, are deviants. They are guilty of lapses in adhering honestly and strictly to the valued ideals of their religious, political or philosophical doctrines. Muslims are no exception. This explains why time and again religion was exploited by ambitious tyrants or violated by ignorant mobs. These religions or doctrines should not therefore be held responsible for such violation and inadequacies of their adherents.

Islam and Terrorism

Islam, certainly does not condone nor permit terrorism. There are abundant references in the Qur'an to that effect. For example, it stated in the Qur'an that: "God does not forbid you from showing kindness and dealing justly with those who have not fought you about religion and have not driven you out of your homes. God loves just dealers."[1] Also, "If anyone killed a person not in retaliation for murder or to spread mischief in the land, it would be as if he killed the whole of humanity. And likewise if anyone saved a life, it would be as if he saved the whole of humanity."[2]

From these Qur'anic excerpts, it become clear that acts of inciting terror, the wholesale destruction of buildings and properties, the bombing and maiming of innocent men, women, and children are not only forbidden and detestable acts, but also against the spirit and letter of the Qur'an. It follows that when individual Muslims commit an act of terrorism, even if they attribute their acts to Islam, it is un-Islamic and they would be guilty of violating the law Allah.

In similar vein, suicide bombings is un-Islamic. It is not supported or justified by the Qur'an and Sunnah - the two primary sources of Islamic law. It is even considered to be a major sin in the Islamic jurisprudence. The Qur'an says: "And do not kill yourselves, surely God is most Merciful to you."[3] Prophet Muhammad was also quoted to have said that: "He who commits suicide by throttling shall keep on throttling himself in the Hell Fire (forever) and he who commits suicide by stabbing himself shall keep on stabbing himself in the Hell-Fire."[4]

Islamphobia and The Media

Islamophobia has reached its climax at the behest of persistent negative portrayal of Islam in the media. The media particularly from the Western hemisphere had continued to sensationalize what some bad Muslims have done in the name of Islam but which has no basis in Islam. Consequently, apprehension, fear and mistrust coupled with inadequate knowledge of Islam and the Muslims are the order of the day.

A 2008 research carried out by the Cardiff University focusing on the coverage of British Muslims in the British press, revealed that "four of the five most common discourses used about Muslims in the British press associate Islam/Muslims with threats, problems or in opposition to dominant British values. So, for example, the idea that Islam is dangerous backward or irrational is present in 26% of stories. By contrast, only 2% of stories contained the proposition that Muslims supported dominant moral values."[5] The research further revealed that "the most common nouns used in relation to British Muslims were terrorist, extremist, Islamist, suicide bomber and militant, with very few positive nouns (such as 'scholar') used. The most common adjectives used were radical, fanatical, fundamentalist, extremist and militant. Indeed, references to radical Muslims outnumber

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[1] Qur'an 60:8
[2] Qur'an 5:32
[3] Qur'an 4:19
[4] Sahih al-Bukhari, 2:23:446
[5] Allen, C., *A Review of the Evidence Relating to the Representation of Muslims and Islam in the British Media,* Written Evidence Submitted to the All Party Parliamentary Group on Islamophobia, Institute of Applied Social Studies, School of Social Policy, (2012), p. 9.

references to moderate Muslims by 17 to one."[1]

The media is considered by many as the sole source of information. Unfortunately, what they get from the media, it is argued is misinformation especially when it comes to Muslims and Islam. For example, 'Islamic Terrorism', 'Muslim fundamentalists', women being oppressed and forced to wear the veil, 'forced marriages' and 'terror plot', are some of the terms associated with Islam and Muslims. The consequence of this media stereotype are mistrust, apprehension and division between Muslims and non-Muslims. A graphic example of this was when the caricatures of the Prophet Mohammad (pbuh) were published in the Danish newspapers, it touched a nerve with every Muslim and made them to be outraged.

It may be argued that this media hypes are provocative and inciting, however, it is no excuse for Muslims to confront these tendencies with equal negativity, threat of violence or terrorism as this will be contrary to the basic tenets of Islam and the ethos of Prophet Muhammad Sunnah (practice). Historically, peaceful co-existence was an important factor that brought about rapid spread of Islam in the world.

The media has failed to draw a line between what is termed freedom of expression and inciting racial and religious hatred by their method of presentation and their choice of insensitive language and misrepresenting Islam and Muslims. Some political figures have also contributed to this trend by using the terms which are not only insensitive but abusive. The combined effects of all these contribute immensely in encouraging the youth in embarking on political Islam with view to counter this unfortunate trend.

Experts suggest different factors leading to radicalisation of Muslim Youth in Europe and elsewhere. It has been actually argued that there is lack of scientific data on this. However, some possible explanations have been suggested. These include:

(i) Lack of integration and racism which have led to some Muslims feeling excluded from the society in which they live;

(ii) **Lack of understanding of what a sound "Muslim identity" means.** The gross misunderstanding around the issue of loyalty to one's faith versus loyalty to one's country is perhaps the stepping stone to extremism.[2]

 (iv) Globalisation and improved and rapid means of communication, including the internet and social media, give youths direct access to information. They are now more aware than ever before of the events in Bosnia, Somalia, Chechnya, Kashmir, Afghanistan, Iraq and the Israeli-Palestinian conflict where the Muslims, mainly, appear to have been the victims.

(v) Feeling of exclusion in the country they are domiciled as a result of which they develop some degree of empathy with all the Muslim victims in the world and convince themselves that their own exclusion and the persecution of their brothers and sisters have the same roots - the rejection of Islam by the Western world;

(vi) **"Lack of balanced discourse on social justice in the Muslim community.** While traditionally, Muslims have a strong, pragmatic social justice narrative, Muslim leaders and Imams have failed to address the issue of social justice in a wholesome manner that reflects the reality of a multicultural neighbourhood and an increasingly globalized, interconnected world. Our conversation has to go beyond simply condemning wars in Muslim lands or condemning a terrorist attack by radicals in the name of Islam. It has to condemn the evil trio: War-Terrorism-Islamophobia. All three need to be condemned simultaneously and unequivocally. Our narrative has to offer real solutions for this global crisis, beyond theory. In the absence of such balanced, scholarly discourse, young Muslims are bound to pick sides in the "war on Islam";[3]

(vii) **"Lack of avenues for positive engagement for young Muslims.** Due to insufficient quality programs and services that are engaging, inspiring, and relevant, offered by legitimate Muslim institutions, Muslim youth are prone to be attracted to shady "Shaykhs" and YouTube videos that offer a concrete "plan of action NOW". Art, cultural enrichment, and creative expression are proven tools for keeping youth off the streets and for channelling their energies in a constructive way."[4]

(viii) **"Genuine grievances of young Muslims unacknowledged and ignored by media, parents, teachers, Imams, youth leaders, and social service providers in the Muslim community.** If we fail to listen to and address the sincere concerns and anxieties of youth generally and Muslim youth in particular regarding the ongoing atrocities, destruction, and war crimes being committed against their Muslim brothers and sisters around the world, they will naturally gravitate toward those who not only acknowledge their grievances, but also offer "solutions" to the dilemmas of the Ummah."[5]

Beyond the challenges of radicalization resulting in the acts of terrorism as discussed above, the Muslim youths have role to play in research and scientific knowledge for positive development.

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[1] Ibid.
[2] https://www.soundvision.com/article/13-reasons-young-muslims-fall-prey-to-radicalization (accessed 04 Sept., 2017)
[3] Ibid
[4] Ibid.
[5] Ibid.

Resurgence in Scientific Culture Beyond Radicalization

If the present-day Muslim youths are to adequately address the underlined causes of Muslim decline in science and technology and launch an effective resurgence in this regard, they have to be conscious of certain factors. These factors which some experts describe as the cumulative effect of multiple factors include those that are identified by Aaron Segal. [1] He listed the following in detail:

"**Demographics:** The number of research scientists and engineers remains well below that of rich countries as well as Latin America and South and East Asia. Science and engineering students are drawn primarily from urban middle-income backgrounds; few of the much larger number of poor students can pursue research careers. Participation by women in science remains low, as the disincentives, formal and informal, for women to study science or engineering are formidable. Only a handful of mostly urban, middle-class male students have sufficient exposure to science to even consider making it a career.

Language: With an estimated 80 percent of the world's scientific literature appearing first in English, the literature in Arabic, Persian, Urdu, and other languages is inadequate for teaching students as well as researchers. Scientific work, therefore, requires a competence in reading, writing, and comprehending English, an area in which Muslims overall lag behind other peoples, such as Chinese, Thais, and Brazilians. Even though the Arab League has systematically promoted scientific translations and an updated Arab vocabulary, Where English or French are the language of instruction (the former in the Arabic-speaking countries of the Persian Gulf, the latter in North Africa), hostility often develops between students in science, who study in a foreign language, and those in other disciplines, who work in Arabic. [27]

Education: Effective science education at primary and secondary levels is available in many countries only at a handful of urban private schools. There is too much rote learning, a legacy in part of Qur'anic schools, and far too little support for science education at all levels. Universities and technical schools emphasize teaching rather than research. Few strong doctoral programs or research centers of academic excellence exist. Overcrowded, underfunded, and turbulent universities have been unable to protect space and resources for research.

Research: The Muslim world suffers no shortage of scientists and engineers, but it does have an acute scarcity of career researchers. While several countries boast outstanding individual researchers and projects, there is little mentorship or in-house ability to train young researchers. And many of the few science and engineering graduates being trained in research are then employed in bureaucratic posts. Inadequate equipment and access to data also reduces scientific output per researcher, as do the few incentives to publish and the absence of quality doctoral programs within the region. Attempts to develop research capabilities -- whether in universities, research institutes, government ministries, non-profit foundations, multinational corporations, or local corporations -- have rarely succeeded.

State-owned corporations: Given the increasing links between science and technology, state-owned corporations have a potentially important role, especially in Algeria and Syria, but they have woefully neglected science. Research by parastatal such as Sonatrach, the state petroleum firm in Algeria, has been plagued by poor management, erratic funding, political instability, and personnel problems. Lack of accountability and inability to diffuse research -- even within the firm -- are persistent problems. Unwilling to build linkages to university researchers or to collaborate with admittedly weak government ministries, the parastatals have wasted resources. Industrial import substitution often continues to rely on turnkey projects and foreign maintenance. There are signs, especially in Pakistan, Turkey, and Lebanon, of local firms' developing adaptive research capabilities. Multinational firms active in the region prefer to conduct research at European or North American sites. Some adaptive research in the petroleum and petrochemical industries, mostly small-scale quality control, provides few incentives for joint ventures in research with state-owned companies. Except for Algeria, Iran, and Iraq, state oil companies are more managers of concessions than operators with strong technical capabilities.

Professional societies: Professional societies of physicists, engineers, dentists, physicians, and other disciplines generally sponsor journals and meetings but have no structures or resources for research. Sometimes harassed politically (as in Afghanistan, Libya, Somalia, and Iraq), the professional societies often opt for the most narrow and technical concept of their mission. Broad-based interdisciplinary professional societies for science and engineering have been slow to develop in the Muslim world. The one exception is the Royal Scientific Society of Jordan, which has monarchical patronage and interdisciplinary participation.

Resources: A lack of financial resources and incentives has been a major barrier to research except in some oil-rich states. Whereas Japan, the United States, Germany, and other Western countries spend 2 percent or more of their gross domestic product (GDP) annually on research, no Muslim country spends more than .50 percent of its (much lower) GDP on research. [28] Not only is money scarce but what little is available comes sporadically, further bedeviling long-term research (which requires equally long-term financial commitments). Even where funds are available, research-management capabilities are in short supply. The prospects for stable research

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[1] Segal, A., Why Does the Muslim World Lag in Science?, *The Middle East Quarterly,* Vol. III, No. 2, (1996), pp. 61-70. http://www.meforum.org/306/why-does-the-muslim-world-lag-in-science (accessed 28th February, 2014).

funding and effective institution-building are both poor.

Authoritarianism: Authoritarian regimes deny freedom of inquiry or dissent, cripple professional societies, intimidate universities, and limit contacts with the outside world. A horrific detailed account by the U.S. National Academy of Sciences documents the long-term destruction of the scientific community in Syria29 by a nationalist regime, not a fundamentalist one. Authoritarian regimes also reinforce the prevailing pattern of relying on technology transfer. Distrustful of their own elites and institutions, the rulers prefer to buy rather than generate technology. The oil-exporting countries especially see science and technology as commodities to be purchased, an outlook that has a pernicious effect on the development of indigenous research capabilities.

Regional cooperation: Regional cooperation in science and technology has a checkered history in the Muslim world. It makes eminent sense in principle, for a handful of countries (like Kuwait and Saudi Arabia) are oil-rich and short of researchers, while other countries (Egypt and Pakistan) export them. Also, the similarity of applied-research needs and priorities, such as solar energy, desertification, and desalination, should produce shared interests. Meetings held over two decades to coordinate regional research have produced much rhetoric and little action.

Government incompetence: Applied-research units in government ministries, such as agriculture or construction, have often become sinecures for political appointees with little or no interest or capabilities for research."

Suggestions and Conclusion

1) Muslim youths should uphold the tenets of their religions. The moral standard of Islam, for instance, if observed sincerely and faithfully, serves as impetus to accelerated growth spiritually and materially.

2) Governments of Muslim countries in line with the United Nations' recommendation, should devote at least 27% of its annual budget to education. This will enable Muslim schools and universities to expand their facilities and employ more qualified teachers, so as to give admission to as many prospective students as possible which, anyway, is their birth-right. Secondly, religious and moral instructions should be given adequate position in school educational curricular.

3) Muslim societies and organizations should give serious attention to the establishment of schools with combination of Islamic teachings and secular education.

4) Purely Islamic schools (Madrasat) should incorporate secular subjects (science and arts) and even vocational courses in their curricular so as to make their graduates relevant in the labor market and become economically independent after their graduation.

5) Professional societies can, given sufficient autonomy, play an important role in improving science education, scientific communications, and the place of science in popular culture. Small-scale projects can establish links between the public and private sectors and universities and technical schools. The basis exists for fostering regional and sub-regional cooperation, for there is a consensus on research priorities in much of the Muslim world. These include solar energy, desalination, arid lands agriculture, irrigation, animal sciences, and petrochemicals. While these are applied-research and demonstration-and-development priorities, they do involve a substantial amount of science. With agreement on priorities, long-term funding can be developed.

6) Yet, these incremental and pragmatic measures must still confront a hostile environment. For science again to flourish in Muslim countries requires a recognition that it requires long-term continuities, the lessening of authoritarianism, and a serious effort to reconcile faith and reason.

As regard the problem of radicalization of Muslim youths Cathryn Siefert suggests that:

7) "Parents, community leaders, volunteers, and professionals need to help youth meet goals toward a vocation. Young vulnerable Muslims need to have dialogues among those of different religions and backgrounds to teach that there can be differences of opinion and they can still have respect for each other. We must teach tolerance and diversity. For those that have mental illness and substance abuse, identification and treatment is needed. For those with risk factors for violence risk reduction plans are needed."[1]

8) Precht, Tomas suggests that: "Social integration of youth is extremely important along with counter ideology by education, involving Muslim community in the process of countering radicalization by teaching young people. This will address the need to create collective identity and develop shared values."[2]

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[1] Siefert, C., 'Radicalization of Young Muslims, Reasons and Prevention', (2015), https://www.psychologytoday.com/blog/stop-the-cycle/201511/radicalization-young-muslims (accessed 05 Sept., 2017).

[2] Precht, Tomas, "Home grown terrorism and Islamist radicalization in Europe."Research report funded by the Danish Ministry of Justice. December 2007. < http://www.justitsministeriet.dk/sites/default/files/media/Arbejdsomraader/Forskning/Forskningspuljen/2011/2007/Home_grown_terrorism_and_Islamist_radicalisation_in_Europe_-

9) Briggs, Rachel observes and suggests that: "The major problem in the UK for example is that Muslim communities still feel alienated because they don't feel that their views are valued by local authorities or that their involvement will make any difference. Negative media reporting about Muslims and growing Islamophobia naturally influence the way in which Muslim communities view efforts at engagement."[1]

10) A solutions suggested by Reem Salahi may be also relevant. He says: "Muslims and Muslim youth are not intrinsically prone to radicalization through the aid of the internet, just as White youth are not intrinsically prone to commit massacres or lynch ethnic minorities in solidarity with the KKK. Rather, the problem is the media and the government's continued vilification and the consequential disenfranchisement of the Muslim community. It is the government's infiltration of mosques and community centres with informants and agent provocateurs. It is the FBI's prolonged fishing expeditions and false prosecutions of many innocent Muslims. And it is an ever-worsening foreign policy that wastes away our tax dollars on killing innocent civilians throughout the world. So please stop parroting the misguided construct of home-grown terrorism and Islamic radicalization as the problem, when the real problem is xenophobia couched in politically correct terms."[2]

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[1] Rachel, B., "*Community engagement for counterterrorism: lessons from the United Kingdom*" International Affairs 86 , no. 4 (July 2010): 971-981.

[2] Salahi, R., '*Muslim Youth Radicalization or Politically Correct Islamophobia?*' (2011), http://www.huffingtonpost.com/reem-salahi/muslim-youth-radicalizati_b_405055.htm (accessed 05 Sept., 2017)