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UNIVERSITY OF OKLAHOMA GRADUATE COLLEGE

PERCEPTIONS OF ISLAMIC EDUCATORS ABOUT THE CONFLICT
BETWEEN CONSERVATIVE AND SECULAR MUSLIMS REGARDING
ISLAMIC EDUCATION AND THE TEACHING OF SCIENCE,
PHILOSOPHY, AND MYTHICAL STORIES TO MUSLIM STUDENTS

A Dissertation

SUBMITTED TO THE GRADUATE FACULTY

In partial fulfillment of the requirements for the

degree of

Doctor of Philosophy

BY Yacob M. Ali Norman, Oklahoma 2000 UMI Number: 9985571



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A Dissertation APPROVED FOR THE DEPARTMENT OF INSTRUCTIONAL LEADERSHIP AND ACADEMIC CURRICULUM

BY

ACKNOWLEDGEMENTS

The accomplishment of such an undertaking as this study requires the guidance, encouragement, and support of so many devoted people. My eternal appreciation and sincerest gratitude go to my major advisor, Dr. Frank McQuarrie, an indispensable mentor and a good friend, for his insights, guidance, continued encouragement, and unwavering support. I am also eternally thankful to the rest of the members of my doctoral committee, my good friends and mentors: Dr. John Chiodo, Dr. Pamela Fry, Dr. Tom Owens, and Dr. John Rausch for their assistance, support, insights, and guidance.

My special gratitude goes to my wife Fatma and my children Amna, Malika, Mohamed, and Ahmad for their understanding, patience, and encouragement. Thanks to my brothers Mohammad Osman, Saleh, Abdulakader, Alamin, Malik, and Omar for their support and prayers. I am most grateful to my cousin and close friend Mahmud Alamin for his support and encouragement. Above all, my sincerest gratitude go to the Islamic school teachers, administrators, and board members, and the Islamic students majoring in education at two state universities for their participation and tremendous contribution to this study. There is no doubt that without their concerted efforts and dedication, this study would not have been possible. I am also grateful to the

employees at the writing center, particularly Andrea Horn for proofreading the manuscript.

Finally, special thanks to my former employer Mr. Abdulraouf Batterjee, the chairperson of Saudi Arabia's Batterjee Pharmaceutical Stores and Pharmacies, who encouraged me in my educational endeavors.

DEDICATION

To my late father and my late mother for their infinite love, nurturing, and devotion.

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ABSTRACT

PERCEPTIONS OF ISLAMIC EDUCATORS ABOUT THE CONFLICT

BETWEEN CONSERVATIVE AND SECULAR

MUSLIMS REGARDING ISLAMIC EDUCATION AND THE TEACHING OF

SCIENCE, PHILOSOPHY, AND MYTHICAL STORIES TO MUSLIM

STUDENTS

BY: YACOB M ALI

MAJOR PROFESSOR: FRANK MCOUARRIE, PhD

This qualitative study explores the perceptions of Islamic educators in a

southwestern state about the conflict between Islamic Secularism and

Conservatism regarding the education of Muslim students. It also examines these

educators' perceptions as to whether science, philosophy, and mythical stories

contradict Islam, and whether these educators can teach these topics to Muslim

students. Semi-structured, in-depth, face-to-face interviews were used to collect

data that were analyzed using grounded-theory methodology.

Analysis showed convergent and divergent views about Islamic education.

Many perceived a conflict between Islamic Secularism and Conservatism in

education and were pessimistic about a compromise between the two groups.

Almost all of the participants perceived a harmony between science and Islam

including astronomy. However, as related to the teaching of Darwin's theory of

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evolution, philosophy and mythical stories, supporting, opposing, and ambivalent views were expressed.

CHAPTER I

Introduction

One of the major difficulties for Muslim educators is the inclusion or exclusion from the Islamic academic curriculum topics that might be perceived as contradictory to Islam. Upon deciding to design a curriculum or a syllabus for instruction, Muslim educators may encounter a variety of interpretations or different viewpoints of what constitutes legitimate knowledge in Islam and what does not. The Quraan, the Muslim Holy book, and the Sunna, the recordings of what Prophet Muhammad said or did, show the importance and excellence of knowledge in general.

The question is which types of worldly knowledge are permissible and which are not. This chapter, while trying to show the different opinions on this question, will briefly present the controversy between the Islamist and Secularist Muslims about institutions, education and branches of knowledge. It will also include a brief summary of the views of the past and present Muslim scholars and thinkers on education, science, evolution, philosophy, astronomy, and mythical stories. These views have implications as to whether these branches of knowledge could be included in the Islamic academic curriculum or not. This chapter also presents the need for this study, the research questions, the limitations of the study, and the definition of terms.

Background of the Study

An examination of the Quraan and the Sunna shows that all knowledge could be legitimate, and the only explicit mention of questionable knowledge is the knowledge that does not benefit Muslims and other human beings; this implies that as long as it is useful, any knowledge is to be sought (Nagvi, 1977). For many Muslims, including educators, what constitutes knowledge is more complicated than at first glance. A controversy between Islamic Secularists and Islamists is whether all secular knowledge could be taught to Muslim students, and whether Islamic educators should connect or separate the religious and secular spheres of knowledge. Despite the close relatedness among the branches of knowledge in the Quraan and Sunna, Rosenthal (1970) points out that Muslims, depending on different interpretations of Islam about knowledge, have a variety of opinions about this topic. There are two major sects in Islam--the Shi'a, the Sunni--and other smaller groups could be found in both sects, but the differences about knowledge do not seem to be sectarian. Furthermore, in almost all of the sects, both conservative and secular Muslims can be found, and the latter are not necessarily atheists¹ (Ativeh, 1985).

For the past two decades, the Islamic World has witnessed a debate between Islalmists and Secularists as to whether Islamic education should be

¹ Most, if not all, Secularist Muslims are believers in Islam. They are different from the Islamists and other conservative Islamic groups because they espouse separation of religion and all public spheres of life including government.

religiously oriented or remain secular. Massialas and Jarrar (1991) argue that although the Iranian revolution of 1979 played some role in the resurgence of Islamic movements, the ground was fertile because the current regimes in the Islamic countries rarely took into consideration the rights of the opposition groups. Other observers of the Islamic scene blame the inefficiency of the current regimes in the Muslim World, including the deteriorating standards in education. Salt (1995) argues that, in some Islamic countries, the failure of the secular governments to achieve social justice has resulted in a resurgence of Islamic movements.

The Secularist and Islamist Perspectives

The Secularist Muslims and the Islamists have different points of view regarding institutions in general and Islamic education in particular. The debate between the two sides has been going on for a long time. The Secularist Muslims' perspective in education, as well as in other issues, is to separate the realms of religion and other public affairs, whereas the Islamists' desire is to integrate the two realms. On the other hand, some secularist Muslims, citing earlier history when Islamic religion and government were integrated, argue that almost the same problems as the current ones were widespread in the Islamic countries. They also point out that religion has an important role to play, but it should be a private

matter restricted to the spiritual rather than the political and the public spheres (Hatem, 1998).

Secularists also argue that it is unrealistic for the Islamists to claim that reform in general could be achieved only as a result of Islamization of government and other institutions (Ismail, 1998). Additionally, some secularists argue that Islamic movements have curtailed schools because they want them to spend more energy and time on the religious and humanistic studies than applied sciences and technology (Massialas and Jarrar, 1991). Other Secularists express their fear that Islamists would bring an end to the political and economic projects of modernity that offered all members of the nation the right to self-determination (Hatem, 1998).

On the other hand, Islamists argue that religion and state went hand in hand in the Islamic World in the pre-colonial era, and that Islamic religion at the present should guide all institutions as it did in that past. They also assert that, because of secular education, Islamic culture is deteriorating and Islamic society is disintegrating (El-Sanabary, 1992). Islamists contend that they are not against science, reason, economic development, and the rights of others including non-Muslims (Hatem, 1998). In addition to the wide gulf between the Secularists and Islamists in the domain of education, there are substantial differences among Muslims as to which branches of knowledge could be included in the Islamic academic curriculum and which ones could not. It is a fact that Muslim countries

are lagging behind non-Muslim countries in science (Hoodbhoy, 1991).

Therefore, it is important that some Muslims reevaluate their position about science.

Arguments about the Conflict between Islam and Foreign Ideas

Some researchers categorize the conflict between Islam and foreign ideas into three groups; others classify them into two groups. Ziyadat (1986) points out that the history of Muslims is a history of reaction when it comes to scientific ideas from the West: 1) rejecting everything Western and foreign, 2) adapting Islam to the new ideas, and 3) completely adopting Western ideas and sciences in order to progress. Other researchers refer to two views: 1) that modern knowledge imported from the West to Islamic countries should be limited to practical technological sphere only, and 2) that science and all other branches of knowledge could be, without fear, acquired from the West (Rahman, 1982b). Some Secular Muslims argue that because a conflict exists between Islam and some branches of knowledge, particularly science, the two must be separated.

Arguments about the Conflict between Islam and Science

Some researchers point out that there has been no conflict between Islam and science, while others argue that there has been a conflict. Hoodbhoy (1991) presents three major arguments about the conflicts between some Orthodox

Muslims and science: (1) that separation of knowledge existed even during the Middle Ages, when disagreements took place among Muslims as to what could be considered legitimate science and what could not; (2) that Islam's historic scientific achievements came as a result of dissent rather than a belief, and that the decline of sciences was the result of Muslim Orthodoxy's opposition to some branches of sciences by excluding them from the curriculum; and (3) that a clear demarcation, therefore, between the spiritual and the worldly is necessary.

Sayilli (1985), despite his presentation of more factors related to the causes of the decline of sciences in Islam, agrees with Hoodbhoy that the Orthodox Muslims were mainly responsible for the decline. However, Sabra (1981) opposes this view, arguing that the role of the Orthodoxy was not the main cause of the decline in science. He also asserts that the Islamic curriculum was traditionally informal, with some teachers including sciences and others excluding them, depending on their personal interest. Nasr (1982) concurred with Sabra that no conflict exists between Islam and medieval Islamic sciences but argues that modern science and Islam must be separated because they cannot go hand in hand. Similarly, Al-Tahtawi, realizing the difficulty to reconcile science and Islam, "draws a clear distinction between scientific truth and religious truth, refusing to apply to one the standards of the other" (Yared, 1996, p. 67).

For other Muslims, science and Islam do not contradict one another.

Bakhsh (1983) argues that the Quraan and science are related, because the Quraan

foretold many advances that the physical sciences have made today. He suggests that science should be taught to Muslim students without fear. However, some Muslims are aware that some scientific theories such as the Darwin's theory of evolution may be contradictory to Islam. For instance, some proponents of Islamization of knowledge argue that "any concepts that are anti-thetical (sic) to the spirit of Islam have to be eliminated from the courses taught to Muslim children or they may be taught only as comparative studies while the basic teaching should have to be based on purely Islamic concepts" (Saqeb, 1984, p. 80).

Similarly, Yared (1996) points out that one of the major Islamic scholars, Rifa'a Badawi Al-Tahtawi, though highly influenced by European ideas, considers any science that is not supported by the Quraan and the Sunna as misleading. Other scholars, such as Chirri (1965), a Sunni Islamic scholar, argue that when there is new scientific evidence, it has to be accepted even if it contradicts the Quraan. Similarly, Al-Jaser, a Shi'a Islamic scholar, points out that the Quraan can be reinterpreted whenever there is a conflict with science (Ziyadat, 1986). Muslim educators, therefore, may find it difficult to decide whether some scientific concepts are in conflict with Islam, and they could be in a dilemma as to whether they should teach some scientific theories such as Darwin's theory of evolution.

There are two distinct views on the subject of evolution. Some Muslims, for instance, point out, either directly or indirectly, that science in general and scientific theories of evolution, and the formation of the universe, do not contradict the story of creation in the Quraan (Bakhsh, 1983; Bayrakdar, 1985; Bucaille, 1988; Chirri, 1965; Santoe 1995; and Ziyadat, 1986). These Islamic writers and scholars do not refer directly to the teaching of evolution in schools, but their acceptance of the theory of evolution or their attempts to accommodate it with Quraan may suggest that it could be included in the Islamic academic curriculum.

On the other hand, opponents of the theory of evolution argue that Darwin's methods are unscientific, and that, besides the physical, other realities whose knowledge is not compassed by science exist (Yusuf, 1987). Similarly, Jamaladin al-Afaghani, one of the most influential Islamic scholars in the modern age, particularly in education, refutes Darwinism and evolution (Ziyadat, 1986). Even today, in some Muslim countries, there are some regulations against the teaching of Darwin's theory of evolution. For instance, a Sudanese was jailed for teaching his students Darwin's theory; this treatment for the teacher, however, caused denunciations on the part of other Muslims including Islamic religious leaders (Hoodbhoy, 1991). Evolution may not be the only difficulty for a Muslim educator in deciding what constitutes legitimate knowledge.

Arguments about the Conflict between Islam and Astronomy

Although the majority of Muslim religious scholars agree with modern astronomy, a few may oppose the widely accepted scientific concepts. For instance, Shiekh Bin Baz, one of the most influential Muslim religious scholars in Saudi Arabia's highest religious committee *fatwa* or disciplined religious opinion, believed in the ancient Ptolemaic view of the universe with the earth, as the center of the planets rather than the sun; he has authored two books on this subject (Hoodbhoy, 1991). On the other hand, Saudi Arabia sent an astronaut into space aboard the NASA Discovery space shuttle in the late 1980s. Hoodbhoy's argument raises a question that these two divergent cases of medieval and modern views may cause some difficulties for some Islamic teachers of geography in Saudi Arabia or other Islamic countries with the same orientation and interpretation of religion.

Other Muslim religious scholars oppose any link between Islam and astronomy. Hoodbhoy (1991) points out that Seyyed Ahmad Khan, one of the most major Muslim scholars in the Indian subcontinent, argued that the Quraan neither states that the earth rotates nor does it say that it does not, because the purpose of religion is to teach morality and not astronomy. These conflicting religious opinions raise questions as to whether Muslim educators could face difficulties when they design an Islamic curriculum or try to teach concepts that

may be perceived as contradictory to some of the interpretations about the beliefs of Islam.

Arguments about the Conflict between Islam and Philosophy

Similar to astronomy, there are divergent views among Muslims with respect to philosophy and whether Muslim educators could teach it to their students. Philosophy is considered blameworthy because, as some religious scholars believed, this discipline caused Muslims more harm than benefit (Rahman, 1982 a). According to some influential Islamic religious scholars of the Middle Ages such as Ibn Taymiyyah, philosophy is not useful (Naqvi, 1977). In some Muslim countries such as Saudi Arabia, Ibn Taymiyyah's views on philosophy and other subjects are followed, and therefore, philosophy is not taught in the institutions of that country.

Other Muslims do not oppose logic and philosophy as Ibn Taymiyyah did but have mixed opinions. Absar (1988) and Nasr (1981) are against modern rationalistic and scientific interpretations of Islam, arguing that such attempts are considered alien to Islam, though they are not against the critical teaching of logic, philosophy, and other branches of knowledge. Therefore, the question becomes whether the teaching of philosophy has a place in Islamic education.

Similarly, some Muslims consider stories that contain myth as contradictory to Islam, while others see them as a means to understanding an idea,

because these stories have nothing to do with faith (Boullata, 1990). Therefore, this also raises the question whether a Muslim educator could teach stories with mythical content or read mythical stories to Muslim students or not. It also raises the question as to whether Muslim educators could teach mythical stories comparatively, critically, or not at all. These are some of the major areas in knowledge where Muslims could have disagreements in their educational institutions. Therefore, the question becomes who should decide such issues?

In Islam a spiritual leadership capable of decisively ruling on such matters does not exist. It is a religion without theology and without priesthood (Baker, 1955; Rahman, 1982a). Therefore, one of the major problems for the educators of the Sunni sect in particular (almost all the countries with Muslim majorities with the exception of Iran and Iraq are Sunni Muslims) is the non-existence of theologians who can render a collective opinion acceptable to all Muslims, in such debatable issues as to what constitutes legitimate knowledge. Despite the existence of religious scholars known as Ulama, they, even within one country, let alone different countries, have diverse opinions in some issues. However, there are many issues on which a consensus exists. The problem lies on issues where a consensus does not exist.

The situation, however, for the Shi'a sect (about 10% of all Muslims, found in Iran, Iraq, and Southern Lebanon) seems slightly different. For these educators, the Imam or the highest religious authority may decide any ambiguous

issue, including that related to the separation or integration of knowledge or whether education should be secular or religious. Perhaps one could get some insights by looking at history and trying to draw some parallels with respect to the problems that earlier Muslims had to face when confronted with similar controversial issues.

Muslims throughout their lengthy history came into contact with other civilizations and tried to appropriate and assimilate the knowledge imported from those cultures whose worldviews were totally different from the Islamic one. As a result of their interactions with Greece, Persia, India, and Byzantium, Muslims achieved cultural synthesis (Nasr, 1985; Sabra, 1986). The debate about what constitutes legitimate knowledge in Islam has been going on since the Islamic Golden Age, the ninth through the thirteenth centuries A.D. At that time, some Islamic religious scholars dealt with this topic and categorized knowledge into two: the "praiseworthy" and the "blameworthy" (Nagvi, 1977). Any useful knowledge, according to these religious scholars, fell in the realm of praiseworthy as long as it was of benefit to human beings and provided that it did not contradict Islam. On the other hand, any knowledge was considered as blameworthy if it was of no benefit to Muslims and other human beings and if it contradicted Islam. However, there are branches of knowledge that may or may not fall within these definitions and they may be interpreted as blameworthy or praiseworthy depending on different perceptions.

In summary, today Islamist and Secular Muslim scholars disagree about both the past and the present and whether they should separate the secular and the religious branches of knowledge. They also debate whether in the Middle Ages Islamic orthodoxy was responsible for the decline in science, and whether at that time Islam inspired Muslims to seek and cultivate sciences. Some Muslims argue that science, philosophy, and mythical stories do not contradict Islam, while others who oppose this view, show the conflicts and support the separation of secular and religious knowledge.

Need for the Study

This study will focus on the perceptions of Islamic school teachers, board members, and administrators and Islamic students majoring in education to determine if a conflict exists between Conservative and Secular Muslims, and if these educators perceive the possibility of a compromise between the two groups with respect to Islamic education. This study will also determine if Islamic educators perceive that science, philosophy, and mythical stories contradict Islamic religion, and whether these subjects would pose instructional and curricular difficulties for these educators. Therefore, findings of this study would help Muslims understand some of the divisive issues in Islamic education. Furthermore, since most of the views in the literature come from Islamic scholars, it is important to find out what Islamic educators think about these issues.

The conflicts between Islam and other imported ideas and branches of knowledge such as science, philosophy, and mythical stories, and how Muslims could accommodate the different interpretations of their religion with regard to these branches of knowledge will facilitate the teaching of these subjects in their schools. One of the major problems for some Muslim communities in the U.S. and elsewhere could be ignorance of the cultural differences of one another. Most Muslims come from different Islamic nations; therefore, different systems of governments and different backgrounds in Islamic religion are to be found. Some Muslims assume that because they believe in the same religion, there are no differences among them, and some may lack the awareness and the understanding that their cultural, linguistic, and sectarian differences may sometimes be deep. Therefore, such differences could have an effect on how they interpret ambiguous issues in science, such as the theory of evolution or astronomy, philosophy, and mythical stories.

Some of these Islamic communities in the Southwest and across the United States have Islamic schools; many Sunni, Shi'a, Mainstream, and Secularist Muslims may send their children there. Therefore, conflicts about the different interpretations Islam regarding the inclusion or exclusion of some subjects that some Muslims perceive to be in conflict with their religion may cause differences among the members of some of the communities. One of the

major problems in some of the Islamic schools could be the lack of detailed curricular guidelines.

Many Islamic educators may get the explicit message from their school board members and administrators to teach the students the Quraan, Islamic studies, and Arabic language, in addition to what the public schools in their respective school districts teach, as long as the subjects are appropriate and they do not contradict Islam. However, what is appropriate to one person may be inappropriate to another, depending on the different interpretations of some of the ambiguous issues such as some branches of science, philosophy, and mythical stories.

Therefore, this study will identify implications for Islamic educators as it tries to shed some light on such curricular and instructional problems, such as the possible conflict between Islam and some subjects. Furthermore, this study, by emphasizing the importance of science, may increase the awareness of Muslims who are lagging behind non-Muslims in sciences and technology (Said, 1981; Hoodbhoy, 1991). Therefore, it is essential that some Muslims closely reexamine and reevaluate the notion that Islam and science may contradict each other.

This study will objectively present the problems and, upon its conclusion, may suggest the possibility of a common ground and may stimulate a healthy discourse and a meaningful discussion related to Islamic education so that Muslim educators could all work toward a synthesis that would bring them closer together

rather than set them apart. It is essential to study these issues of great concern to Muslim educators and non-educators to find out as to whether Islamic education should be secular or religiously oriented. It is also important to explore the area as to whether the conflicting views of Islamic scholars and thinkers are congruent to those of the Islamic educators in a southwestern state and those students preparing to become teachers.

This study will also find out to what extent the views of Islamic scholars have an impact on these educators as they design or implement the formal or the informal Islamic academic curriculum or syllabus for the instruction of Muslim students. Additionally, this study might stimulate a discussion about the differences between Islamic Conservatism and Islamic Secularism and might shed some light on their respective perspectives on Islamic education, enabling the Muslims in general to clearly understand the issues related to education, to reflect on them, to narrow the gap between them, and to work toward moderation—as the Ouraan commands (II: 143).

This problem may not be unique to Islamic education; it could also be relevant, in one way or another, to non-Muslim American educators who teach at the Islamic schools in the Southwest and across the United States. This study will enable them to have a better awareness and understanding of Islamic education. Furthermore, since many Muslim students are also enrolled in the American public schools and go to the Islamic schools in the evenings and on weekends, it

is hoped that this study could lend American educators in the Southwest and in the rest of the nation a better understanding of some of the problems in Islamic education. Since the main focus of this study is Islamic education, it is important to point out that it is a new phenomenon in the United States and studies in this area are very scarce and almost nonexistent. Therefore, this study will contribute something to the literature in this area.

Research Questions

Two research questions will guide this qualitative study. The questions are:

- 1. What are the perceptions of Islamic school teachers, administrators, and board members in a southwestern state and Islamic students majoring in education at two universities in that state about the conflict between Conservative and Secular Muslims regarding Islamic education, and do these educators perceive a compromise in Islamic education between the two groups?
- 2. Do these educators perceive that science, philosophy, and mythical stories are in conflict with Islam, and do these topics pose instructional and curricular difficulties for these educators?

Limitations

This section will focus on the limitations of this study.

- The debate in the related literature review of this study about whether
 there is a conflict between Islamic Secularism and Islamic Conservatism,
 and about whether science, philosophy and mythical stories are in conflict
 with Islam, mostly includes scholars from disciplines other than
 education.
- 2. Most of the items in the literature review deal with the various views of some of the major scholars and thinkers of some Islamic countries whose views could have substantial implications on Islamic education and could also have an impact on Muslim educators. It is impossible to include the views and opinions of all the major scholars in the more than 50 nations with Muslim majorities. Despite the shared common heritage among the Islamic countries, they have many differences, too. These countries have similarities because they were under one empire for many centuries and have a common religion and similar cultural traits. Attempts have been made to include representative views of Islamic scholars from the major Islamic regions. For instance, regions such as North Africa, the Arabian (Persian) Gulf Region, and the Indian Subcontinent are more or less represented. However, the views of the respective scholars in this study are not generalizable to one region or another. Views of Muslim scholars

from Sub-Saharan Africa and Southeast Asia were not available when this study was made.

3. Attempts have been made to include representative perspectives of the major Sunni and Shi'a sects. The study sample reflects some of the views of the various Muslims in the Islamic countries, but may not be representative of the entire population. The perceptions of the Islamic teachers, administrators, and board members in the three Islamic schools in a southwestern state may be representative and reflective of the perceptions of Muslim educators and board members in that state. However, they may not be generalizable to the views of all of the educators and board members in other Islamic schools in the United States or in the Islamic countries.

Definition of Terms

'alm: (Plural Ulamma) an Islamic religious scholar, either a graduate of an Islamic religious university or informally educated under another Islamic religious scholar.

Conservatism: Relates to conservative Muslims who adhere to the teaching of Islam and who oppose the separation of religion and other institutions including education.

Conservative Muslims: Those Muslims (most of whom would like to be called Mainstream Muslims) who strictly adhere and practice the religion of Islam, particularly the five daily prayers mostly in the mosque, fasting the month of Ramadan, giving alms to the poor, observing Islamic dress code, etc. Most of these Muslims also prefer the integration of state and religion.

Hadith: One of the recorded and authentic sayings of Prophet Mohammad.

Imam: A person trained in Islamic studies and whose main function is to lead the five obligatory prayers at the mosque.

Islamic Conservatism: The views that some Muslims hold about the integration of religion and institutions including government and education.

Islamic Movement: The mainstream Islamic political organizations some of which plan to establish an Islamic State, while some try to work with the status quo.

Islamic religious Scholar: Scholars educated in the Islamic religion mostly at Islamic religious universities. They render opinions on the various Islamic issues. However, unless there is a clear verse in the Quraan and a description in the Sunna or Hadith to support their opinion, and unless a consensus among scholars exists, the opinion of one or several scholars may be rejected or accepted by Muslims.

Islamic Secularism: Muslims who prefer to separate religion, state and other institutions including education. Many of them prefer the label "Moderate Muslims."

Islamists: This label and "Mainstream Muslim" are preferable to most Conservative Muslims. They consider "Fundamentalist" to have a negative connotation.

Muslim: In its broad sense Muslim refers to the belief that 1) all human beings were born Muslim 2) all the prophets, including those in the Christian, Jewish, and all preceding monotheistic religions were Muslims and their messages were mainly all the same, and 3) one God (Allah) has been sending prophets to guide human beings ever since Adam and Eve. In this study Muslim is used in its narrow sense to refer to a person who believes that there is only one God and that Muhammad is one of the major prophets. A Muslim also refers to both practicing and non-practicing Muslims.

Mythical stories: Stories that deal with supernatural and unrealistic characters, such as in the Greek mythologies and fairy tales.

Philosophy: Mainly Greek, Western, rationalistic and any philosophy that contradicts with Islamic philosophy and religion.

Quraan: The Muslim holy book. Muslims believe that it was revealed in installments to Prophet Muhammad through the angel Gabriel who appeared to him in the form of a human being almost regularly in different occasions for

almost twenty years. It was recorded during the Prophet's lifetime but gathered in one book during the time of the second caliph Othman.

Science: The knowledge that uses scientific methods such as natural, applied, biological, physical, and pure sciences.

Secularism or Secular Muslims: Both practicing and non-practicing Muslims who advocate a separation between Islam and government and between the religious and the secular education particularly in sciences. Most of the Secular Muslims in this study prefer to be called Moderate Muslims.

Shi'a Muslims: One of the two main Islamic sects--Shi'a and Sunni. The differences between the two sects mainly centers on the succession process to the Islamic Caliphate--a person who succeeds the Prophet. The Shi'a believed that a descendant from the prophet's family must have become the caliph, while the Sunni elevated the person they thought was the most qualified person for the position. Shi'a Muslims are a majority in Iran, Iraq, and Southern Lebanon. They constitute about 10 percent of the total Islamic population. In addition to the two sects, some smaller Muslim sects exist.

Sunna: What Prophet Muhammad said or did in his lifetime, based on authentic sources.

Sunni Muslims: Mainstream Muslims who form majorities in almost all Islamic countries except Iran and Iraq. The Sunni religious sect, unlike the Shi'a, has no

structure. However, it has Ulama, or religious scholars who render opinions on religious matters.

Ulama: Plural of religious Islamic scholars; (singular 'alm) comes from the Arabic root 'ilm (knowledge; 'ilm includes divine, religious, and secular knowledge).

CHAPTER II

HISTORICAL BACKGROUND AND REVIEW OF THE RELATED LITERATURE

Introduction

This chapter will first present a brief overview of the historical background of Islamic education during Prophet Muhammad's Period (609-632) and the subsequent era of his four immediate successors (632-661). Second, some of the major developments in Islamic education during the Umayyad period (661-749) and Abbasid era (750-1258) will be presented. Like the historians of Islamic education, this review will focus more on the Abbasid era than the Umayyad because Islamic education witnessed major influences from foreign countries including Greece during the Abbasid period. Furthermore, this period is more directly related to this study than the others for the similarity of the debate then and now over Islamic and foreign branches of knowledge.

The third part of this paper will highlight the decline in Islamic education during the Ottoman, the Colonial, and the Post-colonial era. Education of Muslim females will be included in part four. A very brief history of Muslims in America is in the fifth part. It is important to point out that the majority of Muslims in America today are relatively newcomers, and Islamic education is considered a new phenomenon in the United States. Therefore, literature in this area is very

scarce and almost non-existent. The sixth part includes Islamic education in America, particularly in the southwestern state where the study was carried out. In the final part, the major views of Islamization, secularization of knowledge and the areas of difference among Islamic writers on science, philosophy, astronomy, and mythical stories are included.

The Earliest Islamic Period (609-632)

Introduction

As early as its dawn in the early seventh century A.D., Islam considered knowledge and learning as a life-long process. Prophet Muhammad's most quoted saying is "Seek 'ilm [knowledge] from the cradle to the grave" (Yousif, 1985, p. 2711), and the Quraan, stressing the great importance of 'ilm or knowledge, mentions it 800 times (Anees and Athar, 1980). The Arabic word "Quraan" comes from the same root of the verb "to read" or "reading", the first word revealed to Prophet Muhammad was "iqra," meaning "read" (Said, 1981), and the first of God's creation was the pen (Hamidullah, 1939). The two types of knowledge in Islam, the hidden and the manifest with their absoluteness, belong to God, and humans in their capacity to learn and to know are considered superior to all creatures including angels (Maruf, 1996). Despite the strong emphasis on the importance of knowledge and learning in the Quraan, the illiteracy rate in the

Islamic World is alarmingly high (Said, 1981), and Islamic countries are lagging behind the non-Islamic countries particularly in sciences (Hoodbhoy, 1991).

Education During the Earliest Islamic Era

During Prophet Muhammad's time and that of his four caliphs or successors, the main foundation of Islamic education was laid down. Open to everyone, the mosque was mainly the center of learning at this time; however, separation of the sexes took place as the Prophet set different times for the instruction of men and women (Rosenthal, 1970). The main aim of Islamic education was for the human beings to learn to know God and to appreciate Him and His creation and to learn to live according to the principles of Islam, so that God's pleasure and happiness in the here and in the hereafter could be attained. Therefore, the Quraan as the main guide became the major source of education. At that time, Islamic education could be generally characterized as cooperative. The Prophet required educated Muslims to teach the uneducated. Almost the same tradition continued during the period of his immediate successors, 632-661 A.D. Abubaker, Omar, Othman, and Ali (Yousif, 1985). The main objective was to spread the religion as fast as possible. The emphasis on education, of both men and women, played an important role in achieving this goal (Lemu, 1989). The religious aspects of education were mainly stressed, while other subjects were also given some attention.

Religious education was considered as the main foundation during the Prophet's time, while a balance between the worldly and the religious was recommended. Yousif (1985) points out that, "the objectives of learning [in Islam] can be broadly stated as religious righteousness and social efficiency" (p. 2711). Similarly, Nakosteen (1964) asserts that the Prophet urged Muslims not to neglect this world for the one to come or the next world for the current one. This suggests the necessity of keeping equilibrium between the secular and the religious matters including education. However, many Muslims, in both the past and the present, have gone to one extreme or another. Throughout the Arabian Peninsula, as Islam began to spread, the Prophet sent teachers to the various tribes in the region, and the teaching mainly took place in the mosque; some of the instruction was sometimes carried out in a way similar to that of the pre-Islamic era (Tibawi, 1954).

Education in the early days of Islam was partially related to the culture of the Arabian tribes; however, the Quraan brought with it a new kind of learning. Due to the oral tradition in the partly Bedouin and semi-Bedouin culture of the time, the Prophet would repeat important concepts three times, and he would tolerate obnoxious questioning (Rosenthal, 1970). One of the teacher's functions was to recite the Quraan in a way similar to the recitation of the pre-Islamic poetry where several verses from memory were recited as the occasion demanded (Tibawi, 1954).

The form of the Quraan and the *Hadith*--the Prophet's tradition--contain six elements on how human beings learn: (1) a direct address of the reader on a teacher-student relationship; (2) dialogue to show a logic that leads to a conclusion; (3) deliberate repetition of important principles; (4) parables intended to illustrate concepts, (5) promises of rewards for desired behavior and threats of severe punishment to prevent undesired behavior, and (6) use of figures of speech such as metaphors and similes (Obeid, 1994). It is important to point out that the Quraan emphasizes that the teacher must be kind, compassionate, and flexible (Omran, 1997). The Quraan and Sunna occupied an important part in the informal curriculum. In addition to these subjects, swimming and shooting of arrows, mathematics, and practical phonetics were also encouraged (Hamidullah, 1939). A few teachers--who taught in secular schools mainly for the wealthy, where grammar, literature, and arithmetic were taught--charged fees for their services; however, education was free for all Muslims (Stanton, 1990). Other subjects were added as Islam began to spread to other countries.

The Umayyad and Abbasid Periods (661-1258)

When Islam spread to Syria, Iraq, and Egypt, many changes in Islamic education took place. As the Prophet's era and that of his four immediate successors ended, and the Umayyad dynasty made Damascus, Syria, its capital, the rules of Arabic grammar and calligraphy were written. Some individuals

founded small one-room schools called *Khuttabs*, where children studied both religious and secular subjects (Tibawi, 1954). In 749 A.D., as the Abbasid dynasty replaced the Umayyad, religious, mystic, philosophical and literary movements flourished, and the result was a strong influence in the course of education (Ibid). This period is the most important one because it witnessed the flowering of sciences and learning.

Islamic education, mainly indigenous, underwent substantial changes during the reign of the Abbasid caliphs, the eighth to the thirteenth century A.D. Most historians often refer to this era as the Islamic Golden Age. Muslims borrowed educational materials from different sources, searching every branch of knowledge and giving great importance to learning in general; the result was a strong influence from Greek, Indian, Persian, and Christian cultures (Nakosteen, 1964). Greek literature was neglected because of its mythical contents that made it incompatible with the Islamic faith; however, translation and adaptation of Greek sciences, philosophy, and medicine took place (Rahman, 1982b). It is important to examine where learning generally and science especially took place during the beginning of the Golden Age.

Education was carried out in various sites at this time. The Abbasid rulers attached to every mosque a primary school, where children learned the fundamentals of reading, writing, computation, some elementary science, geography, and history (Nakosteen, 1964). At that time private or endowment

schools also existed. Some of the wealthy supporters of the private schools decided the contents of the curriculum, and sometimes the government decided what the public colleges should teach (Rahman, 1982b). However, Yousif (1985), unlike Rahman, argues that the Abbasid rulers did not interfere in education.

In addition to the schools and institutions, learning took place in other places. The mosque, open to every Muslim, functioned as the center for education, and bookshops, scholars' homes, and libraries were also places of learning (Al-Jayar, 1974). Elementary education and literacy were almost universal in the Islamic regions (Nakosteen, 1964). The imported branches of knowledge, including science, philosophy, medicine, mathematics, etc. were translated and studied at the academy called *Bait-al-Hikma*, established by the Abbasid caliph, al-Ma'mun, in the ninth century in Baghdad (Pedersen, 1929). This institution, where multicultural and multiethnic scholars and scientists worked, contained an observatory and a library (Nasr 1968). Similarly, the Shi'a, Fatimid ruler of Egypt, opened an academy for higher learning named *Dar al ilm* in Cairo (Tibawi, 1954). It is worth noting that, despite the wide spread of higher education, it was not as organized and as formal during the early ninth century as it was in the later period (Nasr, 1968).

The first organized Islamic colleges for both educational and other purposes were established during the Golden Period. For example, in the late

ninth through the tenth centuries, a spontaneous development of colleges with private endowments occurred (Nakosteen, 1964). However, this period was followed with a difficult time. The eleventh and twelfth centuries witnessed wars with the European Crusaders, political and sectarian division, rivalries between Sunni and Shi'a Muslim rulers, and tensions among Sufi² and non-Sufi groups (Al-Jayar, 1974). During this era of political unrest, the rulers used the colleges as tools for their political end (Ibid.). The public colleges known as *Nizamiya madrasa* were set up at this time. One of the purposes of establishing these colleges was for the instruction of Islamic jurisprudence, where the four Sunni rites of law--Shaf'i, Maliki, Hanafi and Hanbali--were studied, in addition to the linguistic sciences (Berkey, 1992). It is worth mentioning that the colleges also served other non-educational purposes.

During this period, both the Sunni and the Shi'a rulers had a political motivation behind the establishment of the public colleges, known as *madrasa*. The rulers of the Fatimid Shi'a dynasty, whose subjects were overwhelmingly Sunni Egyptian Muslims, set up schools with curricula not only to impart education but also for propaganda and Shi'a religious indoctrination in Egypt (Rahman, 1982b). When the Sunni Sultan of the Seljuk dynasty, Nizam al-Mulk, replaced the Shi'a Fatimid rulers in Egypt and Iran, he established in Baghdad the

²Sufi Muslims tend to devote all of their lives to God, and most of them, neglecting the materialistic world, spend almost all of their time in worship and remembrance of God.

first Nizamiya *madrasa* or College, and thereafter about 30 colleges spread all over the city; and subsequently, others were also founded in most of the Islamic lands (Pedresen, 1929). Islamic colleges, which were mainly private during the Abbasid era, became government institutions as the Seljuk took over (Makdisi, 1981).

In addition to the many colleges, four public universities--al-Azhar in Egypt, al-Nizzamiyya and al-Munstansiria both in Iraq and Cordoba in Spain-existed in the Islamic world during the Golden Age (Tibawi, 1954). Other colleges and schools were built by private endowments, and some of the teachers, due to informal curriculum, taught what the owners desired. Others carried out instruction depending on their interests and those of their students (Sabra, 1987). For these reasons, it is debatable whether Muslims integrated the imported branches of knowledge, mainly Greek as well as Persian, and Indian sciences and philosophy, in the colleges and universities.

In the absence of monographic studies dealing with education in the various parts of the wide Islamic Empire during the Abbasid era, some historians of Islamic education argue that the foreign sciences were not included in the curriculum at the college and universities. Makhdisi (1981) points out that higher Islamic education at the colleges generally reflected religious science, law, and Islamic traditionalism. This view suggests that sciences and philosophy were not part of the curriculum of these colleges. On the other hand, Tibawi (1954) argues

that most of the colleges taught religious subjects, Islamic jurisprudence, and some adaptation of philosophy and logic; but pure philosophy and astronomy were banned at a later period when most of the Abassid and Fatimid rulers, who enthusiastically facilitated the study of philosophy and science, were replaced.

Several studies show that Muslims in general integrated the secular sciences in their curriculum during the Golden Age. Rahman (1982a) argues that philosophy in general was not banned and it continued to be cultivated, but the orthodox Muslims were opposed only to some of its aspects that contradicted Islamic beliefs of resurrection, creation, and the mode and nature of revelation. Similarly, other studies show that in addition to the religious sciences, Islamic education at that time included secular branches of knowledge such as pure science and philosophy (Yousif, 1985; Al-Jayar, 1974; Siddiqui, 1970; and Nakosteen, 1964).

Al-Jayar (1974) points out that the curriculum included subjects such as Quraan, Sunna, mathematics, natural science, medicine, pharmacology, philosophy, literature, history, geography, Islamic law, psychology, comparative religion, and history of religions. Similarly, Yuosif (1985) argues that sciences and arts were integrated in the Islamic learning in general. On the other hand, Sabra (1987) asserts that it is difficult to generalize about the education of the entire empire because the curriculum as a whole was informal and some of the learning took place in various places including scholars' homes, libraries, and

study groups in private homes. Sabra's argument is more convincing than Makhdisi's or others, because the informality of the educational system where people learned in different places and under different educators, with informal curriculum. Also, the fact that sciences flourished for five centuries in the region makes it difficult to dismiss the Islamic higher educational system as purely religious. However, it is important to point out that some of the Orthodox Muslims were intolerant of some branches of knowledge that contradicted their religion.

The nature of the Muslim reception of sciences and philosophy and the causes of the decline of learning in general are sometimes attributed to the Orthodox Muslim. Sayilli (1981) and Hoodbhoy (1991) argue that the Orthodox Muslims were against science and philosophy and therefore they played a major role in the decline of learning, while Nasr (1985), Nakosteen (1966), and Sabra (1987) point out that the exposure to foreign sciences and philosophy resulted in assimilation and cultural synthesis rather than rejection, and that Muslim Orthodoxy opposed only what was not utilitarian. Nasr (1968) contends that, more than the Sunni, the Shi'a Muslims integrated some of the Greek philosophy and science as their religious scholars legitimized and encouraged these new subjects, while the Sunni, except for the Aristotelian logic, did not accommodate philosophy in general.

During the five centuries of the golden age, most scholars agree that, in one form or another, science and philosophy flourished in the Muslim regions, albeit, whether the Muslim Orthodoxy opposed some or all of the imported sciences is disputed. It is worth mentioning that the Orthodoxy was against many things including saint-worship, which spread throughout the Muslim region at that time (Sayilli, 1981). Therefore, one would argue that if the Orthodox Muslims' opposition to saint-worship, considered as blasphemous and contradictory to the faith, could not stop this practice, then how could they oppose and stop the foreign elements of education such as pure science and philosophy? Therefore, in addition to the Orthodoxy's opposition to these subjects, there must have been other contributing factors.

While attributing the causes of the decline to the role of the Orthodoxy and the new converts to Islam, Stanton (1990) refers to foreign intervention such as the invasion of the Mongolians and their systematic burning of libraries and massacring of 800,000 people during this era. However, he does not take this important factor into consideration in his discussion of the decline in sciences and learning in general. Unlike Stanton (1990), Tibawi (1954) argues that while the intolerance of the Orthodox Muslims played a role in the decline of sciences and learning in general, other factors such as the successive campaigns by the Crusaders, the Mongolians, and the Turks also played a role in the decline. It is worth mentioning that although the Turks and the Mongolians were invaders.

most of them converted to Islam as they occupied became rulers of the Muslim lands. Therefore, the causes of the decline include many factors.

With the beginning of the decline in the late thirteenth and early fourteenth century and until the period of the colonial era in the nineteenth and early twentieth century, cultural stagnation and rigidity took place in the Islamic world (El-Sanabary, 1992). The Ottoman Turks ruled most of the Islamic countries until the nineteenth century, and they established secular schools between the years 1875 and 1920 (Ibid.). Subsequently, the Europeans replaced the Ottoman rulers of the Islamic countries.

The European Colonial Era

Historians of Islamic education, just as they disagree on the causes of the decline during the later medieval and subsequent periods, give different reasons as to why the decline in Islamic education took place during and after the colonial era. For instance, Talabani (1996) argues that the Orthodox Muslims are to be blamed for the stagnation in Islamic education:

The Quraanic verses emphasizing research, inquiry, and contemplation about the nature of the world were interpreted so that scientific aspects of these matters were ignored and theological implications were emphasized.... Thus, pedagogical discourse produced by the *madrasa*

[colleges] became an effective device for social control, and resulted in an educational stagnation that still persists (p. 71).

However, there were some exceptions in some of the Islamic countries. In Turkey and Egypt, for instance, the study of chemistry, mathematics, astronomy, medicine, and philosophy existed, and some organization, sophistication, and originality could be seen particularly in the Islamic traditional education (Rahman, 1982b). In the rest of the Islamic countries there was almost no originality in both the secular and the religious branches of knowledge (Ibid.).

During the colonial era, which began in the nineteenth century, Islamic education witnessed a drastic change. At this time, the religious scholars increasingly resisted change and took refuge in their inheritance of the Middle Age literature because the purely secular education set up by the European Colonialists posed a threat to them and their culture (Rahman, 1982b). However, this does not mean that all the religious scholars opposed modernization. Among these scholars and thinkers of the late nineteenth-century, there were some Pragmatists such as Jamaliddin al-Afghani. He argued that Islam brought with it the spirit of inquiry and because science ruled the world, Muslims must be free from dogma and take the same path that the Western World had taken (Hoodbhoy, 1991)

Other major Islamic modernists of the late nineteenth century included Sayyid Ahmad Khan and Sayyid Amir Ali of India, Namik Kemal of Turkey and

Shaykh Muhammad Abdu of Egypt (Rahman, 1982b). On the other hand, many of the Orthodox religious scholars were against Western-style modernism. For instance, some influential Turkish Orthodox Muslims succeeded in expelling Afghani from Istanbul as he advocated the establishment of a Western-style university for the study of modern sciences (Hoodbhoy, 1991). However, whether some Muslims opposed the secular education or not, it was there to stay.

Confrontation or competition were some of the major means the colonialists used to diminish Islamic education; in several French-dominated Islamic countries, such as Senegal and Algeria, competition took place between the two systems of education until finally the traditional one was replaced (Wagner, 1991). However, in some Islamic countries there were some exceptions. For instance, in Morocco, Indonesia, and Nigeria the colonialist intrusion strengthened the importance of Islamic education instead of diminishing it (Ibid.). In other Islamic countries new problems in the education system began to emerge. In the nineteenth century, the colonialists created alienation, destroying the indigenous culture and replacing it with a European one (Yousif, 1985). For example, the introduction of Western education in Egypt, dating back to the French invasion in the late eighteenth century, began to rival the traditional Islamic education and created a dichotomous and chaotic culture that still exists today (Faksh, 1980).

During the colonial era, the only major independent Islamic countries were Saudi Arabia and Turkey. However, the latter experienced some pressures from European countries to westernize its education and other institutions, whereas the former did not (Rahman, 1982b). The last Islamic Caliphate ended in Turkey in 1929, and as Kemal Ataturk became the first secular ruler of that country, he banned Islamic education for more than two decades (Khuri, 1998). Furthermore, he abolished Islamic laws and instituted western-style laws, reforming education and creating an educated citizenry that was ready to support a nationalistic, secular, democratic state (Swartz, 1994). In many Islamic countries, traditional Islamic education became purely religious, withdrawing mainly to the rural areas even after colonialism.

Islamic Education in the Post-colonial Era

As some Islamic countries gained independence in the early part of the twentieth century, and most of them in the latter part, they began to face, in varying degrees, a conflict between traditional and modern education. Almost all of these countries continued to imitate Western schools and curricula in the post-independence era, a process that still continues today (El-Sanabary, 1992). At the same time, in some Islamic countries, the traditional Islamic education, although diminished, continued to exist side by side with the modern one. In the absence of freedom and democracy, and as dictators ruled almost all of the Islamic countries,

some Muslims began to search for alternatives to replace the repressive regimes. In the 1970s, Islam was rediscovered as a political ideology to legitimize political action, as Islamists struggled to establish Islamic republics (Massialas & Jarrar, 1991). Contemporary resurgence of Islamic political movements has created an interest among researchers who try to study the changing patterns of Islamic education as it is increasingly related to social and political activism (Elias, 1999).

Resurgence of Islamic movements has sharpened the divisions between the secularist and the conservative Muslims in many institutions, including education. Some people interpret the radicalism in many Islamic countries as antiwestern, albeit, the main problem is the tension between tradition and modernization (Kechichian, 1986). During this era of political confusion and turmoil, some Muslim conservatives began to aspire toward Islamization of institutions including education. while Secularist Muslims desired democratization and secularization. Most Islamic countries are under an increasing pressure from Islamists to revive Islamic education, forcing those governments to issue decrees to strengthen the traditional Islamic education. However, such an attempt most often appears to secularize the curriculum and to increase the government control (Wagner, 1991). On the other hand, the Islamists want Islamization of education.

A synthesis between the traditional and the modern is required to narrow the gap between the two opposing parties in the Islamic countries. Khuri (1998)

points out that the solution would be to radically reform Islamic education because Muslims have a choice between an education that completely imitates Western model or perpetuates the colonial system, and a traditional religious education that has lost its efficacy and resonance. The situation in Iran, for instance, reflects the conflict between the modern and the traditional. Fereshteh (1994) argues that Western-educated Iranians and American advisors in Iran, although they were the source of innovation and modernization, did not take into consideration the cultural heritage of the country and failed to use an approach that was compatible with the realities of the country.

However, like other observers of the Islamic education who recommend a synthesis, Fereshteh argues that "western education has had at least three generations during which to blend with the 3000-year tradition of Iranian culture and the great heritage of Islamic civilization, it seems possible that out of the present crisis a new educational paradigm may emerge that does not reject contemporary technology in order to preserve basic Iranian values" (p.72). This situation, if not typical of all Islamic countries, reflects the tensions and the crisis between tradition and modernism, between Islam and secularism. In addition to these problems, another area of Islamic education deserves some attention.

Education of the Other Muslim Half

Education of girls deserves a mention. There is no doubt that Muslim women did not get full access to education in most of the Islamic countries, although Islam advocated the equality of both sexes in education in particular. For instance, Prophet Muhammad stated that, "searching for knowledge is a duty of every believer, male and female" (Yousif, 1985, p. 2713). Many Muslims, while supporting the education of girls insist on the traditional role of females as mothers who should take care of their children so that the family life is stable. However, in Islam, at least theoretically, the female is not responsible for household work, and supporting the family and educating the children are the responsibilities of the father.

Similar to the situation of women in the developing countries, in many Islamic nations the education of women lags behind that of men (Fagerlind & Saha, 1989). Several factors contributed to this problem. For instance during colonialism, many schools were coeducational, something which contradicted the Islamic traditions. Although different Islamic countries have different interpretations of Islam, in general the education of the two sexes is required to take place in separate facilities particularly in the intermediate, secondary, and higher levels of education. For this and other reasons such as ignorance, old customs and traditions, many Muslims opposed female education in the colonial schools, a situation that still continues in many Islamic countries.

Another factor for the lack of access of Muslim females, before and after independence, was due to some Orthodox Muslim opposition of Western-style secular schools for girls in particular and for boys in general. For instance, when the first public school for girls was established in the 1960s in the Eastern Region of Saudi Arabia, the government was forced to call the National Guard to intervene as some extremist Orthodox tried to stop the girls from attending the secular schools. The Orthodox feared that secularism was replacing Islam in other Islamic countries.

However, the extremist Orthodox Muslims were appeased as the department of education for girls, run by conservatives, was separated from the secularly administered Ministry of Education for the boys. In spite of the furor caused by the Orthodox Muslims, Saudi Arabian girls' education in the 1980s was in general comparable to other developing nations. Fagerlind and Saha (1989) point out that, in the 1980s, the Saudi Arabian female enrollment ratio was 36.2 percent compared to 25.7 percent of all developing countries. This ratio must increase in many Islamic countries so that females can attain equal educational access. In many Islamic countries despite the rapid increase in the number of students, schools, and colleges, the quality of education for girls as well as boys is unsatisfactory.

Illiteracy in Some Islamic Countries

In many Islamic countries, such as Pakistan, Jordan, Saudi Arabia, and Iraq, chronic literacy problems exist. The literacy rate in most Islamic countries is very low. For example, Pakistan's low literacy rate of about 26 percent in the late 1980s was expected to decrease in the 1990s (Hoodbhoy, 1991). The Saudi Arabian literacy rate in the early 1990s was lower than what the government reported as 50 percent (Roy, 1992). During the same period, the Islamic Republic of Iran had a 48 percent literate population (Fereshteh, 1994). In other Islamic countries, other problems related to education exist. For instance, the Iraqi educational system, due to the regime's repression, lacks independence, motivation, and flexibility (Roy, 1993).

Similarly, the education system in the kingdom of Jordan, despite its advancement and sophistication, has serious problems, such as large-scale unemployment of the highly educated. This has the potential to destabilize the country, as the public wants liberal political atmosphere (Roy and Irelan, 1992). Most Islamic countries are struggling with similar literacy and unemployment problems. Partly due to the poor quality of education and mainly because of many other economic and political circumstances, many Muslims, particularly during the past three decades, have come to the United States as immigrants or as students.

Brief History of Muslims in the United States

The history of Muslims in America is too diverse and difficult to summarize. Some Muslims of Arab origin arrived mistakenly to the shores of the New World earlier than Columbus, and some Arab Muslims came as sailors with Columbus (Omran, 1997). Other Muslims were forced to come to the New World. The first African Muslims to arrive to America came as slaves as early as 1501 during the slave trade (Diouf, 1998). African Muslims in the eighteenth and nineteenth centuries resisted slavery in a subtle way as some of them kept their African names, wrote in Arabic, and continued to practice their religion (Turner, 1997).

After the end of the slave trade, other Muslims from Syria, Jordan, Iraq, Egypt, India, Pakistan, the Soviet Union, Turkey, Yugoslavia, and Albania began to arrive in the nineteenth century (Omran, 1997). Therefore, the majority of Muslims in the U.S. are of African, Asian, and East European origin. In addition to these ethnic groups, there are thousands of Americans of Western European origin who converted to Islam in the United States (Muhammad, 1984).

During the early part of this century, new development took place in America. The first Islamic mosque was establishment in 1926 in Highland Park, Detroit for prayers and the study of the Quraan (Adeeb & Smith, 1995). In 1930, W.D. Fard, a mysterious Muslim missionary to America who pretended to be a street peddler, established the "Nation of Islam" (Turner, 1997). Fard's disciple,

Elijah Muhammad, the son of a Baptist preacher in Georgia, raised himself to the status of a divine messenger of God to African-Americans and later upgraded himself to be God in human form (Muhammad, 1984). Despite a few similarities with Islam, the teachings of the "Nation of Islam" are in sharp contrast with the Quraan and the traditions of Prophet Muhammad.

The 1960s was a period of change for American Muslims as Malcolm X defected from the Nation of Islam, new Islamic organizations were formed, and many new Arab immigrants began to arrive partly because of the Arab-Israeli war of 1967 (Muhammad, 1984). In the past two decades, Muslims have become well organized and formed some major organizations such as the Islamic Society of North America and the Islamic Circle of North America. Both organizations serve as umbrella for the local and state chapters of Islamic groups. Omran (1997) points out that since the 1950s "[f]rom its humble, uncertain and often distorted beginnings, the Muslim community in the United States today is a vibrant community of about eight million better-educated and well-settled people" (p. 34).

Islamic Education in the United States

Development of Islamic schools in America is relatively a new phenomenon partly because the majority of Muslims are newcomers to this country. It is important to point out that one of the main problems for a researcher

of Islamic education in America is the lack of literature dealing with this area. Omran (1997) points out that in the United States "[t]here are literally no studies available on the performance of present-day Islamic schools" (p. 8). Until the 1970s, most Muslims, in addition to the public schools, had either sent their children to Sunday or Evening Islamic Religious Schools, which were modeled after the Christian Sunday schools (Muhammad, 1984). The first school for both secular and religious subjects was established in Pennsylvania in the early 1970s. Muslims began to make serious efforts to establish Islamic schools only in the past ten years, and in 1997 there were 125 full-time Islamic schools in the United States (Omran, 1997). Trying to answer the major dissertation question as to why the Islamic schools were established in the United States, Omran (1997) points out that one of the main causes was the conflict between the religion of Islam and the secular American public education.

Before the establishment of Islamic schools in this country, as well as the Southwestern state where this study was carried out, most of the parents sent their children to the public schools. During the weekends and evenings the children attended Islamic religious schools where the instruction of Quraan, Arabic language, and Islamic studies took place. In the Southwestern state where this study was conducted, the first Islamic school with both academic and religious studies was established in 1990 in one of the largest cities. A second school was

founded in 1995 in a university town, and, in 1999, a third school opened classes in one of the largest cities.

The curricula of the schools are very similar, however, slight differences exist in the administrative structure. Unlike in the Islamic countries, Islamic education in America in general is free from a direct government control. Therefore the Islamic schools in the United States enjoy more freedom than in the Islamic countries. In some Islamic countries the government designs the curriculum even in the Islamic traditional schools. In this southwestern state's Islamic schools, the board provides a general informal curriculum. With the exception of the religious education and the study of the Quraan, almost all of the schools follow a very similar curriculum and textbooks as their respective school districts. However, the administration of each of the schools is slightly different.

The first school, the largest and oldest of the three, is more or less independent from the mosque or the Islamic Society of the city, as the parents whose children attend the school elect the board members annually. The members of the Islamic Society elect the President and the other Officers. The administrative structure of the second school is slightly different. At least at the present time, it is directly linked to the mosque or the Islamic Society of the City, whose members annually elect the President and the officers of the Executive Committee. The President of the Society then appoints the school Board.

The situation for the third school is somewhat different. During its first and second formative years, it was under the President of the Executive Committee of the Islamic Society of that city, who was elected annually by the members of the Society. The President then appointed the members of the school board. In the school's third year, the members of the Islamic society of the city, in accordance with the school's charter, elected the board members, whose terms lasted one year. At the present time, for some reasons, the school's charter is under review, and--rather than the Society's members electing the board--a group of trustees and also members of the Islamic Society of the city is responsible for the appointment of the board members. Therefore, the third school is currently semi-independent from the leadership of the Islamic Society of the city.

Islamization and Secularization of Knowledge

In many Islamic countries one of the major problems in education is the secularization and Islamization of knowledge. The secularist Islamic perspective is to separate religion and other disciplines; the Islamist view is to integrate the two realms. As discussed earlier, in many Islamic countries, some studies blame the secular education for playing a role in the deterioration of the traditional Islamic education. As a result, one of the top priorities of some Islamic religious scholars and leaders of Islamic movements is to replace the secular education system with an Islamic one. El-Sanabary (1992) points out that Islamic scholars

"are posing serious challenges to educational planners and policy makers. According to Islamic religious scholars religion and education are intricately linked, and any attempt to separate the two is regarded as a violation of Islamic traditions" (pp. 29-30). In some Islamic countries the Islamization movement is having a strong impact. Ashraf (1992) points out that, "There are certain authorities in some Muslim countries which recognized the legitimacy of the Islamic viewpoint in education and are ready to bring about the necessary changes, which may be the real starting point" (p. 75).

The first major conference on Islamic education was held in Makkah, Saudi Arabia, in 1977. Islamic religious scholars from Arab countries, India, Pakistan, Bangladesh, and the United States attended the conference, and their major views, as summarized by El-Sanabary (1992), could be outlined in five major points. First, Muslims should adopt Islamic theories of education grounded on Islamic principles and appropriate other educational theories to the Islamic perspective, so that elements contradictory to Islamic principles are avoided. Second, comparisons are made showing that Islamic philosophy of education is divinely based, whereas the secular philosophy of education is a product of human mind. Third, proposals are made aiming at strategies to form schools that aim toward restoring Islamic culture and combating irreligious tendencies brought about by Western colonialism and secular education. Fourth, suggestions are made that the gap between the secular and religious education must be bridged to

pave the way for an integrated educational system. Fifth, the Islamic curriculum should not separate sciences and religion.

Four more conferences on Islamic education were held at different places. Ashraf (1992) briefly evaluates the achievements of the conferences in four major points. First, he asserts that in the second conference the scholars and educators highlighted and emphasized the need for Islamic concepts of education, but they did not give detailed methods for the formulation of these concepts. Second, the conferences focused attention on the "basic conceptual framework of physical sciences as an alternative to the framework of the hypothesis prevalent to-day [sic] in order to emphasize the spiritual and moral field of education in the sphere of physical sciences." (p. 74). Third, although the conferences suggested the integration of curriculum so that the principles are based on the Quraan, all conferences did not take into consideration the Islamizing of university education. Finally, as a result of the conferences, three institutions aiming at development of the Islamic concepts of education were established in different countries. Although the Islamic scholars discussed Islamic education during these conferences, they did not present in detail, as Ashraf (1992) observes, issues such as the possible conflict between Islam and sciences, philosophy, astronomy, and mythical stories. However, many secularist Muslims oppose such views aiming at Islamization of knowledge, particularly of sciences.

The writings of the proponents of secularization of knowledge in Islamic countries seem to be scarce. Hoodbhoy (1991) presents the strongest arguments in favor of secularization of science and education. He makes several points related to science in particular and education in general. First, he asserts that the state of science and science education in the Islamic World in disastrous. Second, Orthodox Muslims were responsible for the decline of philosophy and secular learning that flourished in the Islamic World during the golden age. Third, even in contemporary Islam the conditions for science and scientific work are not encouraging, and Islamic Orthodoxy plays a role in that. Fourth, some Islamic scholars and thinkers are devoted to a religiously oriented Islamic science. Finally, if Muslims want to excel in sciences, the only way is pragmatism and democracy in the Western style.

On the other hand, Nasr (1985) argues that Muslims failed to assimilate the cultures of the Western world because the encounter was militaristic during colonialism, allowing the dictates of the superior West to the inferior Islam. Hoodbhoy's thesis that the Orthodoxy might have played a role in the decline of sciences and secular learning could be logical. However, he loses sight of the major factors in Islamic education, such as history of colonialism, the colonial legacy during the independence period, inner strife among some Muslims, and the depth of divisions along secular and mainstream lines in some Islamic countries.

The conflict between Islam and foreign branches of knowledge is more complicated than at first glance. For instance one of the major areas of disagreements is biological evolution. Ziadat (1986) did a major work in this area, summarizing and commenting on the writings of major Islamic religious scholars of both the Sunni and Shi'a sects in the Arab World. He points out that the majority of these scholars responded to the theories of evolution positively. Recent writings and commentaries of Islamic scholars show that the theories of evolution and the formation of the universe do not contradict the Qur'anic verses referring to creation. Chirri (1965), Bakhsh (1983), Khan (1983), Bayrakdar (1985), Bucaille (1988), Santoe (1995), all directly or indirectly suggest, providing evidence from the Quraan that the theory of evolution and the formation of the universe in general do not contradict the teachings of Islam.

Some Islamic writers present evidence from the Quraan that there are similarities between some of the aspect of Darwin's theory of evolution and the Quaan. For instance, referring to chapter XXI verse 30 of the Quraan: "[a]nd we have created everything from water," Khan (1983), argues that "the Quranic view does not materially differ from this scientific view except that the evolution took place under the guidance of God rather under the control and direction of natural selection" (p. 5). Similarly, Ziadat (1986) points out that an Islamic, Shi'a religious scholar who authored 25 books in different aspects of Muslim religion,

wrote that "[m]an's resemblance to ape did not prevent him and the ape from coming from the same origin" (p. 93).

There is another side to the same argument over evolution. For instance, Hoodbhoy (1991) observes that "the reaction of the Muslim World to the evolutionary theory of biology has been, for the most part, a highly negative one. Introduced to the Arab World in the 1910, it became the subject of intense denunciation and emotional polemics by traditionalists who proclaimed 'Jihad against the poison of Darwinism'" (p. 47). Views of Muslims who reject Darwin's theory of the origin and nature of human beings is reflected in Siddiqui (1983) who argues that no single theory had done as great a damage to human values than Darwinism. Similarly, Yusuf (1987) asserts that "evolution and creationism are mutually exclusive philosophies. There is no reconciliation between the two. Purposive creationism is therefore the necessary and true deduction" (p. 108).

Some studies raise questions whether astronomy could also be an area of disagreements among some Muslims. Hoodbhoy (1991) points out that Shiekh Abdulaziz Bin Baz, the most influential religious figure in Saudi Arabia, who chairs the Highest Committee for the Issuance of Religious Opinions, authored:

A book in Arabic entitled Jiryan Al-Shams Wa Al-Qamar Wa-Sukoon Al-Ard. This translates into 'Motion of the Sun and Moon, and Stationarity [sic] of the Earth.' The earth is the center of the universe and the sun moves around it, says the venerable Shiekh. In an earlier book, he had

threatened dissenters with the dire fatwa of takfir (disbelief), but did not repeat the threat in the new version (p. 48).

On the other hand, Saudi Arabia is the first Islamic nation to send an astronaut aboard NASA's Discovery Space Shuttle in the late 1980s. Therefore, this raises the question whether Islamic school teachers could face some difficulties in this area or not.

Philosophy is another area of difference among Muslims, and the history of philosophy and Islam goes back to the medieval period. Hallaq (1993) translated from Arabic the work of one of the major Islamic religious scholars of the Medieval Period, Ibn Taymiyyah, who attacks the Greek logicians and their Muslim followers. According to Ibn Taymiyyah, Greek logic leads to the philosophical doctrines of the eternity of the world, the rejection of the nature of the attributes of God and the mediation of prophets. In this major study attacking philosophy, philosophers, and Islamic mystical and sectarian doctrines, Ibn Taymiyyah takes up a few but very important logical principles, such as definition and syllogistics and tried to undermine logic and metaphysics. Similar to Ibn Taymiyyah, Al-Ghazzali one of the most influential Islamic religious scholars of the Medieval Period was severely critical of philosophy. In his opinion "intuition was preferred to reason in the religious realm just as reason was preferred to sensation in everyday life" (Baali and Wardi, 1981, pp. 74-75).

On the other hand, some of the most influential Islamic thinkers of the medieval era--such as Ibn Rushud, Ibn Sina, Al-Razzi and others--were deeply influenced by Greek philosophy without abandoning their religion (Hoodbhoy, 1991). Some, such as Ibn Sina, despite their influence by Greek philosophers, used to mention God in everything they encountered and used intuition and prayer to solve problems (Nasr, 1980). In the present time, a similar rift on philosophy exists among Muslims. Rahman (1982b) points out that many Muslims consider philosophy very harmful to Islam. Similarly, Absr (1988) and Nasr (1982) are against modern rationalistic and scientific interpretation of the Quraan and argue that such attempts are considered alien to Islam. However, they are not against the critical teaching of logic, philosophy, and other branches of knowledge. Similarly, Nasr (1981) argues that rejecting philosophy as disbelief and refusing to confront it are not honest because "Western philosophical ideas will simply creep through the backdoor in a thousand different ways and the student will be much less prepared to confront them or reject alien ideas" (p. 55). Therefore, there are two sides to the argument as to whether Muslims should study philosophy or not.

Mythical stories, according to some studies, may be contradictory to Islamic religion. As mentioned earlier, during the medieval period, Muslims did not show interest in Greek literature and mythology because most of the mythical stories contradicted the religion of Islam (Rahman, 1982b). Similarly, Muhammad Arkoun of the institute of Islamic and Arab studies at the Sorbonne, France,

points out that some Muslims consider concepts such as myth in the Quraanic sense an untrue legend. However, he argues that myth should be understood in the anthropological sense "as a symbolic story that reveals an inspiring truth which is a live force within a culture or a subculture" Boullata, 1990, p. 83).

Chapter Summary

This chapter traces the history of Islamic education since the time of Prophet Muhammad to the present time. It has shown the importance of education and knowledge in the early days of Islam, with an emphasis on life-long education, cooperation in learning, and the mosque as the main center of education during the Prophet's time and that of his immediate four Caliphs. This chapter also presented how Islamic education, from mainly a religious oriented education, developed into a new form of education as Muslims began to interact with other cultures. This part also included the Islamic Golden Age, and the strong Greek influence on Islamic education and learning as some of the Muslims moved from the Arabian Peninsula as Islam spread to countries such as Iraq, Syria, Persia, and others. This part also focused on a debate over Islamic education because a remote parallel could be drawn between the Golden Age and the present time

Also presented were an Examining of the decline that followed the end of the Golden Age, the debate over the conflict between the indigenous and imported

branches of knowledge, the role of the Orthodox Muslims in this debate, and several factors that played a role in the decline of Islamic education. In the survey of the European colonial era of the Islamic world it has been shown how some of the traditionalist religious scholars became isolationists and how the colonialists succeeded in diminishing Islamic education. The problems in the post-colonial era and the conflict between Islamic and secular education in the Islamic countries at the present time have been briefly presented. Some of the major problems of the education of Muslim females were also briefly examined, and the necessity of providing Muslim females with an equal access to education was stressed. An overview of the history of Muslims in America and the recent establishment of Islamic schools across the country with some emphasis on the Islamic education in a southwestern state was presented. Highlights of the Islamization trend and the differences in views among Muslim writers regarding the conflict between Islamists and secularists with respect to education have been examined. Finally, the views whether Islamic religion was in conflict with science, philosophy, and mythical stories were summarized.

CHAPTER III

METHODOLOGY

This study employs grounded-theory methodology. It is guided by two research questions: (1) What are the perceptions of Islamic school teachers, administrators, and board members in a southwestern state and Islamic students majoring in education at two universities in that state about the conflict between Conservative and Secular Muslims regarding Islamic education, and do these educators perceive a compromise in Islamic education between the two groups? (2) Do these educators perceive that science, philosophy, and mythical stories are in conflict with Islam, and do these topics pose instructional and curricular difficulties for these educators? This chapter presents the rationale and the philosophical foundation for grounded-theory methodology, the issues of reliability and validity, the criteria for evaluating grounded-theory research, the study sample, the coding and data analysis procedures employed in this study. Finally, this chapter briefly presents the role of the researcher including assumptions and biases.

Grounded Theory: Theoretical and Philosophical Foundation

Grounded-theory is a useful research method in education. Huchinson (1988) presents five major studies that support the need for educational researchers using the grounded-theory methodology. He argues that studies are

only beginning and must be followed by others that address crucial problems in education using grounded-theory methodology. Furthermore, he points out that grounded-theory is particularly useful if we know little about a topic and if other theories are insufficient and cannot predict or explain the behavior of a group. The conflict between conservative and secular Muslims regarding Islamic education, and whether Muslim educators could teach science, philosophy, and mythical stories is a subject that deserves a study because very little is known about this topic. Therefore, grounded theory is appropriate for this study.

There is no doubt that theory is an important part of conducting research. Glaser and Strauss (1967) argue that, "While verifying is the researcher's principal and vital task for existing theories, we suggest that his main goal in developing new theories is their purposeful systematic generation from the data of social research" (p. 28). This implies that, in the grounded-theory methodology, the researcher explores a theory instead of relying on an existing theory while in the process of conducting the research or at the completion of a study. Burgess (1982) points out that, in grounded theory, conducting research and identifying a theory are components of the same process because "research activities are guided by the emerging theory" (p. 210).

Strauss and Corbin (1990) make three important observations about grounded theory. First, they define it as a theory that is inductively derived from the study of the phenomenon it represents, requiring discovery, development, and

provisional verification by means of systematic data collection and analysis related to that phenomenon. Second, in grounded theory, data collection, analysis, and theory complement one another because the theory comes from the data. Third, instead of consisting of a set of numbers or some loosely connected themes, the findings of the research constitute a theoretical formulation of the phenomena under investigation where the concepts and relationships among them are not only established but also provisionally tested.

Some researchers emphasize induction in grounded-theory, while others argue that the researcher cannot choose easily between induction and deduction. Induction presumes that one can develop laws or generalizations from the accumulation of cases and observations, whereas deduction is based on the assumption that empirical research can be employed for the purpose of testing theories only (Coffey and Atkinson, 1996). Some researchers oppose deductive approach to research, while emphasizing the inductive one. Glaser and Strauss (1967) argue that:

In contrasting grounded theory with logico-deductive theory and discussing and assessing their relative merits in their ability to fit and work (predict, explain, and be relevant), we have taken the position that the adequacy of a theory for sociology today cannot be divorced from process by which it is generated" (p. 5).

The implications for this study are it will generate a grounded theory inductively based on the data collected from the participants.

Reliability and Validity

Reliability and validity are very important components of research. Huchinson (1988) responds to the claims of quantitative researchers who frequently describe qualitative studies as subjective and therefore invalid and unreliable. He makes three convincing arguments related to reliability and validity in grounded-theory. First, thoroughly comparing and contrasting data several times provide a check on validity, allowing the revelation of distortions or lies. Second, in addition to observation, in-depth interviews allow the researchers "to verify, clarify, or alter what they thought happened to achieve a full understanding of an incident, and to take into account the 'lived' experience of participants" (p. 125). Third, since grounded-theory research uses interviews, direct observation, and document analysis in its data collection methods, it rules out bias because it increases the amount of information to the researcher.

Strauss and Corbin (1990), making three major observations, argue that creativity is an important part of the grounded-theory methodology, and they relate it to validity. First, its procedures force the researcher to break down through assumptions and to create new order out of the old. Second, creativity is reflected in the researcher's ability to aptly name categories and also to allow the

mind to wander, making free associations required for generating stimulating questions and for coming up with the comparisons that led to discovery. Third, it is very important that the researcher always validates the categories and statements of relationships on which he or she identifies through the total research process.

Strauss and Corbin (1990) stress three important points related to validity. First, the researcher validates the theory against the data results in grounding the theory. Second, it is better to do this by laying out the theory in memos, either using diagrams or narratives. Third, the statements related to the relationships among categories under different contextual condition are developed and in the end validated against the data.

Similarly, Glaser and Strauss (1967) point out that in grounded-theory, the standard approach is to present data as a means for verifying the conclusions, showing how the researcher formulated the theory from his or her data. Furthermore, according to Straus and Corbin (1990), grounded theory is a scientific method because its procedures are developed and carried out in such a way that they meet the necessary criteria for conducting scientific study, such as significance, theory-observation compatibility, generalizability, reproducibility, precision, rigor, and verification.

Grounded-theory is the appropriate methodology for the present study. First, in-depth interviews, using semi-structured questions, will generate detailed

responses important for the clarification and deeper understanding of the data. Second, since grounded-theory allows the researcher to be a participant observer, verification and clarification of data, concepts, and ideas will be possible. Third, in addition to the in-depth interviews and direct observation, use of documents such as school curriculum guidelines or literature related to the schools in the study will enable the researcher to compare, contrast, check and re-check data that might contradict each other. This will help to ascertain validity, making the study more reliable. Fourth, since little is known about the area the researcher is trying to explore, grounded-theory is the most appropriate method for this study. It will enable the researcher to determine whether the participants perceive a conflict between Islamic Secularism and Islamic Conservatism, whether compromise with respect to education is possible between the two groups, whether science, philosophy, and mythical stories contradict Islamic religion, and whether these subjects pose curricular and instructional problems for the Islamic educators.

Population and Sampling

Several studies utilizing grounded-theory methodology used different sample sizes that suited their purpose. For instance, Charmaz (1997) points out that she used several grounded-theory steps in her study with a sample of 20 chronically ill men. In another study Geherke focused on patterns of teacher

interaction with the potential reference groups in the school. He interviewed 11 beginning high school teachers over a period of five years (Huchinson, 1988). It is important to point out that as Strauss and Corbin (1990) suggest, "Sampling continues until all categories are saturated; that is, no new or significant data emerge, and categories are well developed in terms of properties and dimensions" (p. 215).

The population for this study is the teachers, administrators, and board members of three Islamic schools and Islamic students majoring in education from a southwestern state. Most of the selected participants were interviewed during the spring 2000 and some were interviewed during the early part of the subsequent summer. To allow the sample to be representative, participants were targeted so that both conservative and secular Muslims, Shi'a and Sunni, Arab and non-Arab, American and non-American, and male and female Muslims were interviewed.

The Islamic students were selected based on an initial informal conversation about (1) their views on the topic of the study (2) their religious sect (Shi'a and Sunni) and (3) their conservative or secular persuasion. With regard to the respective schools' population, the principals of the three schools were asked to assist in the selection process. They were asked to consider the sample in the respective schools that included teachers with conservative and moderate backgrounds. Principals were also asked to include in the sample science, social

studies, English or language arts, Islamic studies, and other homeroom teachers. The sample contained teachers from different parts of the Islamic World including such regions as the Arabian Peninsula, the Indian Subcontinent, North and West Africa, Southeast Asia, and the United States including Islamic teachers of both African and European descent.

Three Islamic schools in this southwestern state with student enrollments ranging from 47 to 117 were contacted by telephone and asked to participate in the study. Follow-up telephone calls were made, and, upon the approval of the persons in charge, visits to the respective schools took place during the spring and summer of 2000. Two of the schools are in two large metropolitan areas while the third school is located in a university town. Most of the students' parents were employees in the two metropolitan areas. In the university town school, many of the students were children of university students from Islamic countries, and some were children of employees in the town. One of the schools was established in the early 1990s, the second in the mid 1990s, and the third the late 1990s.

One of the schools is both an elementary and middle school. The other two are elementary schools. All the teachers that participated in the study in the three schools have bachelor's degrees, and most were certified. Two of the participants were board members, and one has a doctorate in chemistry and one a master's degree in civil engineering. Two of the participants were principals. One of them taught Islamic studies and science and the other taught Islamic studies only.

Seven of the participants were teachers. The university students majoring in education were three graduate students and two undergraduate students. The sample also included five females and 11 males. Three females and one male either declined to be interviewed or did not respond to the repetitive written request to be interviewed. Therefore, instead of 20 participants, the sample was reduced to 16.

Backgrounds of the Participants

The various participants of the study have different backgrounds. Three of the participants were Shi'a Muslims, and 13 were Sunni. Five of the participants were from the Indian sub-continent, three from the Persian Gulf area, two from North and West Africa, three from the Arabian Peninsula, one from Southeast Asia, and two from the United States.

Procedures for Data Collection

As participants agreed to take part in the study, an application was filed with the University of Oklahoma Institutional Review Board. This application included the topic of the study, a brief description of the study procedure, and the participants' consent form that contained assurances that their participation was voluntary, and that their identities, their home countries, and all information they provided for the study would be kept confidential within the bounds of the law.

In the three schools prior to data collection, the researcher of this study first took a tour of each school and observed the classrooms of the participants before conducting the interviews.

Observation of classroom teaching included subjects such as Quraan and Islamic studies, science, English or language arts, social studies, and Arabic language. The teaching of Quraanic and Islamic studies focused on issues of rewards of good deeds and punishment of bad deeds, importance of helping one another, and respecting one's parents. Teaching in the science classes dealt with topics such as how the human body works and how to keep the body healthy, cells and heredity, and changes in the weather. English lessons dealt with characterization, classification of same and different things, and review of vocabulary from a story read previously. Social studies lessons focused on states and regions, the city and country, and continents and oceans. The Arabic language lesson dealt with personal pronouns, vocabulary, and review tenses.

As for the location of the interviews, the administrators decided where it was to be conducted and assigned a substitute for each teacher, because the interviews took place during regular school hours. A brief description of the study was given to every participant, and he or she was requested to read and sign the consent form before the interview began. Prior to the interview questions, participants were requested to provide personal information about their nationalities, educational backgrounds and teaching experiences. The

demographic information about the schools was obtained from the administrators during the interview.

All of the interviews in the schools were conducted in English and were tape-recorded. However, two of the Arabic and Islamic studies teachers who were not fluent in English were interviewed in Arabic, and their responses were later translated. One teacher at one of the schools and one board member at another school hesitated to be taped, but they agreed as the researcher gave them assurances that their views would be held in confidentiality. Additionally, the rest of the participants were also assured that their identities would not be revealed and their words would not be altered. Except for some limited telephone interruptions during the interviews things went smoothly. In addition to the taping-recording of the individual interviews, field-notes were taken, noting things of importance such as facial expressions, levels of comfort, and general emotional states. A similar procedure was carried out for each of the three schools.

The students majoring in education at two state universities were interviewed in Group Study rooms in the libraries of the respective universities. Prior to the interviews, a procedure similar to that of the teachers was carried out with regard to the description of the study, signing the consent form, and assurance of confidentiality, information about their educational backgrounds and years of teaching experience. Semi-structured interview questions were used, and

all of the interviews were taped, and transcribed. Guiding Interview Questions are included in Appendix A.

Using the grounded-theory research methodology allowed in-depth interviews and made it easier to follow leads and to allow the participants in the study to express their views in more detail. In addition to the interviews that provided an in-depth understanding of the problem, the researcher's role as a participant observer was complementary in answering the research questions: 1) As to whether the participants perceived a conflict between Islamic Secularism and Islamic Conservatism, and as to whether the two groups perceived a compromise with respect to Islamic education; and 2) As to whether science, philosophy, and mythical stories contradicted Islamic religion, and whether these subjects would pose curricular and instructional problems for the Muslim educators.

One of the important aspects of interviewing as a method of data collection is that it may be more useful for people who come from traditional cultures, such as the Islamic one, where sometimes meaning can be embedded in a brief response. As a result, due to the absence of details, the response could be interpreted in different ways. Unlike in a written response, such as in a questionnaire, interviewing allows the researcher to clarify the meaning of the brief response by asking additional questions or rephrasing the same question when something is vaguely responded to. During the interview, most of the

participants tried to give detailed responses, while others were persistently encouraged to do so. At the end of almost every response, the researcher paraphrased the participants' responses and repeated them to the interviewees to ascertain what they exactly said.

For purposes of validity and reliability, some of the administrators were asked to provide curricular guidelines and documents. However, they pointed out that no such things existed because the schools, with the exception of subjects such as Islamic studies and Arabic language, closely followed their respective public school district's curriculum, textbooks, and the State Department of Education guidelines. To verify this information, the various teachers were asked, and did confirm what the administrators have stated. Having worked for a similar Islamic school, the researcher was aware of this and of the fact that most Islamic schools in general follow a relatively informal curriculum.

Data Analysis

Once the data were collected, transcripts were prepared, and the data were reread several times to ascertain that what the participants have said was consistent. In the data analysis process, three types of coding were used to categorize and arrange the themes, patterns, and narratives. The participants in the different Islamic schools in a southwestern state were compared and contrasted with one another and with the participants who are studying at that

state's universities to become future teachers in the United States or the Islamic countries. Comparisons were also made between the students and the other participants associated with the schools as early as the initial interviews began. Additionally, similar comparisons were also made among the three schools.

The transcripts of the interviews were thoroughly analyzed and re-read several times. At the conclusion of the data collection, again the responses of the participants in the three schools and the responses of the students were compared to determine if there were major differences based on the three different schools and the students majoring in education. Grounded-theory techniques, such as identification of pertinent thoughts or events applying initial coding, were used so those concepts were developed and then grouped into categories. The data from the interviews were arranged and analyzed, depending on the themes and narratives. To validate what the participants asserted, detailed excerpts from the data were presented so that the reader of the study can follow the logic of the analysis.

It is important to elaborate on what is involved in the process of coding data and analyzing them. Coding data is very important in grounded-theory. Strauss and Corbin (1990) point out that coding, the central process by which theories are built from data, represents the operations of breaking down data, conceptualizing, and rearranging them in new ways. In grounded theory, the purposes of coding are broad because this theory not only enables the researcher

to put together some themes or to develop a descriptive theoretical framework of loosely interwoven concepts, it also: (1) builds rather than only tests a theory; (2) gives the research process the rigor necessary to make the theory "good" science; (3) helps the analyst to break through the biases and assumptions brought to the study and that can develop during the research process; and (4) provides the grounding, builds the density, and develops the sensitivity and integration that will bring about a rich tightly woven, explanatory theory that closely approximates the reality it represents. It is important to point out that in grounded-theory, things are not done in a linear fashion. Huchinson (1988) points out that grounded-theory methodology requires that the researcher collects, codes, and analyzes data as soon as he or she begins the field work; and therefore, "the method is circular, allowing the researcher to change focus and pursue leads revealed in the ongoing data analysis" (p. 133). This procedure was followed early on.

Strauss and Corbin (1990) point out that analysis in grounded theory mainly consists of three kinds of coding. First, in open coding, the researcher breaks down, examines, compares, conceptualizes, and categorizes data. The main analytic procedure is asking questions about the data and comparing and contrasting events and instances of the phenomena. It is important to point out that while conducting analysis the researcher can move from one form of coding to another, particularly between open and axial coding.

Second, in axial coding, which may come after open coding, the researcher puts data back together so that connections between categories and their sub-categories are made. In this complex process of several steps, inductive and deductive thinking take place, involving a constant interplay between proposing statements of relationships and checking them against this or that incident. During axial coding, the researcher begins to notice some relationships that are repeated between properties and dimensions of categories. According to Straus and Corbin (1998) axial coding involves four basic tasks:

1) Laying out the properties of a category and their dimensions; 2) identifying the different conditions, actions/interactions, and consequences associated with a phenomena; 3) relating a category to its subcategories through statements denoting how they are related to each other; and 4) looking for cues in the data that denote how major categories might relate to each other (p. 126).

Furthermore, Straus and Corbin (1998) point out that axial and open coding are not sequential but they go together naturally by adding density and explaining a theory that will emerge during the analysis. As in open coding, the researcher makes comparisons and asks questions about the data; however, in axial coding, the use of comparisons and asking of questions is more focused so that by relating categories, a discovery takes place.

Third, in selective coding, the researcher formulates the conception of what the research is all about, developing an entire picture of reality that is comprehensible, conceptual, and most importantly grounded. This is done in several steps. Explicating the story line is the conceptualization of a descriptive story about the main phenomena of the study. The story is analytically told, and the central phenomena are given names. The researcher looks at the list of the categories to find out if one of them is abstract enough to encompass all that has been described in the story. If such a category already exists, it becomes the core category. Here, the core category is developed based on its properties. The next step is to relate the other categories to it, making them subsidiary categories. The storytelling and its sequential order are important to ordering the categories clearly.

The Role of the Researcher

According to Glesne and Peshkin (1992), the qualitative methodology researcher plays two roles: the first is the role of the researcher as the data collector and analyzer, and the second role is that of a learner expected to listen. During the data collection and analysis of this study, the researcher has made his utmost efforts to listen intently, to learn, and to remain as open-minded as humanly possible. The researcher also tried to keep a distance while analyzing the perceptions about the possible conflict or lack of it between Islamic Secularism

and Conservatism and whether a compromise regarding education is possible between the two groups; and whether science, philosophy, and mythical stories contradict Islam, and whether these topics pose curricular and instructional difficulties for Islamic educators.

Strauss and Corbin (1998) point out that analysts and research participants bring biases, beliefs and assumptions to the research. However, these authors point out that "it is not possible to be completely free of bias" (p. 97). Furthermore, these authors also advise the researcher to stand back and ask questions whenever bias intrudes. As a Muslim and as a person who had taught at an Islamic school, the researcher may have a perspective and some biases but tried to minimize them. Based on his experiences and readings, the researcher expects to find different points of view about these issues with respect to the perceptions of Islamic educators. The researcher of this study took the advice of Strauss and Corbin (1990) to keep some social and theoretical sensitivity and distance during the process of interpretation. Such attempts could assist the researcher to stop and check the data analysis from time to time so that biases are minimized if not completely excluded. This is very important for the study's reliability and validity.

The researcher of this study tried his best to become aware of his biases so that they did not intrude in the data collection and analysis. Furthermore, the researcher tried his utmost to listen carefully to what each participant had said and made every effort to summarize, repeat, and paraphrase back to the participant, during the course of the face-to-face interviews, what he or she had asserted. This was done to ensure that in their responses, the participants did not mean something different than what the researcher understood.

Chapter Summary

In this chapter the study methodology, the purposive sampling methods, and the three Islamic schools and the participants were described. Data collection procedure and design, the role of the researcher including assumptions and biases were also included in this chapter. Grounded-theory procedures including data analysis and coding were also presented in detail. Verification and validation procedures of grounded-theory data processes and collection were also presented.

CHAPTER IV

PRESENTATION AND ANALYSIS OF THE DATA

Introduction

This study tried to determine the perceptions of the state's Islamic school teachers, administrators, and board members, and Islamic students majoring in education at that state's universities regarding the possible conflict between Conservative and Secular Muslims and the possibility or impossibility of a compromise between the two groups. The study also tried to find out whether these educators perceive that science, philosophy, and mythical stories contradict Islamic religion, and how the educators deal with these issues in their schools. To research this topic, semi-structured, face-to-face, in-depth interviews were individually held with representative Muslim educators from various Islamic countries and the United States. They included 11 Islamic school teachers, administrators, and board members at three Islamic schools. Additionally, similar interviews were held with five Islamic students majoring in education at two universities in the state. Furthermore, observation of classroom teaching at the three schools took place. Artifacts such as school textbooks, curriculum, and lesson plans based on state department of education guidelines were examined.

The population sample of this study was comprised of representative participants from the various Islamic countries including North and West Africa, the Persian Gulf Area, Southeast Asia, the Indian Subcontinent, and Muslim American teachers of both African and European descent. This study was guided by two research questions: (1) What are the perceptions of Islamic school teachers, administrators, and board members in a southwestern state, and Islamic students majoring in education at two universities in that state about the conflict between Conservative and Secular Muslims regarding Islamic education, and do these educators perceive a compromise in Islamic education between the two groups? (2) Do these educators perceive that science, philosophy, and mythical stories are in conflict with Islam, and do these topics pose instructional and curricular difficulties for these educators?

Data analysis, utilizing grounded-theory methodology was conducted, and multiple-source approach was used. Included in the study were representative participants from various Islamic countries, including teachers, administrators, and board members, and education students, and classroom observation of the teaching in the schools. This included subjects such as Quraanic and Islamic studies, science, social studies, English or language arts, and Arabic language. For instance, the teaching of Quraanic and Islamic studies focused on issues of rewards of good deeds and punishment of bad deeds, importance of helping one another, and respecting one's parents. Teaching in the science classes included

topics such as how the human body works and how to keep the body healthy, cells and heredity, and changes in the weather. English lessons dealt with characterization, classification of same and different things, and review of vocabulary related to story previously read for comprehension. Social studies lessons focused on states and regions, the city and country, and continents and oceans. Arabic language lessons dealt with personal pronouns, vocabulary, and review of present, past, and future tenses. Additionally, interviews of the participants provided in-depth responses.

Findings are presented in five sections. Sections one and two answer the first research question related to the perceptions of Islamic school teachers, administrators, and board members, and Islamic students majoring in education about the conflict between Conservative and Secular Muslims regarding Islamic education, and whether these educators perceive a compromise in Islamic education between the two groups. Sections three through five answer the second research question related to the educators' perceptions whether science, philosophy, and mythical stories are in conflict with Islam and whether these topics pose instructional and curricular difficulties for these educators. It also presents the perceptions of some of the participants that some sciences are in conflict with Islam and others who perceive otherwise. Also included in section three are the theory of evolution and the views of the Islamic educators who

would teach it, those who would not, and those who were ambivalent toward this theory.

Additionally, this section related to the second research question presents the unanimous view of the various participants that no conflict exists between modern astronomy and Islam and that they would teach this subject to Muslim students without reservation. Section three, also related to the second question, focuses on the various perceptions of the educators who do not perceive a conflict between Islamic religion and philosophy and those who do. It also presents the views of those who would teach this subject to Muslim students, those who would not, and those who expressed ambivalence toward philosophy. Finally, section four also related to the second question is devoted to the conflict between Islamic religion and mythical stories. It includes the views of the participants who perceive that these stories pose instructional problems, those who do not, and those who think that they would impose some restrictions in the teaching of these stories to Muslim students.

Conflict between Secularist Muslims and Mainstream Muslims

The majority of the participants--14 out of 16--pointed out that they perceived a conflict between Islamic secularism and conservatism or between the

Secularist³ and Islamist⁴ groups. Only two participants disagreed that there were major differences between the Moderate Muslims and Mainstream Muslims. The participants, who were keenly aware of the seriousness of the conflict between Islam and secularism and between the two Muslim groups, expressed their perceptions of the differences in stronger and rather dichotomous terms. Most of them suggested the impossibility of a compromise between the two groups with respect to education, while others--two out of 16--expressed their views about the differences between the Moderate Muslims and Mainstream Muslims in a lighter tone, implying the possibility of a compromise.

When asked if they considered themselves as Secularist Muslims, only one participant who espoused the Moderate Muslim point of view among the participants pointed out that he was comfortable with either the Moderate or Secularist Muslim label. The other four participants preferred to be called Moderate Muslims only. On the other hand, almost all who would be considered Islamists preferred to be called "Mainstream Muslims." Therefore, it is very difficult to label the participants or to categorize them in neat compartments.

³ Some difficulties were encountered regarding such labels as Secular, Islamist, Moderate, Conservative, etc. Except for one of the participants, most of the participants who were identified as secular Muslims prefer to be called Moderate Muslims. Therefore, they will be referred to as Secular or Moderate Muslims in this document. This label may not be accurate because many mainstream Muslims also consider themselves moderate Muslims.

⁴ Almost all of the participants who were identified as conservative or Islamist Muslims prefer the label Mainstream Muslims. Therefore, they will be referred to as Islamists or Mainstream

Mainstream Muslim Perspective on the Differences

The majority of the Mainstream Muslims were very disappointed while talking about the differences between them and their Moderate Muslim counterparts with respect to education as well as other areas of life. They were against the differences and divisions between Muslims and strongly argued against the separation between Islam and institutions as well as between religious and secular sciences. For instance, one of the Islamic studies teachers, referring to the conflict and divisions between the Secularist or Moderate Muslims and the Mainstream Muslim groups, pointed out that:

It is unfortunate that we have definitions of Secular Muslims and Orthodox Muslims or Liberal and Conservative Muslims when a Muslim should be just a Muslim, period. Allah says in the Quraan: "O yea who believe enter Islam wholly." Because of their misunderstanding of Islam, they [secular Muslims] say, "what is unto God, give to God and what is unto Caesar give to Caesar." They want the separation of religion and other matters in life, and this does not fit the definition of a Muslim. They want their children to practice some aspects of religion and also to become successful in life. A child should be able to understand Islam. And if he is an engineer, he should be able to become a Muslim in terms of morals,

Muslims. This label may not be accurate because some mainstream Muslims may not consider themselves conservative. Others may not find "Moderate" appropriate for secularists.

faith in God. Then that engineer or physician could use engineering or medicine in a noble way without cheating or engaging in forbidden acts such as sexual harassment, malpractice, etc. (Participant Number Two).

Another Mainstream Muslim, a principal and Islamic studies teacher of one of the schools argued that the differences between the Secularist or Moderate Muslims and Islamists or Mainstream Muslims are very wide. With respect to education and other institutions, he argued that, although there are areas where both groups are in agreement, the Secular Muslims mistakenly think that Islam is only religious rituals and rites rather than a comprehensive way of life:

My humble understanding is that Secularist Muslims think that Mainstream Muslims--sometimes they call them Orthodox Muslims or what have you--want to bring back old ways of life. When it comes to education, the idea of education to the Secularists is that Islam is nothing but elements of worship, and it [Islam] has nothing to do with life in the world in general. This is really not true. The way mainstream Muslims think about education is that it is a total system that would include all aspects of learning--Islam, Quraan, Arabic language, math, technology, science, and so on and so forth. The Mainstream Muslims think of it as a comprehensive system of education. There are areas where we all agree on. Secularist Muslims want to stress on science and technology. Mainstream Muslims don't have a problem with that, because Islam is a

comprehensive religion and Muslim students learn Islam in Islamic schools in a comprehensive way. So in this area where science and technology should be given importance, we agree with them. The area where we don't agree with them is when they insist on the division of religion and science. We absolutely don't agree with them when they say religion and science are different because Islam includes science and Islam is not restricted to only rituals, rites etc. (Participant Number Six).

Most of the participants who considered themselves "Mainstream Muslims" echoed almost the same arguments as those of participants Number Two and Number Six regarding the attempts of "Secularist Muslims" to confine Islam to religious rituals and rites. The Mainstream Muslims' point of view rested on the fact that Islam is a way of life that includes all institutions and that Islam should not be restricted to religious practices alone.

The Secularist Muslims' Perspective of the Differences

The Secularist Muslims, most of whom prefer to be called "Moderate Muslims," had a different point of view with regard to Islamic education. They considered the Islamists, or what they called "Conservative Muslims," as Muslims who preserve the past alone, who lack flexibility and who emphasize the conceptual instead of the actual aspects of education. For instance, one of the

Islamic students who refused the label "Secularist Muslim" and who considered himself as a "Moderate Muslim," pointed out that the conflict rests on the refusal of the "Conservative Muslims" to accept change, to be flexible, and to keep up with the caravan of modernization:

There is a group who [follows] the Quraan, believe in its laws and rules and refuse to show any flexibility in these laws and rules. There is another group of Muslims who [is] flexible and who mostly follow the Quraan and believe in it but who say that time has gone by, and that centuries after centuries have gone by. So they say that we have to accept some of the wisdom and some of the rules of Islam but we have to be flexible when it comes to change (Participant Number One).

Echoing a similar view, one of the students considered as Secularist or Moderate Muslim argued that the perspective of the "Conservative Muslims" is that they emphasize one area of education while the "Moderate Muslims," or Secularist Muslims, emphasize others. For instance, with respect to education, participant Number Eleven argued:

Education in Islam is to enable the people to use their education to help them in their daily life. I believe that this should be the purpose of education. Education in life should be used in a functional way. I think in more conservative Islam, they emphasize more on conceptual rather than actual education. In modern view of Islam, we are concerned more on

bringing education more with the new way of living. We need to get what is good from our past and adjust it to the modern.

Similarly, another Secularist Muslim student held the view that "Conservative," or Mainstream, Muslims must adjust to the needs of modern age particularly in such areas as technology:

Yes, there is a conflict. For example, traditional Muslims would like to see things the way they are. They are against change. Secular Muslims say that since the world is changing, we must adjust to it and we must be able to take advantage of technology. There are many issues that Muslims need to address. For example, how do we perform the five obligatory prayers in places like the moon? What direction can we face when we are at the moon? There are many more other things that the Conservative Muslims don't want to change. They resist change (Participant Number Ten).

The Secularist, or Moderate Muslim participants' point of view emphasized more the utilitarian aspects of education, and they argued that Islamists, or Mainstream Muslims emphasize humanities and religious subjects. However, Islamists or "Mainstream" Muslims defended their position, arguing that they emphasize both the worldly and the religious subjects. For instance, Participant Number Six argued: "So, if you are talking about pure Islamic education, it will absolutely include humanities, geography, math, science, etc. Islamic education emphasizes all subjects." It is important to point out that sharp

differences exist between the two points of view, but, based on the researcher's observation and the interviews, one may argue that the Islamic schools in the Southwestern State emphasize all religious and non-religious subjects. With the exception of the Islamic studies and Arabic language, the schools in general follow almost the same textbooks as their respective district public schools.

Pessimistic View of a Compromise

With these two opposing points of view regarding the function of Islamic education, many of the participants on both sides are pessimistic about a compromise between Islamic Secularism and Islamic Conservatism. Seven participants thought that compromise might not be possible, five participants argued that it was possible, and four others were neutral about this topic. For instance, an Islamic teacher gave reasons why the two sides cannot come to terms regarding Islamic education:

I don't see any compromise between Secularist and Mainstream Muslims. In most Islamic countries, the education system is in the hands of the Secularists. For example, I was [on] a visit to an Islamic country in the gulf region and the Department of Education in that country is Secularist. There is struggle between people who say education should be taught with a religious base and those who say no. There is no compromise. For example, from the mainstream Islamic point of view, there is no

compromise because we are not teaching only Islam, but also all other subjects (Participant Number Four).

Similarly, another Mainstream Muslim teacher argued that the Secularist Muslims have gone to extremes in rejecting the rights of Mainstream Muslims and that the secularist excesses are causing the problems:

The Secularist Muslims are not willing to work with the Mainstream Muslims. They are very insulting to the Muslims. They have even insulted Prophet Muhammad. In one of the Islamic countries, the Minister of Education insulted Prophet Muhammad--peace be upon him. The issue is not that simple. The Secularists are going to the extreme. They don't have respect for our Prophet. (Participant Number Sixteen).

Therefore, the conflict between the Mainstream and the Moderate Muslims seems to be somewhat deeper and larger than it appears in the literature. The Moderate Muslims were as forceful as the Mainstream Muslims with regard to the difficulty of a compromise between the two groups. For instance participant Number Eleven argued: "I don't think the conservatives can compromise. I wish they could compromise. The Conservative view of education is very different and it is hard for them to compromise." However, this is not the only view. Some participants were cautiously optimistic about the compromise between the Secularist and Conservative Muslims.

Cautious Optimism of a Compromise

When compromise was raised, the participants were divided into three groups--those who were pessimistic, those who were optimistic, and those who were neutral. For instance, among those who were optimistic, a Mainstream Muslim teacher argued that it was possible that Moderate and Mainstream Muslims could compromise particularly in the field of education but within the Islamic limits:

The way I look at it is that Islam dictates the way we live, does not mean that we all have to be like robots. Islam allows us to think, to express our ideas. As Muslims when we implement some ideas, we have to see if they are in accordance with the teachings of Islam. I may have other different ideas that may also be in accordance with Islam. Islam does not have a problem with different points of view. I'm more than willing to compromise with them on those things that Islam permits me to compromise (Participant Number Five).

Similarly, an Islamic scholar and teacher of Quraan and Arabic language at one of the schools asserted that Islam demands compromise, debate, understanding, and persuasion. He also argued that persuasion and dialogue were required not only among Muslim groups but with non-Muslims too, particularly Jews and Christians because "the Quraan says that we must use the best possible means of persuasion and debate with the 'People of the Book'--Christians and

Jews. Therefore, the same has to be done with the Secularist Muslims" (Participant Number Sixteen). Some participants echo this approach. Although the above point of view came from a Mainstream Muslim, some of the Moderate Muslims, too, supported this view. For instance, participant Number Ten, a Secularist Muslim argued that both sides need to compromise and must compromise, "It is possible to have a compromise because both sides need one another and must work together in education and other fields."

Islam and Science

Ten out of 16 participants--Moderate and Mainstream Muslims alike-agreed that there is no conflict between Islam and science in general. It is no surprise that six participants who are considered Mainstream Muslims think that sometimes there could be a conflict between Islam and science, depending on the branch of science or whether it is useful or not. On the other hand, most of the participants, who argued that there is no conflict between Islam and science, gave some evidence from the Quraan and the sayings of Prophet Muhammad to show the relatedness of science and Islam. Although there were differences in opinion when specific questions such as Darwin's theory of evolution was raised, most of the participants to a greater or lesser degrees pointed out that science and Islam went hand in hand.

Harmony between Islam and Science

Ten of the participants, including both Moderate and Mainstream Muslims, pointed out that there has always been a harmony between Islam and science. For example, a board member of one of the Islamic schools passionately defended Islam when the question about the conflict between Islam and science was raised:

I don't see any conflict between Islam and science. Revelation is science. What happened during the Muslim Golden Era and how science and development started in the World of Islam and then moved to the West? People who are realistically honest I know they will agree that most sciences and development started with Islam because Islamic education brought the light to the world. You can say science; you can say math.... Now, why are Muslims in trouble? It is because they are not practicing Islam or applying it the same way that the earlier Muslims did (Participant Number Fourteen).

One of the science teachers at one of the Islamic schools argued that some of the verses in the Quraan are closely related to biological science:

The more you study science, I think the closer to God you'll get. For instance, when you study biology, you'll see how God has created us. The iota, the main artery and circulatory system [is] mentioned in the Quraan. We discovered in science the circulatory system in the 1800s. But this was

there in the Quraan fifteen centuries ago. So, how can there be a difference between the Quraan and science? (Participant Number Eight).

Similar to this view, another teacher at one of the schools argued that, "There are many medical facts related to pregnancy and development of the fetus that are presented in the Quraan. There are many things in the Quraan that science has confirmed" (Participant Number Seven).

An Islamic school principal and teacher emphatically asserted that no conflict existed between Islam and science and quoted a verse from the Quraan to support his argument that God encourages Muslims to explore and discover what is in the world:

In Al-Imran chapter, the Quraan says "in the Creation of the heavens and the earth, there are signs for those who have understanding." Allah directs his servants to look at the earth and to look at the sky. Allah mentions so many scientific miracles in the Quraan that were not available to the human intellect when the Quraan was revealed 1500 years ago, and science is confirming all those miracles and ideas (Participant Number Five).

One of the students who considered himself a Secular Muslim presented almost a similar view regarding the harmony between Islam and science and rejected the view that Islam and science are at odds with one another:

Islam is part of science and science is part of Islam. The Prophet said that you should get education from the cradle to the grave.... Education includes science. Islam encourages science. Most of the scientific discoveries are supported by Islam. For example, the amount of water needed to clean dirt and how the rays of the sun can kill some germs and bacteria were discovered by Islam in the tradition of the Prophet long time ago (Participant Number Ten).

Although the majority of the participants--ten out of 16--agreed that there is no conflict between Islam and science, six participants argued that while there are no conflicts between Islam and science in general, some subjects related to biological sciences such as Darwin's theory of evolution could be contradictory to the teachings of Islam.

Disharmony between Islam and Darwin's Theory of Evolution: The View of the Majority

The majority of the participants, Moderate and Mainstream Muslims, indicated that there was no conflict between Islam and science. However, when the question of Darwin's theory of evolution was posed to the participants, most of them perceived the existence of a conflict between Islam and this theory. They argued that Darwin's theory was not a fact but a theory, and that it might not fall within the realm of science. Only three participants believed that there was no

conflict between Islam and Darwin's theory of evolution, whereas 13 of the participants held a different view. For instance, among those who rejected Darwin's theory of evolution, one of the teachers argued that it is just a theory that had never been proven. He also pointed out that he did a study and found that a Muslim biologist was the first to write about this theory:

Actually it is very interesting, I am a science teacher and my major is science. I actually did a paper on the contribution of Islam and Muslims to science. I did another paper on which the idea of evolution was discussed. A Muslim introduced the theory of evolution. Darwin got the credit. Darwin was a priest who took the theory of evolution as a revolution against the church even though Muslims introduced the theory of evolution. In the scientific circles there is no evidence that human beings came about in that way. I say that the theory of evolution is wrong. There is no link. It is just a theory (Participant Number Five).

Participant Number Five's argument that a Muslim biologist introduced the theory of evolution confirmed what has been reported in the literature review in chapter two of this study. Bayrakdar (1985) pointed out that an Islamic biologist of the Middle Ages, Al-Jahiz, presented his theory of evolution long before Darwin. One of the participants of this study, another Islamic teacher, tried to refute Darwin's theory of evolution. While making a similar argument with respect to the conflict between Islam and this theory and arguing his total

rejection of it, this Islamic teacher emphatically asserted that modern DNA has proven that human beings and apes are different:

I believe Islam disagrees with evolution. First of all, the Quraan says that human beings were created from clay.⁵ Evolution says human beings evolved from monkeys. I also think as an intellectual that it is not true. For example, <u>USA Today</u> reported that scientists discovered some DNA that shows that humans and monkeys do not have a similar DNA. So I think that evolution was something that was forced on people's throats. That is why everyone is turning to creation (Participant Number Four).

In almost similar terms, another Islamic teacher expressed his opposition to Darwin's theory of evolution describing it as unscientific, but accepting selective aspects of it:

I can't say there are no conflicts between Islam and science. There are certain sciences that are in conflict with Islam. For example, the first man on earth and how he was created. If we say Darwin's theory of evolution is a science, it cannot be proven. Apes are different species; men are different species. The genes of men and apes could be the same. That is in conflict with what we Muslims believe. Some people would say that we do evolve within species. For example, the muscle can get bigger if you

⁵ The Quraan also mentions "We [God] created everything from water" (XXI, 30). Some Muslim scholars try to relate this to what Darwin said about the beginning of life in general.

lift weight. In science, we call this hypertrophy. Basically, Islam and science go hand in hand. Science is knowledge. It comes from the One who teaches knowledge. Who teaches knowledge? It is Allah. Many scientists don't believe in the existence of the creator in the first place. That is the major obstacle.... We Muslims believe in the unseen. But many scientists do not believe in Allah and still they believe in molecules that are also unseen (Participant Number Two).

Similar to this argument, a principal and Islamic studies teacher of one of the schools concurred that Darwin's theory is totally wrong because not all scientists agree with it. He also asserted that the Quraan is against this theory and that all Islamic scholars oppose it:

There are other scientists who disagree with Darwin's theory of evolution. I think from the Islamic perspective...the only thing that Muslim scholars agree on is that there is absolutely no evidence in the Quraan that Adam or the human being was created from an ape and through evolution became a human being. That is absolutely not accepted by all Muslim scholars, and it is clear in the Quraan that God created Adam in a special way. The Quraan says: "We--meaning God--have bestowed on the children of Adam and made them in a special way." So they--human beings--are absolutely different from other animals and the rest of the creation. Therefore, there is no doubt in that. Other than that, evolution within the universe, the

animal kingdom, Islam does not go against it. When it comes to the height of human beings, for example, we are told [in Islamic traditions] that Adam was taller and larger than any human being. Now the height and size of human beings have decreased. If you want to consider that part of the evolution, we don't have problem with that (Participant Number Six).

It is important to point out that, this participant's views that all Islamic scholars agree about how Adam was created and that they all reject evolution were contradictory to what the literature review presented in chapter two of this study. For instance, Ziyadat (1986) presented five views of major Islamic religious scholars of both the Shi'a and Sunni sects in the Arab World and found out that four out of five of the scholars did not oppose Darwin's theory of evolution. He argued:

Muslim religious writers, except for Afghani, were not against evolution, although they warned against the uncritical acceptance of Darwin's ideas. They interpreted the theory of evolution in terms of Quraanic authority. Muslim thinkers attempted to read into Islam some of the non-Islamic and non-theistic concepts of modern science and asserted that these concepts really had roots in Islam (p.125).

According to Ziyadat (1986) the Islamic religious writers argued that, as long as Muslims believed that God had initiated the process of evolution, there was no conflict between Islam and evolution because the Quraan does not clearly

state whether the process of creation took place gradually or instantaneously. It is also important to point out that Dr. Jamal Badawi, one of the major Islamic scholars in North America, during a discussion at the University of Oklahoma, argued that he would accept the theory of evolution as a possibility with the belief that God was the designer of evolution. This view contradicts Participant Number Six's claim that all Islamic scholars are opposed to Darwin's theory of evolution.

Harmony between Islam and Darwin's Theory of Evolution: The View of the Minority

Two Moderate Muslims and one Mainstream Muslim did not perceive any conflict between Islam and Darwin's theory of evolution in general. However, as mentioned earlier, the majority of the Muslim educators--14 participants particularly the Mainstream ones--unanimously rejected the idea that human beings evolved from apes or that apes and humans came from the same species. The three participants who agreed with the theory of evolution pointed out that as long as they believed that God was the designer of creation who gradually carried out the process, there would be no problem with Darwin's theory of evolution as a whole. For instance, a Moderate Muslim student argued against the view that belief in God and belief in evolution contradict one another:

There is no conflict between Islam and evolution. Adam and Eve could have been created by God in a slow process, and nature is part of His

creation. You don't need to disbelieve in God to believe in evolution. If you believe that the world was created by itself, then it is a problem.

Common sense does not accept that (Participant Number Ten).

Another Moderate Muslim student made similar arguments in her views about the theory of evolution, but she adamantly rejected the view that apes and human beings had the same origin:

I don't perceive a conflict between Islam and evolution. If Islam emphasized the worship of one God, there is no conflict in believing how he did it through creation in a gradual process. Worshipping one God and believing in the theory of evolution don't contradict one another. I think that the conflict between the people who believe in creation and evolution is a conflict that the people created. As long as I believe that God existed long before the process of evolution began, I have no problem. I don't believe that there were six days of creation. I know that there was a systematic evolution that took place, and God was in control of it and He did it wisely. But I don't believe that the human being was a monkey or something else. I don't take this aspect of evolution. But as a whole I believe in evolution as part of nature (Participant Number Eleven).

Therefore, one would conclude that--although 13 out of 16 participants rejected Darwin's theory of evolution--the number of those who rejected this theory has risen when the question was raised as to whether human beings and

apes came from the same species. The majority of the participants--15 out of 16-were against this aspect of Darwin's theory of evolution. It is worth mentioning
that most of the participants did not distinguish between Darwin's view that the
ape and the human could have evolved from the same species, or the popular view
that the human evolved from an ape. Despite the clear difference between Muslim
educators as to the acceptance or rejection of Darwin's theory of evolution,
teaching this theory to Muslim students is also a controversial topic.

Teaching Darwin's Theory of Evolution

Eight out of 16 participants strongly argued that Muslim students should not learn the theory of evolution because it contradicts with the religion of Islam and that the Muslim teacher should teach creationism. On the other hand, only one participant pointed out that he would teach evolution alone in science classes if the Islamic studies teacher taught creationism. Two participants asserted that they would teach both evolution and creation in a comparative manner. Between these two extreme views, five of the participants were ambivalent about it, arguing that they would either teach the theory of evolution comparatively, critically, or side by side with creationism but emphasizing creationism.

Opponents of Teaching Darwin's Theory of

Evolution

This group of participants strongly argued against the teaching of the theory of evolution to Muslim students. They included eight of the participants. Three of them could be classified as "very Conservative Muslims," four were Mainstream Muslims, and one was a Moderate or Secular Muslim. To a greater or lesser degree the participants argued that Darwin's theory of evolution contradicts the teachings of Islam and that creationism is the only option for Muslim students anywhere in the world. For instance, one of the Islamic students pointed out:

Darwinian [sic] theory of evolution cannot be taught to Muslim students because it is contradictory to the teachings of Islam... It is better to avoid it because we Muslims take our concepts from the Quraan and Prophet's sayings. If Darwin says that the ancestor of the human and the monkey is the same, then we would say this is not true. The reason is that God made a difference between a human and an animal. One has reason while the other doesn't (Participant Number Thirteen).

Similarly, one of the Islamic students argued in strong terms that Muslim students should not learn this theory and that the only people who could learn it are the scholars or university professors who can study it critically:

I don't think that Muslim students in any level--secondary or college-should learn this theory of evolution because it contradicts our religion. It is also not a true story or scientifically proven theory. But it doesn't matter if Islamic specialists in biology and Islamic scholars in an individual way study it so that they can point at its defects and contradiction. In this manner, there is no problem because this way anyone will be able to read the books that are written by the scholars and researchers; they should be required to clarify and to show the contradiction and the problems in the theory of evolution. Therefore, when the people read it, they would be able to know that this theory has problems in it and that it contradicts our religion (Participant Number Fifteen).

This Islamic student was against the teaching of this theory even on a comparative or critical manner whether at high school or even at the college level. It is true that this issue could be an emotional one for some people because of their profound religious beliefs. However, few of the participants displayed any negative emotional reactions while discussing the theory of evolution. Although it was expected that strong emotional reactions toward the teaching of the theory of evolution might come from the very conservative Muslims, an Islamic student who was targeted in this study as a secular Muslim and who considered himself a moderate Muslim had strong feelings toward this issue:

You're mixing things and you're jumping into something. Why do you talk about conflict between Islam and evolution...? I cannot agree with the question because you're bringing Islam in the middle of something that all

religions disagree with. You cannot find a Christian who says I believe in Jesus Christ and at the same time believe in evolution. If you are talking about evolution and religion in general, fine. Don't use Muslims alone. Christians have the same problem. Jews have the same problem. They don't believe in evolution. This concept is not only the problem for Muslims (Participant Number One).

During the interview, the researcher explained to this Muslim student that, according to Ziyadat (1986), four out of five major Muslim religious scholars in the Arab World accepted the theory evolution as a possibility. It was also made clear to the participant that both Shi'a and Sunni Islamic scholars point out that as long as a Muslim believes that God started the whole process of evolution, it does not make much of a difference if creation was a slow or instantaneous process. However, the participant had strong feelings toward the interpretation that favors creationism.

Proponents of Teaching Darwin's Theory of Evolution

The proponents of Darwin's theory of evolution were the Secular or Moderate Muslims who want to teach it either separately or along with creation. One of the Islamic students pointed out that it is better to teach the theory of evolution exclusively if the teacher of the Islamic studies covers creation in his or her classes. However if the Islamic studies teacher does not deal with the theory

of evolution, then he as a science teacher could teach both evolution as well as creation to the Muslim students:

If the students are taught in Islamic studies, they [will] get the information they need about creation from that class. I'll just teach them only science and evolution. But if creation [was] not included in the Islamic studies period, I would teach both evolution and creation comparatively. I would show both the similarities and the differences between the two without trying to sway the students that way or the other (Participant Number Ten).

Another secularist or Moderate Muslim teacher pointed out that she could teach both evolution and creation in her science classes:

We are talking about studies that are there. There is nothing wrong if we teach those things such as evolution. The students could be taught evolution. But Islam has to be ingrained in the students before we teach them those things. I would elaborate the theory of evolution in comparison with what Islam says. Science in general is great and it falls within Islam...so I would not ignore it [evolution]. I would find a way to bring it in the classroom in comparison with what the Quraan says. I would point to the areas where it contradicts with the Quraan (Participant Number Nine).

Similar to this point of view with respect to teaching Muslim students Darwin's theory of evolution, another Secularist or Moderate Muslim student almost totally agreed with this theory. However, she argued that, although she did not believe that human beings and apes evolved from the same species, she would not hesitate to teach Muslim students the theory of evolution including the view that humans and apes could have come from the same species:

I would take into consideration the students' emotional and cognitive maturity before I teach them evolution. When they are around 14 or 15 years of age, I would teach them evolution as well as creation in general manner. I would teach evolution by bringing God to it. I would accommodate what the Quraan said and teach the two in a comparative way and also [show] the similarities between the two. The people who believe that the ancestor of human beings was a monkey look at one side of evolution. They don't look at the Darwin's theory as a whole and they don't look deeply at the issues in the theory (Participant Number Eleven).

Although these participants who supported the teaching of Darwin's theory of evolution and who would accommodate it with the story of creation as described in the Quraan represented a small minority among the Muslim educators, there were many Muslim educators who expressed ambivalence toward this theory. This group of Muslim educators would select some aspects of evolution in their teaching.

Ambivalence toward the Teaching of the Theory of Evolution

Five out of the 16 participants in the study were to greater or lesser degrees ambivalent about teaching the theory of evolution to Muslim students. Their views could be divided into three similar categories: a) teaching the theory of evolution at a middle school level separately without mentioning that humans and apes evolved from the same species, b) drawing comparisons and contrasts between creation and Darwin's theory of evolution critically, and c) teaching evolution critically at a college level when the students are mature enough.

One of the participants, a science teacher at one of the schools, argued that she would teach Darwin's theory of evolution in general; but she would ignore Darwin's view that the humans and apes evolved from the same species:

I would teach evolution separately. I would introduce just the theory of evolution. I would for example talk how organisms developed. I would introduce that thought. But definitely when I relate it to Islam, I would relate the idea of organism development in the Quraan that the origin is one cell, and then cells divide and form different tissues. Even a single cell organism divides into two.... I would avoid teaching my students that humans and monkeys came from the same origin. I would not include that in my lecture. However, since we follow in our curriculum the State Department of Education Guidelines, there are certain objectives that we have to teach. Therefore, I would introduce it in a general way. But I

would not emphasize it or discuss the whole theory of evolution such as the aspect that says that the origin of humans and monkeys is the same species (Participant Number Eight).

Unlike this Mainstream science teacher who would select some aspects of Darwin's theory in her teaching, another Mainstream Muslim science teacher pointed out that he would critically approach Darwin's theory of Evolution in a detailed manner to give the students a broad view of what it involves. But he emphatically asserted that he would also teach creation in the Quraan as the only truth:

So to teach the idea of evolution to students it [sic] is OK. I do not see any conflict in Islam. One of the 99 names or qualities of God is "the One who evolves things." This is part of Islamic belief. But, Islam tells us how to believe.... It tells us still the vehicle that started the process of evolution is Allah. He initiated the whole process. I would teach evolution to the students in a very objective way. I would tell them that there is a group of scientists who believe that evolution is the process that led to the evolution of man. I will teach them that it is a theory and I am objective about that. At the same time, I would teach them what Islam has said in the Quraan is the whole truth.... I would teach them that evolution is a process that is bound within a species. It is a process that can be observed within a species. It has not led to the creation of another species. It does not change

animals to other animals. There is a missing link between one species and another. Even today Science has not proven Darwin's theory of evolution (Participant Number Five).

One of the Islamic studies teachers pointed out that he would not teach it in either the elementary or the secondary school, but in the college level he would teach the Muslim students creationism and also Darwin's theory of evolution in a comparative and critical fashion:

I would not teach evolution to [the] elementary or secondary school students. But when the students are mature enough at college level, when they are able to comprehend well, when they are able to analyze things well, then I would teach them the theory of evolution. I would not mind teaching them evolution in addition to creation in the Quraan. They should know that. We should provide them with the facts about creation and evolution (Participant Number Six).

An Islamic school board member expressed a similar ambivalent view regarding the teaching of Darwin's theory of evolution. He pointed out that it is not an issue yet in his elementary school. However, at high school, under certain conditions, he would encourage teaching evolution in a comparative and critical way:

Before I tell the teachers to teach it, I would first research about the topic. I don't exactly know what Islam says about this topic. I don't know now

very well what scientists say about the theory of evolution. If it has been proven, I have no problem. But if not, then I would give the students the information about creation in the Quraan and at the same time what the theory of evolution says (Participant Number Twelve).

It is important to point out that the ambivalent views about the teaching of the theory of evolution to Muslim students included some teachers, board members, and students majoring in education.

Harmony between Islam and Astronomy

All of the 16 participants, including the most conservative and the most secular Muslims, agreed that there is no conflict between Islam and astronomy. Moreover, all of the participants rejected the view of the chairperson of Saudi Arabia's Highest Council of Religious Opinion, Shiekh Bin Baz and his two books that claim that the earth is flat and that the sun revolves around the earth. As indicated in the historical background and the literature review of this study, Hoodbhoy (1991) discussed these two books, arguing that Shiekh Bin Baz issued a *Fatwa* or a religious opinion in one of the books that anyone who did not take the Shiekh's view would be considered a disbeliever.

All the participants pointed out that Shiekh Bin Baz's books do not pose any instructional or curricular difficulties for Muslim educators in Saudi Arabia or in any Islamic country. These views included participants from Saudi Arabia who revere and follow Shiekh Bin Baz particularly for his status as the chairperson of the Highest Islamic Council that issued Fatwa or Islamic disciplined religious opinions in Saudi Arabia. However, they all argued that they do not follow him in an area outside his specialty—Islamic jurisprudence. Contrary to Shiekh Bin Baz's view, two of the participants, an Islamic student and an Islamic studies teacher, argued that the Quraan indicates that the earth is round or oval, but Shiekh Bin Baz had a different interpretation (Participant Number Fifteen and Sixteen). Others asserted that although Shiekh Bin Baz was highly respected in Saudi Arabia and in the Islamic world, his views and opinions would be followed only as long as they are in the area of Islamic jurisprudence. They also gave reasons why they opposed the Shiekh.

Reasons for Rejecting Shiekh Bin Baz's View

The Islamic educators presented three major reasons why they rejected Shiekh Bin Baz's views that the earth is flat and stationary and that the sun revolved around the earth. First, if an Islamic scholar gives a religious opinion in an area outside his or her specialty, no one is obliged to take that opinion. Second, unless there is a consensus among all Islamic scholars on an issue, it is not binding. Third, Shiekh Bin Baz in the end recognized that he made a mistake and changed his mind. For instance, one of the participants, an Imam (or the person who leads prayers in the mosque) and also a teacher in one of the schools, pointed

out that no one takes this view for granted because Shiekh Bin Baz did not specialize in the area of astronomy:

This issue of astronomy was discussed by Dr. Tareq Sueidan, [an Islamic scholar] who said that Shiekh Bin Baz's specialty, as a Muslim scholar was figh or Islamic jurisprudence. He [Dr. Sueidan] said that in many Islamic countries an Islamic Council of Figh or jurisprudence invites scientists before it makes a fatwa, a religious opinion or ruling about any scientific matter. So, I believe that in such issues as well as other scientific matters, the council follows this procedure. Therefore, the Islamic scholars and scientists work together to decide on matters that involve science or astronomy because the scientists know something that the Islamic scholars do not know, and the Islamic scholars know what the scientists do not know. For example, [during the medieval era] Fakhradin Alrazzi was a great scientist and an Islamic scholar. Nowadays you do not find that. You need specialization in both science and Islam so both can work together. I think if Shiekh Bin Baz made this opinion, we are not bound to follow him in this area because it is not his specialty. His specialty is figh [Islamic jurisprudence]. We can follow him in that. Science is not telling us what the Shiekh said. Science is telling us that the earth is round and that is what we have to accept (Participant Number Four).

Another participant, an Islamic scholar and the Quraanic studies and Arabic language teacher at one of the Islamic schools, pointed out that whatever any Islamic scholar says in any matter may be rejected provided that there is not a consensus of all Islamic scholars:

If any Muslim scholar issued any fatwa, [an opinion] we [could] reject it if the other Muslim scholars do not agree with him. Shiekh Bin Baz said that the earth is flat. We do not agree with him because the majority of the Muslim scholars [did] not agree with his view. Three things are important for a fatwa to be binding: a verse from the Quraan, a Hadith [saying of Prophet Muhammad] and a consensus of the Islamic scholars.... But if there are differences in opinions among Islamic scholars, you may or may not take this or that opinion.... When we look in the Quraan, it says, according to many interpretations that the earth is round. For example, if we look at chapter 91, verse six of the Quraan, we will find that Allah made the earth rounded. So what the Shiekh Bin Baz said about this issue is not important (Participant Number Sixteen).

Similarly, an Islamic student pointed out that many Muslims in his country interpret verse six of chapter 91 of the Quraan that the earth is round: "Many people in my country even the villagers say that the adjective that describes the earth in chapter in verse six of chapter 91 of the Quraan means rounded or make round. We know the earth is round" (Participant Number Fifteen).

One of the Islamic students expressed a different point of view with regard to Shiekh Bin Baz. He argued that the Islamic scholar made a mistake and in the end changed his mind about his view that the earth was flat:

Shiekh Bin Baz is a human being, and every human being makes mistakes. If he said that the earth is flat, he made a mistake.... This does not cause a problem for a Muslim teacher in Saudi Arabia or any other Muslim country. I have heard that Shiekh Bin Baz changed his mind even though he believed and wrote that the earth was flat. But finally, he corrected himself (Participant Number Thirteen).

Islam and Philosophy

Eight out of the 16 participants perceived a conflict between Islam and philosophy. However, when the issue of teaching philosophy was raised, three views emerged. One view held that Muslim teachers could teach Muslim students at an appropriate age the subject of philosophy without any reservation. A second view rejected the teaching of philosophy to Muslim students completely, and a third view was ambivalent about this subject.

Conflict between Islam and Philosophy

Almost all the participants who perceived a conflict between Islam and philosophy were Mainstream Muslims. Only one Moderate Muslim believed that

Islam and philosophy contradict one another. For instance one of the school board members who opposed the teaching of philosophy pointed out that Islam encourages simplicity and ease and is against complication as found in philosophy:

As an educator, I would not teach the subject of philosophy. But if somebody tried to reinforce his knowledge to compare what philosophers say and what Islam says to explain philosophy to the people then it is OK. But to teach philosophy with Islamic point of view, I don't think that this is right. Islam says be simple and easy and keep things simple and easy. If you make things complicated in philosophical way and try to argue about Islam saying why Islam is this way or that way, then it becomes tough (Participant Number Fourteen).

One of the Mainstream Muslim participants, an Islamic school science teacher, expressed a similar view with regard to philosophy:

I have taken courses in Greek philosophy and religion. The main question they try to ask is who am I, and what is my purpose on earth. And they try to walk around this question by walking around the big question: does God exist? That is how I look at philosophy. I believe there is a conflict between Islam and philosophy. Islam encourages you to be vast, to think in a vast way. It removes all the shackles and the narrow thinking (Participant Number Five).

A similar Mainstream Muslim point of view came from an Islamic student who argued: "Philosophy is not practical and...it contradicts Islam because many Muslims who were engaged in philosophical arguments were deviated from their religion and became confused" (Participant Number Fifteen). Similarly, a Moderate Muslim argued that he would ignore Greek and Western philosophies that contradict Islamic religion but he would teach Christian and Jewish religious philosophies only:

I would ignore philosophy. We can't play it both ways. We have to be honest with ourselves. If you believe in philosophy in a way, you're ignoring some of the Islamic laws. Why do you have to confuse the Islamic students? No, I would not teach Greek and Western philosophies. What I would do in order to allow the students to understand and to know exactly about Islamic knowledge and to have them acquire enough knowledge about other religion[s], I would teach them the counter philosophy of religion in general. I would not teach philosophy as philosopher talk about, but philosophy of Christian religion and Judaic religion. I would go deeply into Christian denominations such as Protestantism, Catholicism, and give them a wider picture to see (Participant Number One).

No Conflict between Islam and Philosophy

The participants who perceived no conflict between Islam and philosophy represented five Moderate Muslims and three Mainstream Muslims. The Moderate Muslim point of view was that since Muslim students know their religion, have a good background in Islam, and know their God, they would not have a problem with philosophy and philosophical views will not threaten or shake their faith. Similarly, the Mainstream Muslims argued that one cannot avoid philosophy because Muslims can use it as a tool to argue with others and that many Muslims have found it helpful in understanding others.

Proponents of Philosophy: The Secular Muslim Perspective

A similar theme ran in the views of the Moderate Muslims regarding philosophy. Most of these participants argued that any philosophy contradictory to Islam might not shake the good foundation the Muslim student has in Islam. For instance, one Moderate Muslim student pointed out, "When I was studying philosophy, I remember my professor of philosophy back home telling me that I should hang my religion outside the classroom before I came to his philosophy class. I had a good background in Islam and I did not have a problem with philosophy" (Participant Number Eleven). Similarly, another Secular or Moderate Muslim student argued that the Quraan talks about different philosophies that

contradict Islam, and the Fourth successor to Prophet Muhammad was tolerant of people who studied philosophy and ignored the five, obligatory daily prayers:

Islam in general and Quraan talk about different philosophical views and opinions that different people have. So why should there be a conflict? There is no conflict. I would teach philosophy. For example during the time of Ali [Prophet Muhammad's fourth successor] there were people who were engaged in philosophy and who did not believe in God or perform the five obligatory prayers. When Ali heard about them, he said leave them alone (Participant Number, Ten).

A Secular or Moderate Muslim teacher argued that there is no conflict between Islam and philosophy and that she would not avoid the topic, but she would teach it comparatively when the students have acquired a solid knowledge about Islam:

I don't mind listening to the opinions of other Islamic scholars--such as Shiekh Ibn Taymiyyah or Shiekh Ghazzali who oppose philosophy--and then I come with my own opinion. Whether I should follow this or that Islamic scholar, I think every teacher should make her own opinion.... I don't believe in avoiding things because those things are going to come up, and someone would ask the students about such things as philosophy. If they are not prepared, they wouldn't know anything about it, and they would be in a worse condition. For young students, it is not appropriate. I

would start it when students reach teen age. The younger ones would get confused to learn philosophy. But to seventh grade students, I wouldn't mind teaching them philosophy. But it has to be done in a comparative way (Participant Number Nine).

Mainstream Muslims argued that philosophy has some usefulness because it can be used as a weapon for arguments and it is something unavoidable in to-days world. For instance one of the Islamic teachers pointed out that philosophy has to be made accessible to Muslim students but at a higher level:

A Muslim might come across this philosophy in one place or another. We need to have a weapon. If the student at a higher level can have an access to philosophy, we have to make some explanation about Islam for the student because not everyone has the same understanding of Islam. Islam has branched out (Participant Number Two).

Similarly, an Islamic teacher pointed out "there is something in philosophy that we should study. There is something that is useful in philosophy. We should also teach and study the philosophy that does not agree with Islam because it is out there" (Participant Number Four).

Teaching of Philosophy: The Ambivalent Perspective

Eight of the Mainstream Muslim participants to greater or lesser degrees were ambivalent toward the teaching of philosophy to Muslim students. While

they recognized that certain areas of philosophy are in conflict with Islam, they argued that Muslim students could learn philosophy but only under certain conditions. For instance, one of the Mainstream Muslim participants, an Islamic studies teacher, argued that moderation is needed, and that he did not support the teaching of philosophy in its entirety nor was he against teaching it in a general manner:

Islam is the religion of moderation. It would not go to this or that extreme when it comes to philosophy or other issues. I would not agree with those who say that we should not care about philosophy or others who argue that we should get rid of philosophy. This is an extreme.... The other extreme point of view is to get oneself engulfed into philosophy, to accept it completely, and to get lost in it. I think we need philosophy, we need logic, and the history of Islam testifies to the fact that there [were] great internationally known Islamic philosophers. For example, Abulhamid Alghazzali [Islamic philosopher of the medieval period] wrote wonderful books on Greek philosophy and the Islamic perspective on that. So Islam is not against philosophy, but Islam puts philosophy in an appropriate perspective. Therefore, we can teach Greek, Western, Christian, or Jewish philosophy in a comparative way (Participant Number Six).

An Islamic scholar and a teacher of Quraanic studies at one of the Islamic schools expressed a similar view. He argued that he disagrees with one of the

major Islamic scholars of the medieval period, Shiekh Ibn Taymiyyah, who warned against the teaching of philosophy. This Islamic teacher pointed out that although he was aware of the problems involved in philosophy and its conflicts with Islam, he asserted that he would teach it comparatively to Muslim students. His justification for teaching this subject was because he saw benefit in it, and because Muslim students would be able to argue and to persuade others using their knowledge of non-Islamic philosophy:

I know that a major Islamic scholar such as Ibn Taymiyyah is against the teaching of philosophy. I follow Shiekh Ibn Taymiyyah in many figh [Islamic jurisprudence] issues, but I disagree with the Shiekh in his view in philosophy. Let us suppose that a Muslim scholar...or even student wants to discuss or to argue with some people who talk from a Greek philosophical point of view or a Marxist or Communist perspective. If that scholar or student is not well prepared and if he [she] does not know these philosophies, he will lose the argument. If I as a Muslim want to persuade others to Islam, if I don't know their philosophy, I will not convince them. So there is no conflict between Islam and philosophy if we can use philosophy for a purpose. We can teach it to the students and we can compare and contrast it with the Islamic philosophy (Participant Number Sixteen).

Islam and Mythical Stories

Similar to the split in philosophy between the two groups, the views of the participants with respect to mythical stories were divided in two. Eight out of 16 participants perceived a conflict between Islam and mythical stories, whereas an equal number perceived no conflict at all. However, differences could be seen when the question of teaching mythical stories was raised. For example, three Muslims were against mythical stories and categorically rejected the teaching of these stories. On the other hand, four Muslims argued that there is no conflict between Islam and mythical stories and that Muslim teachers could read them to their students. Nine of the participants argued that a Muslim teacher could teach mythical stories in a limited, comparative, and critical manner.

Rejecting the Teaching of Mythical

Stories

Almost all of the opponents of the mythical stories argued that these stories could be contradictory to Islamic religion, could cause confusion to Muslim students, could affect the students negatively, and therefore, only realistic stories must be taught to Muslim students. For example, an Islamic school board member, argued that, "Mythical stories do not agree with Islam and a Muslim cannot teach mythical stories because they confuse Muslim children. The teacher

should emphasize realistic stories and stories of the companions of Prophet Muhammad" (participant Number Fourteen). Similarly, a Muslim student who supported this view pointed out that, "Myth is for the people who lack and need some security. It gives them some explanation for the mysteries of life and a hope to continue to live. But for a Muslim who has the knowledge of the Quraan and the belief in God, there is no need for mythical stories" (Participant Number Fifteen). A Mainstream Muslim student, who supported this view, asserted that teaching mythical stories could have a negative effect on Muslim children:

If I am going to teach a Muslim child stories whose characters are mythical and unrealistic, that story is going to stay in the child's mind and it is going to affect that child. We have to know that there are no advantages that a Muslim child could get from these stories. What benefit does it have for a Muslim child? (Participant Number Thirteen).

Teaching Mythical Stories with Some Restrictions

Most of the proponents of the mythical stories argued that Muslim students who had a strong background in Islamic studies would have no problem with mythical stories because they know and understand that these stories are not real. Some of the participants argued that mythical stories would have some advantages, such as stimulating the children's thinking, provided that they were not the main or the only reading and as long as mythical stories were not insulting

to any religion. Others thought that since the Quraan portrays mythical stories in a critical manner, a Muslim teacher could teach them in a similar way. For instance, one of the teachers pointed out that, "Muslim students know make-belief, mythical, and fairy tales and stories. They also know their God and religion. No, there is no problem in mythical stories. I would not exclude the mythical stories from the syllabus (Participant Number Three). Another teacher, expressing a similar view, argued that she could teach mythical stories side by side with other Quraanic and realistic stories:

If the Islamic foundation of the students is strong and if they know the Quraan and have faith, mythical stories are not a problem. I would teach Muslim students mythical stories. I would also teach them Quraanic stories and other non-Islamic stories.... I would try to emphasize Quraanic stories and realistic stories. But there is no problem with mythical stories too. This is how I was brought up in an open way (Participant Number Seven).

Some of the participants, such as an Islamic Secular or Moderate student, argued that mythical stories have many advantages, such as stimulation of the child's imagination. But they also pointed out that they would not allow these stories to occupy a central place in the reading list:

I think that it is good to have children read mythical stories...something that stimulates their imagination. But I would not let myth go out of hand.

I would keep the Islamic curriculum as much as possible to be in line with the teaching of the Quraan. But at the same time, I don't mind reading mythical stories to the students without giving it too much emphasis in the reading assignments. However, I would not let myth go out of hand. I would not teach students any mythical stories that are intended to insult Islam or any other religion (Participant Number One).

Similarly, one of the Islamic students majoring in education argued that myth was useful to people throughout history because it was created so that people could deal with their problems and find some explanation for them:

No, I don't think that myth contradicts Islam. Myth was created because in the past people had no source of finding scientific bent or scientific issues. So they created myth in order to deal with their problems and things that puzzled them. For example, they were puzzled why there was a difference between day and night. They did not know astronomy or other sources of information that could answer their questions. Therefore, they created myth. When children are young; they need imagination for their psychological development. We cannot take myth away from them. But when they get older, we can tell them that those are myth and fairy tales.... I don't think that a ten-year-old child believes in Cinderella, but a four-year-old child believes in Cinderella because that helps him [or her] to develop at a certain point in their age (Participant Number Eleven).

Teaching Mythical Stories Critically and Comparatively

The majority of the participants argued that the Islamic teacher could teach Muslim students mythical stories in a restricted, comparative, or critical way. For instance, one of the teachers at one of the schools pointed out that, since the Quraan includes some mythical stories and portrays people who believed in a myth, it would not be problematic to teach Muslim children about mythical stories in a comparative and critical manner similar to the Quraanic approach:

The Quraan tells us about myth and that there were people in the past that believed in idols and worshipped them because these people believed that the idols would bring them closer to God. So, we have to teach mythical stories with the concept of oneness of God and we should teach myth in a comparative and critical way (Participant Number Five).

This view was supported by one of the principals and teacher of Islamic studies, who argued that teaching mythical stories is similar to teaching stories from the Quraan that critically relate the life of non-believers such as the Pharaoh of Egypt and the subjects of the Queen of Sheba:

There is no problem for a Muslim teacher to teach mythical stories in a critical way or in a comparative way. From the Islamic perspective, an Islamic educator would go about mythical stories in a comparative way. Islam is based on knowledge and learning. We are not restricted to learn only about Islam.... We must be open to learn about other people's

religion. The Quraan tells about stories of other people who were believers and non-believers. So, it is extremely important to understand others. The Quraan tells us about the Queen of Sheba and what she and her people [used to] worship before they became Muslims⁶. The Quraan tells us also about Pharaoh [of Egypt] and so many others. So there is no problem for a Muslim teacher to teach any stories including mythical stories in a comparative way (Participant Number Five).

Summary of the Findings

The purpose of this chapter was to present the findings of the study as related to the issues that could pose problems for a Muslim educator: 1) the conflict between Islamic Secularism and Islamic Conservatism and the possibility or impossibility of a compromise between the two groups with respect to education, 2) science, particularly the theory of evolution and astronomy 3) philosophy, and 4) mythical stories. Findings that emerged from the data were divided into four sections based on the two research questions. Section one presented the various perceptions of the participants as related to the first research question dealing with the conflict between Islamic Secularism and Conservatism

⁶ From the Islamic perspective, all the believers in monotheistic religions starting with Adam are Muslims.

regarding Islamic education, and whether a compromise between the two groups was possible.

Section two, three, and four were related to the second research question as to whether the Islamic educators perceived that science, philosophy, and mythical stories are in conflict with Islam, and whether these topics pose curricular and instructional difficulties for Islamic educators. Section two presented the perceptions of the participants that no conflict existed between Islamic religion and science in general. It also presented the views of the majority arguing that Islam and Darwin's theory of evolution were in conflict with one another, and the minority view that there were no major conflicts.

Section two also presented the three views, supporting, opposing, and ambivalent toward the teaching of Darwin's theory of evolution to Muslim students. The unanimous view of the participants that astronomy did not contradict Islam, and that Islamic educators could teach it without hesitation was also included in this section. The various views of the participants about the existence or the nonexistence of the conflict between philosophy and Islamic religion were presented in section three. This section also focused on the views that supported the teaching of philosophy, the views that opposed it, and those that were ambivalent about teaching it. Finally, the findings in section four included the views of those who perceived a conflict between mythical stories and Islam and those who did not. This section also presented the views of those who

opposed the teaching of the mythical stories, those who would teach them, and those who were ambivalent toward teaching them.

CHAPTER V

CONCLUSIONS AND RECOMMENDATIONS

Introduction

This chapter begins by restating this study's main findings and compares them to some of the items in the related literature. Grounded theory methodology and multiple source approach were used to explore the perceptions of Islamic educators in a southwestern state about the conflict between Islamic Secularism and Conservatism regarding Islamic education. This study also explored the educators' perceptions as to whether science, philosophy, and mythical stories are in conflict with Islam, and whether these educators can teach these topics to Muslim students. The study sample included Islamic educators and students preparing to become educators from various Islamic countries and the Unites States. Observation of classroom teaching and semi-structured, in-depth, face-to-face interviews were utilized to collect data of the study. A number of conclusions can be drawn from the data of this research. As soon as data collection began to progress, it became clear that almost all of the perceptions of the Islamic educators were diverging into two to four different categories.

As related to the first question, those who perceived conflict between Islamic Secularism and Islamic Conservatism with respect to Islamic education were divided into three: a) Mainstream and Moderate Muslim participants on both

sides and how each group perceived the other, b) participants who were pessimistic about compromise between the two groups regarding Islamic education, and c) participants who were cautiously optimistic about a compromise with respect to Islamic education. As related to the second question whether science, philosophy, and mythical stories contradicted Islam, different views emerged. In the category of science, the views of the participants fell in two divisions: those who did not perceive any conflict between Islam and science in general, and those who thought that some topics such as Darwin's theory of evolution were contradictory to Islam.

Only in astronomy all the views converged. All the participants perceived no conflict between Islamic religion and this branch of science, and no one expressed any difficulties in teaching any aspect of modern astronomy to Muslim students. Regarding Darwin's theory of evolution, four groups emerged: one group of participants opposed the teaching of that subject, another group supported teaching it, a third group supported the teaching of both evolution and creation, and a fourth group was ambivalent about the teaching of Darwin's theory of evolution. With respect to the teaching of philosophy and mythical stories, there were opponent, proponent, and ambivalent views. Theory development that would explain the issues in Islamic education and implications of this study for Islamic education are presented at the end of the conclusion.

Conflicts

Concluding remarks about the four areas of conflicts are made in this section. The four conflicts are between: conservative and secular Muslims, science and Islam, philosophy and Islam, and mythical stories and Islam. In addition to the conflicts, in this section a parallel is drawn between the study's findings and the literature review.

Secular and Mainstream Muslims

With respect to the question as to whether the Islamic educators perceived a conflict between Islamic Secularism and Islamic conservatism, consistent with the literature, the majority of the participants--14 out of 16--argued that a conflict existed between the two Muslim groups regarding education and other institutions. Seven out of 16 participants were pessimistic about a compromise between the two groups. Five participants were optimistic and four were neutral. The Secularist or Moderate Muslims, consistent with most of the literature coming out of the Islamic World, accused the Islamists or Mainstream Muslims of placing more emphasis on religious, humanities, or conceptual subjects.

On the other hand, the Islamists or the Mainstream Muslims refuting this view accused the Secularist Muslims of trying to separate Islam from other institutions including education. However, based on the researcher's observations

and assertions of the teachers at least in the Islamic schools in the southwestern state, the academic emphasis seems to be on all religious and non-religious subjects. All three schools follow almost the same textbooks of their respective districts and also the State Department of Education guidelines.

Islam and Science

A majority of the participants--10 out of 16--did not perceive a conflict between Islam and science in general. Six participants argued that Darwin's theory of evolution in general contradicted Islam. Out of 16 participants, 14 perceived a real conflict between Islam and Darwin's theory of evolution, particularly the view that human beings and apes came from the same species. Most of the participants argued that this theory is not a proven scientific fact. Only two of the participants perceived no conflict between Islam and Darwin's theory of evolution as a whole.

As to whether the educators could teach the theory of evolution or not, four groups emerged. Half of the participants were against teaching it, one participant pointed out that he would teach it in its entirety, two participants said that they would teach both creationism and Darwin's theory of evolution, and five participants were ambivalent about it, arguing that they would teach selective sections of it. The researcher concluded that these findings are not consistent with one of the major studies on this subject. For instance, (Ziyadat, 1986) showed

part of the twentieth century expressed their acceptance of Darwin's theory of evolution. These scholars argued that if they believed that God initiated creation, then it would make little difference if the process took place gradually or instantaneously. However, the majority of the Islamic educators oppose this view. Therefore, this issue may remain to be controversial among the Islamic educators.

With respect to astronomy, all the participants strongly argued that no conflict existed between Islam and astronomy. Therefore, it is fair to conclude that—although one of the studies (Hoodbhoy, 1991) pointed out that Shiekh Bin Baz, a major Islamic scholar and the chairperson of the Highest Council for the Issuance of Religious Opinions in Saudi Arabia was against modern astronomy—no participant supported Shiekh Bin Baz's view. According to Hoodbhoy, Shiekh Bin Baz authored two books rejecting the fact that the earth is round as proven in modern astronomy. Therefore, this raised the question that astronomy may be a problem for some Islamic educators. However, even the most conservative Saudi Arabian participants in this study disagreed with Shiekh Bin Baz regarding his views that the earth is flat. Therefore, Muslim educator in Saudi Arabia or elsewhere have the choice to accept or reject Shiekh Bin Baz's view as they are not required to abide by it. Therefore, this issue does not seem to pose instructional and curricular problems for the Islamic educators.

Islam and Philosophy

The participants fell into two equal groups when the question whether philosophy contradicted Islam or not was raised. However, with respect to the teaching of philosophy, three different views emerged: those who rejected philosophy, those who accepted it, and those who were ambivalent about it. Three participants were against the teaching of philosophy, five supported it, and eight were ambivalent toward it, arguing that they could teach it at high school or college level in a comparative or critical manner. Therefore, it is fair to conclude that these findings are somewhat consistent with the related literature of this study that there are differences in opinion among Muslim scholars about the teaching of philosophy.

Islam and Mythical Stories

Perceptions of the Islamic educators with respect to mythical stories were similar to those of philosophy. Eight participants perceived a conflict between Islam and mythical stories, while eight others did not. However, when the issue of teaching mythical stories was raised, three views emerged. Three participants were against the teaching of mythical stories, four were for it, and nine were ambivalent, arguing that they would teach these stories in a limited, comparative, or critical way. Again this is somewhat consistent with the related literature of this

study that shows that some Muslims are against myth (Boullata, 1990). Therefore, it depends upon the Muslim educator whether he or she considers mythical stories as useful to the imagination of children or contradictory to the Islamic religion. Therefore, Muslim educators have different views about Islamic secularism and conservatism, Darwin's theory of evolution, and philosophy. However, they all have the same view in modern astronomy.

Theory Development

The focus of this grounded theory study was to develop a theory that would explain the issues that cause conflicts in Islamic education. Based on the findings of this study the theory that emerged was there are multiple views related to the issues in Islamic education. Specifically, there are two views regarding the conflict between Conservative and Secular Muslims related to Islam and science. One view is there is no conflict; the second is there are conflicts related to the teaching of science.

There are three views about the compromise related to Islamic education.

The first view is that compromise between Conservative and Secular Muslims is possible, the second view is no compromise is possible, the third view is that there may or may not be the possibility of compromise.

There are also three views related to the teaching of philosophy, the theory of evolution, and mythical stories. The three views are the theory of evolution

should not be taught, it could be taught without any problem, and it should be taught critically and selectively.

The exception to this theory of multiple views is astronomy. Both the Secular and the Conservative Muslim educators agreed that astronomy was not in conflict with Islam and it could be taught to Muslim students.

Implications for Islamic Education

This study has some implications for Islamic education. First, in accordance with the teachings of the Quraan and the traditions of Prophet Muhammad, Muslim educators must remember that a compromise between Conservative and Secular Muslims in Islamic education is a necessity. Second, Conservative and Secular Muslim educators must engage in a constructive dialogue and amicably debate the divisive issues in Islamic education so that they could narrow the gap between them. Third, the teaching of the theory of evolution, philosophy, and mythical stories in Islamic schools might not be excluded from the Islamic academic curriculum and could at least be taught critically. Islamic educators who oppose the teaching of these subjects to Muslim students must bear in mind that the Quraan, the traditions of Prophet Muhammad, and the consensus of Islamic religious scholars do not prohibit these topics.

RECOMMENDATIONS FOR FUTURE RESEARCH

The perceptions of Islamic educators regarding the conflict between Islamic secularism and Islam Conservatism, science, philosophy, and mythical stories presented in this study are quite varied. There is no doubt that almost all of the issues are controversial and need to be re-examined in light of a larger sample that includes perception of Islamic educators, board members, administrators, and Islamic students majoring in education in other states. Other studies that focus on the perceptions of the faculty of one Islamic college or university in America or comparing views of other faculty at other Islamic universities in the United States would be useful as they may show similarities or differences with the present study. Diverse samples from different states or regions are also needed.

New rounds of data collection representing a larger section of Islamic schools and educators in some of the Islamic regions or countries might help in adding something to the categories, or they may refine and elaborate on them. A national or regional comparative study of perceptions and views of Islamic religious scholars in the United States regarding the possible conflicts between Islamic Conservatism and Islamic secularism, as well as whether science, philosophy, and mythical stories are in conflict with Islam, might shed more light on the present study. It would also serve as a guide to help schoolteachers deal with these issues in making specific curriculum decisions.

A future implication for future studies is the need to conduct a study of the Islamic schools with high school students to determine whether Darwin's theory of evolution is taught in these schools exclusively, selectively, or in comparison with creationism. Additionally, longitudinal studies in the areas that the future graduates of these Islamic schools major in as they enter colleges and universities might help determine if the Islamic schools actually emphasize both secular and religious education. It would also be helpful to conduct studies that compare SAT and ACT science scores of graduates of Islamic schools with the scores of Muslim graduates from public schools.

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APPENDIX A

Interview Guide for Questions Posed to Islamic School Teachers, Administrators, Board Members, and Islamic Students majoring in Education Regarding Their Perceptions about the Conflict Between Conservative and Secular Muslims as Related to Islamic Education and the Teaching of Science, Philosophy, and Mythical Stories to Muslim Students

- 1. Tell me about your educational background?
- 2. What grades/subjects do you teach?
- 3. How long have you been teaching in this school?
- 4. Are you a certified teacher?
- 5. Do you think that there is a conflict between conservative and secular Muslims with respect to Islamic education?
- 6. What are the main areas of disagreements between conservative and secular Muslims regarding education?
- 7. Is it possible for secular and conservative Muslims to work together and compromise on the education of Muslim students?
- 8. Do you think that secular Muslims follow the teachings of the Quraan and the traditions of Prophet Muhammad on what Muslim students should learn?
- 9. Do you consider yourself a conservative or a secular Muslim?
- 10. Is there a conflict between Islam and science?
- 11. Do you think some Muslims would perceive a conflict between Islam and science?
- 12. Are there some branches of science and scientific discoveries that might contradict the teachings of Islam?
- 13. What do you think about the theory of evolution?
- 14. Would you as a Muslim teacher teach only creation as mentioned in the Quraan or can you teach the theory of evolution as well?
- 15. Can you as a Muslim teacher teach your students all the scientific discoveries and theories even if they are perceived contradictory to the Quraan?
- 16. Does modern astronomy contradict the Islamic tradition?
- 17. Are you aware of any Quraanic verses that are in conflict or in harmony with modern astronomy?
- 18. Can a Muslim teacher teach modern astronomy without reservation?

- 19. Shiekh Bin Baz, a major Islamic scholar, believes that the earth is the center of the universe, and that the sun moves around the earth. Could you comment?
- 20. Would you as a Muslim educator teach Shiekh Bin Baz's book about astronomy?
- 21. Would you teach both Shiekh Bin Baz'z book and modern astronomy in a comparative manner?
- 22. What are your perceptions about Greek and Western philosophies?
- 23. Do you think that some of the Western philosophical or rational concepts are contradictory to Islam?
- 24. Many Muslims believe that some of the Greek philosophical concepts such as the permanence of the earth, rejection of Prophets and some attributes of God are contradictory to Islam, can you comment?
- 25. Some Muslims such as Shiekh Ibn Taimyya reject philosophy as *Kufr* or disbelief; other Muslims disagree. What are your perceptions?
- 26. Can you as a Muslim educator teach some, all or no aspects of philosophy to your students?
- 27. At what level would it be appropriate to teach non-Islamic philosophy to Muslim students?
- 28. Is Western or any non-Islamic philosophy worth teaching to Muslim students in a comparative manner?
- 29. What do you think about the teaching of mythical stories to Muslim students?
- 30. Does the Quraan reject myth and mythical stories?
- 31. Can you as a Muslim teacher teach mythical stories to your students, selectively?
- 32. If the end of the myth is to illustrate an important idea or a useful theme, can you as a Muslim teacher teach it as long as it is used as a means rather than as an end?
- 33. Would you as a Muslim teacher teach a mythical story so as to allow students to compare it to true stories?
- 34. Can you think of anything contradictory to the teachings of Islam that you as a Muslim teacher cannot teach to Muslim students?
- 35. Any final thoughts, suggestions or comments?

APPENDIX B

CONSENT TO PARTICIPATE IN RESEARCH PROJECT BEING CONDUCTED UNDER THE AUSPICES OF THE UNIVERSITY OF OKLAHOMA, NORMAN CAMPUS

Perceptions of Islamic Educators About the Conflict Between Conservative and Secular Muslims Regarding Islamic Education and the Teaching of Science, Philosophy, and Mythical Stories to Muslim Students

Yacob M. Ali, M.A., M.Ed., Principal Researcher Dr. Frank McQuarrie, Ph.D., Sponsor

I would like to research the perceptions of Islamic schools teachers, administrators, board members and Islamic students majoring in education at a Southwestern State universities to determine if a conflict exists between conservative and secular Muslims, and whether science, philosophy, and mythical stories contradict Islam. This study is designed to help both Islamic and non-Islamic educators to learn more about the inclusion or the exclusion of sciences, philosophy, and mythical stories in Islamic education. Findings of this research will determine whether various Muslim points of view exist or not with respect to designing Islamic education curricula as related to science, philosophy, and mythical stories.

If you decide to participate in this study, you will be asked to engage in two interviews lasting about an hour each. To facilitate the accuracy of acquiring data about this research, your interview will be audiotaped, provided you have no objection.

I do not foresee any risk if you participate in this study which will certainly assist Muslim educators to have a better understanding and an awareness whether certain branches of knowledge may or may not be included in the curriculum of Islamic education.

Your participation in this study is strictly voluntary and if you refuse to participate, no adverse reaction will ensue. You may withdraw from the interview at any moment. All the data from this study, including interview notes and audiotapes, will remain confidential within the boundaries of the law. All data that is not required and that could identify you will be destroyed. You will be given a number so that you will not be identified; neither your nationality will be identified in the research or in its publication.

If you have any questions about this study, please contact me at (405) 360-8644. Please call the office of Research Administration at (405) 325-4757, if you have any questions about your rights as a research participant.

Yacob M. Ali

Doctoral student, College of Education, Department of Instructional Leadership & Academic Curriculum.

CONSENT STATEMENT

I agree to participate in this study, knowing what I will be asked to do and that I can stop at a time I want. I give my permission to be audiotaped during the interview.	
Signature	Date