

Female Pilots in Saudi Arabia

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Dedication

I would like to dedicate this work to my father, Mohammed Saleh Baragabah. I want to thank my father because without his support this could never have been possible. Your words of wisdom saw me through the darkest times as I have traveled this amazing journey.

I also dedicate it to my wife whose support and patience was immeasurable and who put up with the long hours I spent working on this project. You believed in me even when I had lost all hope.

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Abstract

Opportunities for women in Saudi Arabia are limited by cultural and religious belief systems. Women are not allowed to pursue certain opportunities because it could interfere with their social roles. There are many things that women are not allowed to do in this nation. They are not allowed to get a driver's license nor are they allowed to become a pilot. However, this age has seen protests and changes in the Muslim world. Saudi Arabia has also seen some of those changes and it is likely that the roles of women will begin to change. The following paper looks at the opinions of individuals who are Saudi Arabian citizens living in the United States and who participated in interviews regarding the topic of women becoming pilots in Saudi Arabia. This qualitative study examines the cultural beliefs of people from Saudi Arabia concerning women becoming pilots and finds that while there is a belief that it is inevitable, cultural acceptance is still a long way off.

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CHAPTER ONE: INTRODUCTION

The opportunities for women in Saudi Arabia are limited by both law and the consequences of cultural beliefs. Although the separation of gender roles are supported by most men and women in Saudi Arabia, there are opportunities for learning skills and creating careers that some women may be more interested in if given the opportunity. Modern technologies have changed the opportunities for men, but are not influencing changes in the roles that women can adapt to under Muslim law or traditions. Currently there is only one female pilot from Saudi Arabia.

Muslim role traditions support a public position for men and a domestic position for women. Although both men and women are devout, women have far more constraints on their lives than do men. There are a number of reasons that this is the case, including issues surrounding reproduction, the act of being modest as a woman, and the need for controls that support the family structure under Muslim faith. The laws in nations where Islamic faith is integrated into the law often support the roles of women without the modernization of her place in society. As an example, women in Saudi Arabia are not allowed to have a driver's license or drive a car, thus they are dependent on others for transportation in a world where modern living requires traveling farther than walking permits.

The conflict between modernity and Saudi Arabian laws where women are concerned means that few women achieve skills and knowledge that are available to men. Although respect for the Muslim faith is supported by the law, modern living can be achieved through both devotion to Islamic beliefs and through providing opportunities outside of the home. Although not all Muslim men and women would agree, the potential for making change could mean that some technologies may be more available for women as careers and experiences.

There is only one Saudi Arabian woman who has ever pursued and achieved a career as a pilot. Hanadi al- Hindi is a pilot for Kingdom Holding, which is operated by Prince Alwaleed ibn Talal who is a proponent for change in the traditions of keeping women from opportunities that are currently held primarily by men. The example that Hindi provides is that women can seek and achieve opportunities that are currently outside of normal expectations for Saudi women, thus supporting the premise that women in Saudi Arabia could pursue a career in aviation without compromising the expectations placed on their gender.

Background

When Hanadi al Hindi began her education to prepare her for the rest of her life she had to look at her culture and her goals. She was fortunate to find someone within her culture who would support her goal of becoming the first Saudi Arabian airline pilot and to offer her a position after her graduation from a Jordanian pilot program. As the only female pilot in Saudi Arabia she acts as a role model for other young women who have modern goals that they would like to achieve in a nation where the law does not always work for women with modern aspirations.

Women are respected in Saudi Arabia for their roles in society. Their roles are different than men and therefore in the culture of Saudi Arabia there are laws that support the preservation of the female role in society as outlined according to Sharia guidance. Sharia law is designed to reflect Islamic law, which defines life in Saudi Arabia where 98% of the population is Muslim. Modern technologies have opened up capacities for doing a variety of different jobs and developing careers that would not have to be in conflict with Sharia. However, it is possible that the law has not yet recognized the capacities that would allow women to do certain jobs in modern technological contexts. This could include becoming an airline pilot.

Literature Review

This section is devoted to examining the literature that is relevant to the topic of Muslim women pursuing the opportunity to become airline pilots in Saudi Arabia. The problem is one of not only a lack of opportunity, but cultural issues which prohibit women from participating in public life in very specific ways. The cultural pressures that limit the public life that women can have can be shifted so that the technological changes that have created modern society can also provide women with the means to participate in a modernized world without compromising their belief systems. The following examination of secondary resources will look at the culture for women in Saudi Arabia, the ways in which culture could come into conflict with expanding certain opportunities for women including becoming an airline pilot, and ways in which the problem has already been addressed from a national perspective.

Muslim Women in Saudi Arabia

One of the problematic stereotypes that the West has for women of Islam is that they are in seclusion. This is partially perpetuated by the veiling of women. Women in Islam see the veil as a status of adulthood, not a sign of oppression. This study shows that wearing the veil affords them respect from the men in their culture when women work in an office atmosphere and remained veiled while they worked (Maisel & Shoup, 2011, p. xxvii).

Muslim women who express their devotion through traditional Islamic methods are often misunderstood by those in the West. Power in Muslim culture for women comes from being devout and respectable in their Muslim religious devotion. Muslim women will have power through how they show that they are good women of their traditions. This is not dissimilar to Western female power, even though the specific behaviors are not as consistent in the West. Just like in other cultures, Muslim women become valued for their ability to consign themselves to

the roles that give them the most status, which are those roles that are most appreciated by the culture as a whole. It is not only Muslim men who judge how Muslim women hold status, but other Muslim women (Feener, 2004).

Women in Saudi Arabia have rights. They have the right to own and control property, which was given to them long before those in Western nations held those rights. They are also able to divorce and can put a stipulation in the wedding contract that makes divorce easier. The one law that those in the West sometimes have an issue which is Saudi Arabian women is not being allowed to drive. However, what is not often recognized is that they are allowed to buy and own cars (Maisel & Shoup, 2011). In addition to not being able to drive, however, they are not allowed to learn to fly or sail a boat (Kechichian, 2013). Women in Saudi Arabia are not allowed to hold passports or travel without having received permission from the male relative under whose care she lives (Maisel & Shoup, 2011).

Education in Saudi Arabia was separated by gender according to Article 155 of the Saudi Arabia Education Policy, which provides separated schooling through higher education with the exception of nursery school, kindergarten, some private elementary schools and some medical schools at University. Students in Saudi Arabia of both genders spend a great deal of time learning about Islam. There were 414,420 female students (54.59% of all higher education students) in Saudi Arabian universities during the 2009-2010 school years (Smith & Abouammaoh, 2011).

Hanadi al Hindi

In defiance of the laws against women learning how to fly a plane, Hanadi al Hindi learned to fly at an educational institution in Jordan after she was sponsored by Prince Alwaleed ibn Talal bin Abdulaziz who put her into his private jet roster as a pilot when she was done with

her education (Kechichian, 2013). As the only female pilot in Saudi Arabia, she is the model for the premise that other women in Saudi Arabia can become pilots.

Hanadi al-Hindi is the first and only Saudi Arabian woman to become a pilot. Prince Alwaleed ibn Talal bin Abdulaziz al Saud hired Hindi, making her the first accredited female Saudi pilot who would be allowed to fly in the nation of Saudi Arabia. Saudi women are not allowed to drive cars so many have noticed the conflict of allowing a woman to fly a plane when she could not legally drive in the nation. Hindi received her education in aviation from the Mideast Aviation Academy in Jordan with the financial support from the Prince. He is quoted as having said that “I see the hiring of this female pilot to work on Kingdom Holding’s fleet of private jets as a historic move for Saudi ladies. The move transcends the traditional role of Saudi women previously confined to working in the health, education and philanthropic sectors. I am in full support of Saudi ladies working in all fields.” (Kahn, 2004, n.p.).

Hindi faced a number of cultural struggles in her pursuit of becoming a pilot. Her father encouraged her, but her mother was not as encouraging. Her father had always wished to become a pilot, but his dreams had not been fulfilled. Hindi gained her license at the age of 27 and at 35 is still flying for Prince Al-Waleed bin Talal. Some of her family has suggested that she is a bad influence on the women of Saudi Arabia (Islam, 2013).

Muslim Women and Work

One of the problems that is perceived with women doing jobs that are traditionally held by men is that women would have to mingle with men in order to do those jobs. Conservative beliefs in Saudi Arabia hold that women should not be put into positions where they mingle with men which can prevent them from getting an education or participating in public activities such as philanthropy (Sabbah, 2005). Roded (2012) writes that the three primary spaces in which the

“negotiation between religious legitimacy and social reality” takes place is in communal prayer, studying and teaching, and in the court system (p. 1). These exceptions to the gender separation tradition provide context for exploring how exceptions can be made in order to implement modernity into the roles of women in Saudi Arabia.

Elamin (2010) found that men who are single, unemployed, educated or young have less traditional attitudes about work opportunities for women. However, men who are older, employed, less educated and married were more traditional in the way in which they thought about women in Saudi Arabia entering into roles of employment traditionally not allowed. The most important predictor for attitude about this issue is age. This means that the changes that are needed to overcome these restrictions may be based upon the passage of time as older men with traditional perspectives are no longer the primary political force and younger men begin to assert their modern perspectives on female roles.

Kucinskias (2010) studied the effect of religious participation on gender egalitarianism in both Saudi Arabia and Egypt. It was discovered that those males in Saudi Arabia who attend Mosque on a regular basis were more likely to not believe in gender egalitarianism. Female belief systems, however, were not affected by their religious beliefs, thus suggesting that for men a lack of a belief in equality was connected to their adherence to traditional Muslim practices in Saudi Arabia, but women were both religiously and culturally socialized to believe that men and women are not equal.

Andersson and Togelius (2011) studied the nature of reform within Saudi Arabia in regard to female equality. It was determined that women are currently legal minors who must have the permission of a male guardian in order to pursue an education, employment or even their health care. Despite laws that continue to suppress the ability of women to operate in the

public world without guardianship, the Saudi Arabian government has ratified the Convention on the Elimination of All Forms of Discrimination against Women. This was ratified with the exception of allowing for Islamic law to override anything that is in conflict. Andersson and Togelius (2011) believe that the use of culture and religious claims is a method of continuing oppression and not the reason for justifying its continuation. Although oppression of women is a global phenomenon, the evidence of oppression in Saudi Arabia is that it is culturally tied rather than tied directly to religious belief. In other words, while there is a belief that the cultural oppression of women is tied to religiosity, it is actually tied to tradition and beliefs that are based on the development of culture outside of the laws of Islam. It is founded in cultural tradition.

Sharia law is the foundation of the laws in Saudi Arabia. Sharia is the constitution and the formal political legitimacy of the cultural connection to the politics in the nation. Vogel (2012) writes that “It is avowed as the solitary source of binding norms for the civil and private spheres, shaping and justifying social, communal, and family mores as well as individual morality” (p. 18). Vogel continues to describe the meaning of Sharia law as not just a part of the law in Saudi Arabia, but something that is integrated into all political situations.

Cordesman (2003) reports that women who continue their education are largely being taught to fill the roles of educators and office support staff. Women are also finding that the jobs that they are allowed to fill are frequently taken by foreign nationals. Ramady (2011) writes that the most common obstacle to women entering the work force is the sexually based segregation of women from men. As an example, women in Saudi Arabia cannot become nurses in hospitals because they are not permitted to work with male patients. Transportation to and from work is a problem as Saudi women are not allowed to drive. However, the research has shown that most women who work are married, while most unemployed women are single. The research referred

to by Ramady (2011) suggests that women who work do so out of a social and cultural need rather than through economic factors.

Ramady (2011) writes, however that “the issue of Saudi female participation cannot be effectively tackled until and unless women are more directly involved in Saudi nation building” (p. 388). King Abdullah said in 1999 that:

We will not allow any person to undermine the role of Saudi women or marginalize the active role they take for their religion or country...Saudi women have proven their ability to handle responsibilities with great success, whether through their principle duties as mothers or professionals. We look forward to women playing a major role in a way that will promote the interest of this nation on the basis of Shariah (Islamic law) (Ramady, 2011, p. 388).

This statement suggests that the position of women in Saudi Arabia can be tailored for both religious law and for modern society. Inclusion of women into roles that are emerging through modernization does not have to be in conflict with Muslim ideals.

Airlines in Saudi Arabia

Hanadi al Hindi has had good fortune in finding someone to sponsor her dreams of becoming an airline pilot. She became a pilot for a private airline, but she would have met with a great deal more resistance had she wanted to become a pilot for the official public airline, Saudia. Although she has a position with the Saudi Prince, she is still restricted by the laws and culture within Saudi Arabia. Through the development of her career she has made history as the only female pilot, but her situations is unique because of her sponsorship. The growth in the Saudi Arabian flight needs, however, suggests that the need for pilots is growing. Creating a way for women to become pilots will help to provide a service to the nation as well as give women a

yet unknown opportunity. The following outline of the conditions in Saudi Arabian airports and pilots shows that the need for female pilots has merit.

Saudia is the Westernized and English name of the airline of Saudi Arabia which until 2012 was called Saudi Arabian Airlines. This change was made to commemorate the association and membership that was created with SkyTeam, an organization which provides central management for airlines so that they work in cooperation with one another. Other members of SkyTeam are Aeromexico, Air France, and Delta Airlines. Although Saudia was once the largest airline in the region, they have fallen behind the United Emirates and Qatar because of increased business in those two regions of the world (Youssef, 2013).

Saudi Arabia has three major airports in Riyadh, Jeddah and Dammam. During the pilgrimage period where Muslims from all over the world are traveling to Saudi Arabia, the airlines are packed full coming in to the airports, but have trouble filling the seats on the way out, thus the prices out of Saudi Arabia at that time are very low (Mobile Reference, 2007). During the period of Hajj the airports are overburdened with the arrival of 6 million people into the country to participate in the holy pilgrimage. Airplane travel accounts for 90% of the arrivals for Hajj. By the year 2030 it is expected that more than 30 million people per year will want to take the pilgrimage each year. The infrastructure of the airports is not equipped to handle this influx of people, thus there are current reforms being considered to remedy the situation (Oxford Business Group, 2007).

Liberalization has been the solution that Saudi Arabian King Abdulaziz has undertaken in order to create a system which will be modernized in which the infrastructure will be upgraded. Rather than being a government run institutions, the airport system will be privatized so that investment can provide the money needed to support infrastructure changes. Airport

management is being restructured to meet the needs of privatization. In line with these changes is a planned fleet expansion which will modernize and increase the capacity for travel. This will provide a more competitive advantage to the airline and support the coming needs. The upgrades and changes are going to include an airport in the rural hinterlands. King Abdulaziz stated that air travel was going to be a major source of economic development in the coming decades with job opportunities, increased movement, a rise in trade volumes, investment and domestic tourism (Oxford Business Group, 2007).

The first airport to be privatized in Saudi Arabia is the Madinah Airport. According to the consulting firm COWI (2013) “The privatization of Madinah Airport is considered to be a milestone in the Middle East in terms of size, significance and innovation” (n.p.). This project is considered the first major project in Muslim cultures of the Middle East and Africa that is Sharia compliant. In addition to being Sharia compliant, the airport is going to be eco-friendly when reconstruction is finished. In addition, in order to help those on pilgrimages to get to the prophet’s Mosque more efficiently and with less eco waste, metro systems and bus systems will be used for transport from the airport (Arab News, 2013).

There are needs for pilots being opened up as opportunities are increasing with the new construction that is being done in Saudi Arabia. However, new regulations for becoming a pilot has changed some of the opportunity that those who have studied to become airline pilots face. In 2011 a lawsuit was filed by 55 pilots who finished the 300 hours that is required for being eligible for becoming a pilot with Saudia, but were consequently not employed. The reason they were not appointed as new pilots is because they exceeded the age of 27 when they applied. This condition was created in 2010. This lawsuit has yet to be resolved (Khalifa, 2011).

Summary

The conditions that exist in Saudi Arabia make it difficult for women to achieve in careers that are outside of those in which they currently work. However, the reigning authorities are working towards keeping Sharia law while modernizing the position of women so that they are both devoted, but given opportunities according to new technologies. Although women are subjects of male guardianship, this does not mean that they cannot operate within modern contexts. Egalitarian principles can be achieved with the concept of equal, but different, allowing for women to have equal opportunities while having the acknowledgement that men and woman have different, but equal, value within society. This would allow a framework of employment for women as airline pilots. As long as both men and women could fulfill their assigned roles on a cultural level, flying a plane and being employed as a pilot should not be restricted.

Statement of Problem

One of the problems with opening up the opportunities for women is that it is often seen as an all or nothing type of proposal. This violates the sense that men and women of Islam have about their roles and beliefs. This study will challenge those beliefs by presenting alternative possibilities during interviews and allowing for participants to assess whether or not these changes would violate their ideas about how women should behave and what opportunities they should explore while being faithful to their belief systems.

The purpose of this study is to determine the cultural and sociological implications of women becoming pilots in Saudi Arabia. One of the most important aspects of introducing opportunities for women to become pilots in Saudi is navigating the gender roles that are dictated through both religious and political frameworks. This study will provide information about the

beliefs and experiences of Saudi nationals so that the idea of female pilots in Saudi Arabia can be considered as an opportunity.

Research Questions

The following research questions will frame the inquiry for this study:

1. According to the participants, what is perceived as the changes in the belief systems in the nation of Saudi Arabia that will be needed in order to allow women to seek opportunities for technologically modern careers such as becoming a pilot?
2. How do the participants in this study view the reconciliation of traditions and beliefs in Saudi Arabia with the idea of a woman pursuing a career in aviation?
3. What perceptions do the participants have about how becoming a pilot would affect women in their gender roles as it relates to culture, law, and religious beliefs?
4. What does Hanadi al-Hindi believe to be the difference in her experience and ability to achieve her dreams in comparison to other young women who might have wanted to become an airline pilot?

CHAPTER TWO: METHODOLOGY

The methodology for this study was to conduct a series of interviews with members of the Saudi Arabian cultural community within the United States. This study was approved by the Middle Tennessee State University Institutional Review Board under protocol number 14-241 (see Appendix A). The participants responded to inquiries that were made at the Daytona Islamic Center which allowed for the opportunity to give interviews to a variety of Saudi Arabian citizens who are currently living in the United States. The interviews consisted of open-ended questions which allowed the respondent to initiate different avenues that they felt were relevant to the discussion. This chapter examines the methods with which the study was conducted and provides an overview of the procedures through which the data was accumulated.

Study Design

Theoretical Framework.

The research that has been done for this study was based on qualitative modes of inquiry. The semi-structured interview provided for interaction with participants so that a conversation could be developed about the topic. Free formed conversation developed based upon the use of a designed set of interview questions that acted as a catalyst towards deeper concepts. Covington (2008) writes that the use of unstructured interviews allows the researcher to use their interpersonal skills in order to develop the conversation within the interview, rather than merely asking questions and seeking a finite range from which to answer. This allows the respondent to develop answers that might not be possible through a structured interview or questionnaire. This was an appropriate form for this study because it allowed members of the community from Saudi Arabia to be able to discuss their beliefs and explain why they have these beliefs. A questionnaire based study might have limited the scope to which this topic can be understood.

There are limitations that might occur through this form of inquiry. The respondent might be likely to answer in a way that they believe the researcher wants them to answer and the researcher might interpret the information based on bias. As well, the researcher is limited to a few respondents as opposed to a wide variety of people through which the researcher might get a broader scope in terms of answers. In the case of this study, however, it was important to try to get a more experiential based set of data that comes from a cultural understanding which may not be possible if the participants were only allowed one response to each question. This might limit the scope and depth that the answers might provide in terms of culture and social life that would affect the topic of inquiry.

Interview Question Rationale.

The first research question was “What changes in the belief systems in the nation of Saudi Arabia will be needed in order to allow women to seek opportunities for technologically modern careers such as becoming a pilot and how will this affect law as it relates to Muslim beliefs?” This question has been posed in order to gain an understanding of what it will take for the culture to accept the proposal of having women as airline pilots. This question is based on the knowledge that the cultural belief systems, legal environment, and the social environment will all have to undergo some changes in order for this proposal to be realized. The following interview questions were asked in order to gain insight into this question:

1. The law does not allow Saudi Arabian women to drive. What do you think of that law?
2. Do you think this law has anything to do with restricting women from working?
3. Should women work outside of the home?
4. If you think that women should have more opportunities, how should they be given?

Should they be restricted, but expanded?

5. What do you believe is the reason that women are so restricted under Saudi Arabian law?
6. Do you believe that they are too restricted or not enough?
7. What is different about the experiences of Hanadi al- Hindi, the only female pilot in Saudi Arabia, in comparison to other women in Saudi Arabia that allowed her to become a pilot?

The purpose of these questions was to create a sense of how the culture views women and their role in transportation, as well as their role in the work environment. A key to enabling women to become pilots in Saudi Arabia is finding a way to reconcile social beliefs with cultural construction. The question about Hanadi al Hindi is intended to create a connection between the cultural beliefs and the reality of this woman's experience as a pilot from Saudi Arabia.

The second research questions is "How do the participants in this study view the reconciliation of traditions and beliefs in Saudi Arabia with the idea of a woman pursuing a career in aviation?" The following research questions were used in order to create answers to this questions:

8. What specifically would restrict a woman from becoming a pilot?
9. Should there be restrictions that could be placed upon her that would allow her to become a pilot?
10. What would it take for men to change their beliefs about women so that this type of cultural change could take place?
11. Prince Al-Waleed bin Talal is the one who supported Hanadi al-Hindi's efforts to become a pilot and then hired her after her education was done. Do you support this idea of helping women to achieve their goals for these kinds of opportunities?

These questions were asked in order to find answers to how the culture and the opportunity for women to be pilots can be reconciled.

The third research question was “What perceptions do the participants have about how becoming a pilot would affect women in their gender roles as it relates to culture, law, and religious beliefs?”

12. What do you see as the consequences of women being able to pursue the same kind of opportunities as men such as becoming an airline pilot?
13. Do you believe that these changes could take place in Saudi Arabian culture? Should they take place?
14. What effect would this have on the relationships that men and women share within the Saudi Arabian culture?
15. How do you feel about the idea of female pilots in general? What about female pilots from Saudi Arabia?

These questions were used in order to not only gain the answers, but to observe the reactions to these questions by the participants.

The fourth question was “What does Hanadi al-Hindi believe to be the difference in her experience and ability to achieve her dreams in comparison to other young women who might have wanted to become an airline pilot?” This question was answered by questions about her experiences as a female pilot from Saudi Arabia. The questions asked in an interview with Hanadi al-Hindi (see Appendix) and provided context for the realities of becoming a pilot in Saudi Arabia as well as the consequences for a woman who has chosen to pursue this role. The interview was conducted by Skype and allowed a deeper meaning to the research because it

provided real life experienced that could be compared to the interview participant reactions to the questions.

Participants

The participants for the study were men and women who are from Saudi Arabia and who practice Muslim beliefs and traditions. All participants were over the age of eighteen. The participant pool was found from the Daytona Islamic Center through handing out informational flyers (see Appendix C) to both the administrators of the facility and directly to members by the researcher. The respondents who emailed the researcher were invited to participate if they met the criteria of being from Saudi Arabia, Muslim, and over the age of eighteen. Upon meeting, all participants were provided an informed consent document (see Appendix B) and their role as a participant was explained. There were twelve total respondents who finished the interviews, with two respondents declining to be a part of the study after an initial discussion with the researcher. In addition, Hanadi al Hindi has participated in the study as she has a unique perspective on the topic. A case study of this interview has been included as part of the data collection.

Instruments Used

The interviews were conducted with the series of questions that were previously discussed. These questions were designed to be used in a semi-structured interview that allowed for the participant to expand upon themes and ideas that are inspired by the questions asked. Through developing a connection to the participants and allowing them to respond in ways that could go off topic, the data became rich with the beliefs and ideas that defined how they participants felt about the concepts they were presented.

Inquiry Method

As stated, this study has been designed through qualitative methods of inquiry. One of the theories on which this study was based is *intuitive inquiry*. In intuitive inquiry the researcher asserts humanistic and transformative psychology into what is considered to be conventional for scientific research. Wertz (2011) writes that intuitive inquiry allows the researcher to be subjective and to interpret findings through what may be elusive or mystical. This theory can be combined with *constructivist grounded theory* in order to allow for the assumption of subjectivity and build on the interpretations that are made by the researcher. Intuitive inquiry provides for a topic that will inspire concepts through which to examine that topic. Broad strokes can be made initially, and then intersections of information will help to form convergences and divergences that will explore the topic of research.

A *phenomenological perspective* allowed the individual experiences of the participants to have an impact on the findings (Wertz, 2011). Through exploring the experiences of being Saudi Arabian and having lived within the culture, the participants will be able to contribute to the discussion from their own perspectives on how the culture is created and how it might be opened up for change. The participants experienced semi-structured interviews in which the opportunity to change course and discuss topics that the interviewer had not thought of was achieved.

Ethics.

One of the problems that is perceived about qualitative data is that it is largely unstructured. This means that it does not fit into a format that can be assessed through mathematical analysis. The researcher is trusting that their interpretations of the experiences with participants will provide enough data to answer the questions that have been posed. In addition, the development of the data is such that bias can be a problem when trying to determine the

meanings that have been relayed by the participants. In order to establish that the data is realistic and reliable, the researcher must set aside their own biases and approach the topic based upon the information about the culture and social structures that have been presented, putting the data into context with the topic.

It is important that informed consent was given at the time of the interview. The participants were thoroughly informed of the nature of the study and must signed consent stating that they are willing to participant. If at any time during the period of consent the participants wished to end their participation, they would freely do so. It was important that their consent could be rescinded at any time during the process (Hammersley & Traianou, 2013). The participants in this study all signed consent forms and were willing to participate. Through developing a bond of trust with the participants, it was possible to get the most accurate answers possible.

It was also important that the participants know their rights and risks in relationship to participation. The first problem that was addressed was that of anonymity. All participants were informed that strict anonymity would be observed and that all reference to their real identity would be excluded from any notes or transcripts. In addition, the files would be kept in a separate area so that they would not be associated with any type of identifying information that might cross with the interview results. As well, the risk for harm was discussed. The process of the interview would not pose any risk to the participants, but might bring up questions that they would need to consider post the interview process.

Procedures

Participants were first given instructions about the process with a consent form to sign so that they were aware of the process that they would be experiencing. The interviews were private

where possible and conducted through face to face meetings. Some of these meetings included Skype interviews where the researcher and the participant talked via the internet, but still had the advantage of being able to communicate with both the ability to hear and see so that observations were made during the event of the interview. The following steps were included in collecting data:

- Find participants and set appointment for interviews
- Create a file system that is separate and distinct for the purposes of this project so that ethical security in terms of anonymity can be maintained
- Provide participants with information about the study and consent forms
- Collect Consent forms
- Conduct interviews
- Conduct a post interview debriefing with each participant
- Examine interviews to determine appropriate case study information
- Code and classify information from interview notes and observations into common themes which are placed into a grid.
- Interview Hanadi al Hindi
- Formulate case study for the Hanadi al Hindi interview
- Analyze the data to find concepts that address the research questions

The interviews were coded and the information placed into a grid for analysis. As well, a case study about the experiences and reports on the development of the aviation career of Hanadi al-Hindi is included as a representation of how a woman can achieve the goal of becoming a pilot and work in Saudi Arabia. Although Hindi's experiences are unique, they provide context for the topic.

Data Analysis.

Wertz (2011) writes that phenomenological data can be analyzed for patterns that come from individual descriptions from the interview process. The process of looking for patterns includes looking for discursive commonalities which also means that the written and the actual interview process is considered to be localized and must be put into context separately. Data was developed through methods that “produced temporally organized structural moments or substructures of experience and identified themes” (Wertz, 2011, p.306). The data was defined by how the experiences are shared and where they are different, looking for gaps and closed spaces in which the answers to the research questions can be found. A grid was created in which to place the data so that it could be measured for commonality and differentiation.

The information from the grid and the development of narratives from the case studies provided methods of discovery in order to develop answers to the research questions that have been proposed. Through developing the grid and placing the information into coded commonalities, patterns of belief systems began to emerge and give context to the overall subject matter. The methods were successful because of the shared culture and belief systems that framed the subject of inquiry. Although not all participants agreed, they all had commentaries that were based on a similar belief system that was the foundation for the direction of the inquiry that was conducted during the investigation.

The data was analyzed through seeking common ideas that emerged from the interview processes. In addition, the narratives provide context for how these common ideas were interpreted by those who participated as subjects in the interviews. The patterns that emerged supported the overall culture while allowing for an understanding of how modern life had an impact on older belief systems. Demographic information put the patterns into context with

communities and types so that the development of an argument based on how changes will be met in the future could be created.

Summary

The methodology for this research has been accomplished through qualitative study means. Interviews were conducted so that the feelings and opinions of participants could be taken into consideration. The researcher's job was to interpret this information through an unbiased method so that the data could be analyzed. This included both creating case studies and a grid through which the information was developed. Through the use of a consent form and providing thorough information to the participants, the research that was conducted was both ethical and safe. Anonymity and confidentiality was strictly observed so that the participants felt comfortable to speak what they thought of the questions that were posed to them.

CHAPTER THREE: RESULTS

The following chapter looks at 10 interviews with individuals who are currently residing in the United States but whose ideas remain current with Saudi Arabian cultural ideals. As well, the details of the interview with the only female pilot from Saudi Arabia, Hanadi al Hindi, are included.

Participant Interviews

Five men and five women who currently live in Daytona Beach Florida were selected to participate as interviewees for this research study. While living in the United States might have influenced some of their beliefs due to adapting to the United States culture, the answers that were received reflected Saudi Arabian values more often than they did Western culture. The five men were more inclined to have continuing belief systems that suggested that women were not suitable for being pilots while the women were more interested in the idea that they could become pilots and still fulfill their social roles. Two of the men were adamant that this was an inappropriate idea. One of them was angry that this was under discussion. He felt that there were no redeeming qualities to the idea of a woman becoming an airline pilot in Saudi Arabia.

The interview questions had some surprising results. Although there was some resistance expected, the level of some resistance was very aggressive. The first question asked the participants about the laws in Saudi Arabia which were preventing women from driving. Most of the participants believed that women should be able to drive, but the two men who were most aggressive were against this policy being changed. As well, two more of the men also disagreed with the possibility of change leaving only one to agree that women should be able to drive. All of the women believed that women should be able to drive. The second interview question asked if the policies that did not allow women to drive were preventing them from working. All of the

participants except for one female and two of the males believed that this law was causing problems for women when they were trying to work outside the home.

Question number three asked the participants if they believed that women should work outside of the home. Three of the men and two of the women believed that women should not be working outside of the home. Question four continued the discussion of women working outside the home by asking if they should have more opportunities and if they should be restricted. Four of the men believed that women do not need any more opportunities outside of the home and one of the women agreed that they do not need more opportunities outside the home. The responses to the questions about opportunities outside of the home suggest that there is still a belief that the status quo is working for the culture. Although half of the participants believed that opportunity should change, the other half believed that everything is fine.

Question number five asked the participants why they believed women are restricted under Saudi Arabian law. All of them believed that this was for the best for women. They believe that women are protected under Saudi Arabian law and it was brought up by one of the women that reproduction and family was the most important thing in human life and therefore women needed to be protected from anything that could cause difficulties in fulfilling their role. There was no negative reason given for these restrictions in the sense that not one of the participants suggested that women should be less than men. For the participants, women are protected rather than a oppressed. Question six, which asked if women were too restricted, did have half the participants suggesting they were a bit too restrictive, but the other half believed that status quo was good. The discussion between these two questions involved the idea of how women should fulfill their roles within society, which would affect their ability to perform as a Saudi Arabian pilot.

Question number seven brought on some very interesting results. All of the participants knew about Hanadi al Hindi and her role as the only working pilot in Saudi Arabia who is a woman. Most of the men and all but one of the women believed that she made a bad choice in becoming a pilot. The one woman who agreed with her decision indicated that she thought the changes for women were coming and that pioneers needed to exist. However she did regret that this was a negative for Hanadi al Hindi because she believed it set her outside of her own culture. The one male who was most aggressive in his answers against this idea believed that she was a disgrace to her people.

Question number eight asked the participants what would restrict women from becoming a pilot. The answers were varied, including some answers from women that stressed that there was no reason that women would be restricted from becoming a pilot. Most of the answers revolved around the female role in the family. The great concern for women taking on more opportunities outside of the home is that they will then neglect their responsibilities inside the home. According to the structures that are in place, men take care of the family in terms of working and creating means of survival while women take care of the home and make sure that their survival is attended.

Question number nine asked the participants if there were restrictions that could be placed upon a female pilot that would allow her to work in Saudi Arabia. The answers to this varied. The general consensus was that in order for women to be able to take an opportunity such as becoming a pilot outside of the home they would have to be restricted in the type of hours that they worked and what their roles in the career would do to their roles in the family. Primarily, women were expected to be home at night and so their shifts would have to be over by a certain time during the day. As this was discussed, the idea that women would be able to become pilots

came into question because this would then force the company to make certain accommodations that they may not be willing to make. Question number 10 asked the participants what it would take for men to change their beliefs about women so that this type of cultural change could take place. All of the men except for one believed that men were not going to change their beliefs even if this became possible. One of the answers from a female participant suggested that the idea that current adult men would change their ideas was not reasonable and it would require belief systems in boys to change in order to be fully accepted.

At this point the conversation was turned back to Hanadi al Hindi. The participants were asked if they agreed with Prince Al-Waleed bin Talal, as he had hired her to work as a pilot for his private airplane. The general feeling about this was that the Prince had done this solely as a publicity stunt and not for the support of women making this choice. This served his own agenda rather than looking towards social change. While three of the men did not feel this was the appropriate thing to have been done, the rest of the participants believed that it was not a problem that he had hired her as a pilot. This question took on two dimensions, in which politics was a part of the equation as well as social change, and the effects of the action were discussed.

Question 12 approached the idea of the consequences that would come from women being able to pursue the same kinds of opportunities as men such as becoming an airline pilot. Two of the men and one of the women felt that the consequences were too high and that women should not be taking opportunities like this outside of the home. One of the men believed that women did not have the capacity to learn how to fly. He was adamant that women were incapable of taking on highly technological roles and that they did not have the appropriate minds for this type of position. The effects that this change would have on the relationships between men and women was discussed for question 14 and this also had strange results. All of

the participants, including the male who believed that women were incapable of this, thought that this change would not significantly change the roles between men and women in Saudi Arabia. Some of the participants believed that this was because the effect of women becoming pilots was not going to create social change between the genders, but some of them believed it was because culture would not change even if the law changed.

In general, the participants were more against the idea of women becoming pilots than they were for it. Question 15 asked how they felt about this idea and specifically how they felt about it in regards to women pilots in Saudi Arabia. Three of the men and three of the women did not believe that women should become pilots. While they discussed it in different terms, these participants believed that women just did not belong in this particular career. In addition, they did not believe that women becoming pilots in Saudi Arabia was something that should ever happen. Two of the males believed that women have the capacity to become pilots. Only one of the males thought that this should become an option in Saudi Arabia and he believed it was for women who for one reason or another could not marry. He said that if a woman could not marry or could not bear children, there was no reason that she could not take on this career. Interestingly enough, only one of the women believed that they should have the opportunity to become an airline pilot in Saudi Arabia. One other woman believed that women have the capacity to do it but should not do it in Saudi Arabia. The reason that the three other women went against the idea of female pilots did not have anything to do with mental capacity, but they believed that it was too much risk for women to take.

The following grid reveals the answers given during the interview process (Figure 1). The rows represent participants with the number corresponding to the gender as indicated by M for male and F for female. The columns represent the questions with P indicating a positive reaction

and N indicating a negative reaction. A negative reaction indicates against women participation and a positive reaction indicates pro-women opportunities. Thus, a negative reaction to women driving means that the participant was not in favor of women driving.

Reactions to Interview Questions

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1M	N	N	N	N	P	N	N	N	N	N	N	N	N	P	N
2M	N	N	N	N	P	N	N	N	N	N	N	N	N	P	N
3M	N	P	N	N	P	N	P	N	N	P	N	P	P	P	P
4M	P	P	P	N	P	P	P	N	N	N	P	P	P	P	P
5M	N	P	P	P	P	N	N	N	N	N	P	P	P	P	N
1F	P	P	P	P	P	P	P	N	P	N	P	P	P	P	N
2F	P	P	N	N	P	P	P	N	N	P	P	P	P	P	N
3F	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
4F	P	N	N	P	P	N	N	N	N	N	P	N	P	P	N
5F	P	P	P	P	P	P	P	N	P	N	P	P	P	P	P

Figure 1 Grid of Interview Answers

The grid in Figure 1 shows that in general, three of the participants, one female and two males, were very against the proposed change to allow women to become pilots. In general, it was clear that the change would be accepted, but that the change would not necessarily be adopted within their own social circles. Allowing it to happen would not necessarily mean that they would allow it as a part of their own lives or within their family.

Case Study: Hanadi al Hindi

Hanadi al Hindi is the only woman to have received her pilot's license and used it as a Saudi Arabian professional pilot. Although she was unable to get her license at a university in Saudi Arabia, she went to courses in Jordan in order to achieve her goals. Hanadi al Hindi is the one person from Saudi Arabia who has the most to contribute to a discussion on women who live in Saudi Arabia being able to become pilots and fly planes as their career. One of the problems that has occurred for this pioneer in women's rights is that she is now a celebrity both within her own nation and outside of it. She has had to endure the opinions of a nation as much as the world. While her time is restricted, she graciously agreed to spend a few minutes discussing the issue of female pilots from and within Saudi Arabia for this research.

Hanadi al Hindi answered ten questions for the purposes of this research. The first question that she answered was whether or not flying was everything she had hoped it would be. She indicated that flying was not her first choice for a career. Becoming a pilot was something that her father had wanted to pursue as a career but was unable, and when she was looking for how to spend her education her father suggested that she become a pilot. She feels that other Saudi Arabian women will someday have the opportunity to become airline pilots, but the country and the culture will need time to accept it. Realistically, she is optimistic that women will be able to become pilots. Right now however it is a job they cannot get in Saudi Arabia. They are currently unable to work in aviation.

The interview moved on to more personal questions about her experiences. She was asked what type of sacrifices she had to make in order to become a pilot. The researcher observed that she was hesitant as she answered this question and that the answer was important to her. When she became a pilot for social life and personal life were dramatically changed, she

said. She was unable to get married because there were no men available who could accept her with the media attention she was receiving. She indicated that she would only choose to marry a man from Saudi Arabia and has no desire to marry outside of this country. She is loyal to her culture. One of her regrets is that she wanted to have children but because there was no Saudi Arabian man who would have her this was something she would never be able to do. As far as regrets about her choices, she has none even with the struggles that she has experienced. She has been happy that she was able to become a role model and open this door for other Saudi Arabian women. Since she became a pilot, there are two Saudi Arabian women who have entered into the aviation industry and indicated to her that it was because of her influence. One is trained in flight dispatch and the other has become trained in aviation, but while they have training they cannot yet work in Saudi Arabia.

Hanadi al Hindi was asked what she would say to other young women for whom she is a role model. Her answer was “Keep doing and dreaming and it will happen – do what you are doing. Don't let anyone discourage you from doing what you're doing.” She was also asked to address the changes that would be needed in belief systems in order for women to seek opportunities for technologically modern careers such as becoming a pilot. She was asked how this would affect law as it relates to Muslim beliefs. Her answer was that the problem was not with religion, but the interpretation of religion in this particular society. It was not religion that needed change but it was the interpretation. When asked to address the problem of Saudi Arabian women and how they could reconcile the traditions and beliefs with a pursuit of a career in aviation she said that it was all about finding balance. She had to make sacrifices so that she could do what she wanted to do, but she hoped that women in the future would not have to do that.

Summary

The interviews with the 10 participants and the interview with Hanadi al Hindi revealed that the central core of the problem was change. In order to evaluate the change in culture that would allow women to become pilots and work as pilots in Saudi Arabia six dimensions in which this problem exists became apparent. The problem areas include inevitability, culture, law, acceptance, beliefs, and the belief in that there is a purpose to maintaining gender roles. The next chapter will more fully discussed these six dimensions and how they relate to the problem of women between pilots in Saudi Arabia and the culture that currently does not allow them to pursue this career.

CHAPTER FOUR: DISCUSSION AND RECOMMENDATIONS

Saudi Arabia is currently undergoing a great deal of social upheaval. The position of women in modern society has not been clearly defined and is currently still experiencing restrictions because religious law does not specifically address technological advances. While the law has not specifically restricted women from pursuing a career in aviation, social and cultural demands have made it impossible for women to become pilots within the state of Saudi Arabia and they would not be hired under the current cultural climate.

Saudi Arabia is undergoing social change, however. The people of Saudi Arabia are beginning to realize that technological change has created both challenges and opportunities to their cultural traditions. Although Islamic tradition still places women in the domestic sphere, technology has changed what it would mean for them to enter the public sphere. As the modern world and antiquated traditions collide, social change is inevitable. Keeping respect for tradition and embracing modern technology are not exclusive concepts. However, the belief systems within the current cultural climate are very resistant.

The interview process provided the opportunity for the interviewer to not only record what was being said but to interpret the emotions and behaviors that were observed during the interview. Through observing the interviews, it became clear that the topic was one in which culture was of one mind and politics supported another avenue. Although the current political system does not support changes in the opportunities for women, namely that of allowing them to become working airline pilot, the population interviewed believes that this change will take place and that a sense of integration between modern technology and ancient Muslim beliefs will be the end result. There are a number of reasons why this might be believed, but the inevitability

of change in Saudi Arabia is something that population is currently dealing with and is coming to accept.

Looking at the interviews as an observer meant interpreting body language as well as the transcript of the interview itself. Most of the participants had a resigned posture. This meant that they were accepting the inevitability even though they may or may not have agreed with this particular change. Two of the men that were interviewed were aggressive about this change and in that aggression it was clear that they saw inevitability. If they had not believed that this change is inevitable they would have exhibited calm and confidence that the culture was not in the midst of change. Instead, they saw change coming and were angry because it does not fit in with their beliefs.

Speaking with Hanadi al Hindi revealed that she was a very thoughtful woman. Her belief systems are not in conflict with her religion, but she has had to make sacrifices in order to find the opportunities that she wanted. It was curious that becoming a pilot was not her idea and yet she still made the sacrifices. She has sacrificed developing her own family in order to live in the public eye and make a statement about the abilities of women. The interview revealed that despite her regrets for her personal life she is very satisfied with the choice to be a pilot. While she did not have time to talk for a long period, she was able to express her feelings on culture, opportunity, and the female presence in Saudi Arabia.

The interview made it clear that the conflict was not between religion and opportunity, but between interpretation of sharia law and modern technology. The abilities of women are not really in question. How women can take advantage of technology and still remain in the traditional roles assigned women within society is the fear that prevents opportunities such as careers in aviation from manifesting. Because of the importance of family, opportunities for

women are limited because there is a belief that if the focus goes outside of the home the family will suffer. The interview with Hanadi al Hindi showed that this fear is currently fulfilled because she did not marry and was not able to create a family. However, this is due to cultural problems rather than the problem of women pursuing an opportunity in aviation.

This following discussion reveals observations and meanings that were conveyed in the interviews with the 10 participants. Although not everything was said out loud, many of the messages that were received by the interviewer led the research in a specific direction. The concept of change became the focus of the research and the dimensions of change became relevant to how belief systems were both going to be fulfilled and challenged.

Evaluation of Interviews

The participant who had the most conservative views also felt that Hanadi al Hindi had overstepped by becoming an airline pilot. He felt that the Prince who had supported al Hindi's education was only doing so in order to create publicity, and progressive ideas were part of an agenda rather than an honest attempt at creating change. One of the women also expressed that she felt that her role should remain in the domestic area. Although she felt that the opportunity should exist, she expressed the idea that she herself wanted to stay at home and be a good wife to her husband and raise her children.

One of the female participants who showed conservatism also seemed to believe that there should be a separation between the law and what people choose. She believed that taking a job as a pilot would interfere with the domestic responsibilities that woman had, but she also believed that the law should not determine whether or not a woman chose to live by her religious beliefs or how her religious beliefs should be interpreted. In other words, a woman should have

the choice. Choosing to live under sharia law means that an individual has accepted them on the grounds of religious belief and not because they are legislated by the government. Interpreting these laws belongs to those who have been chosen to do so. The case of driving shows that the law does not make it unlawful for a woman to drive; it is just that culture does not allow her to get a driver's license. The same principle applies to getting a pilot's license. This participant was very clear on her beliefs and while she believed that her choice was to live as a good Muslim woman and did not include becoming a pilot, she did not believe she had the ability to make that choice for someone else. She was very calm during the interview with her.

An interview with another woman was not as easily conducted. She seemed to be nervous about her opinions and not all of them were given easily. Many of the questions she could not answer clearly. Some of the questions she seemed to have an answer for but did not give one that served either side of the debate. This seemed to mean that she was afraid to give answers that were honest. It is possible that because she had not necessarily always been allowed to think freely she was unable to freely give honest answers. Her behaviors during the interview were interpreted as dishonest. It was not that she was being dishonest with her answers, but that she did not know how to be honest with what she believed because some sort of conflict existed. This interview was very interesting because it shed light on many of the reasons that circumstances in Saudi Arabia have not significantly changed as yet. Her behaviors suggested that she did not know how to resolve the conflict of her beliefs on both sides of the problem. It could be suggested that many of the people in the culture do not know how to reconcile their beliefs in embracing modern technologies and holding to older traditions.

Using a qualitative perspective allowed this research to be directed by the observations made during the interviews as much as by the written transcript. Two of the male participants

became very agitated by the questions. The questions seemed to be just as offensive as the ideas behind them. The fact the study was being conducted was an affront to one of the men. This suggested that his frustration went beyond an opinion, and that he believed that by discussing the problem it was being given legitimacy.

After the interviews were conducted the information was codified and put into a grid in order to look for common threads that could identify the potential for women becoming pilots in Saudi Arabia (see Figure 2). The grid was broken down into dimensions of belief and ideas that seemed to emerge most often during the interviews. These dimensions indicate the way in which the experiences of the participants manifested in terms of their cultural ideas and beliefs. The X in each box indicates the affirmative response to the relevance of each of these dimensions to the problem being discussed. This grid suggested that the culture is likely not ready for allowing women to become pilots, even though change is occurring across the national belief system. Both men and women were hesitant about the concept that women might be taking on a more responsible role in guiding their own futures by becoming airline pilots. The opinions of the men and women that were interviewed vary, but most believed that this would eventually be a possibility for women in Saudi Arabia. Even though they may have disagreed about whether or not it was a good thing, it was believed that it would happen.

Several key threads were discovered during the course of the interviews. The first crucial thread that was discovered was that all of the participants believed that the problem of restricting female activities was one of culture and not one of religion. Even those that believed in conservative values felt that they were part of the traditions of their culture more than a result of religious beliefs. Another important thread was that while there was a belief that women should

not get their pilots license or participate in the aviation field by flying, there was a believe that this would become possible in the near future.

The development of the grid shows patterns that have emerged from discussions that were had with participants. Most of the patterns were consistent even though some of the opinions are very different. The grid was developed from a synthesis of the research questions and the interview questions, with the most common ideas represented and the individual participant answers being placed into the appropriate section where they had the most influence. Figure 2 reveals how the interviews can be put into data so that it can be examined for commonalities and differences. (M = male, F = female).

Female Pilots	M1	M2	M3	M4	M5	F1	F2	F3	F4	F5
Inevitability	x	x	x	x		x	x	x	x	x
Culture	x	x	x	x	x	x	x	x	x	x
Law	x		x							
Acceptance			x			x	x	x		
Beliefs						x	x			
Gender Roles	x	x	x	x	x	x	x			

Figure 2 Representation of Positive Beliefs of Participants

Figure 3 represents the issues of inevitability, culture, law, acceptance, beliefs. The belief that there is a purpose to maintaining gender roles in relationships versus a belief in the potential for change, as it relates to women becoming pilots in Saudi Arabia, was evaluated. Change, as represented by these six dimensions, can be evaluated in terms of the weight of each of the dimensions when change is considered a whole. Figure 3 places the six dimensions in comparison to one another in order to understand which factors are going to have the most influence in creating change towards women becoming pilots in Saudi Arabia.

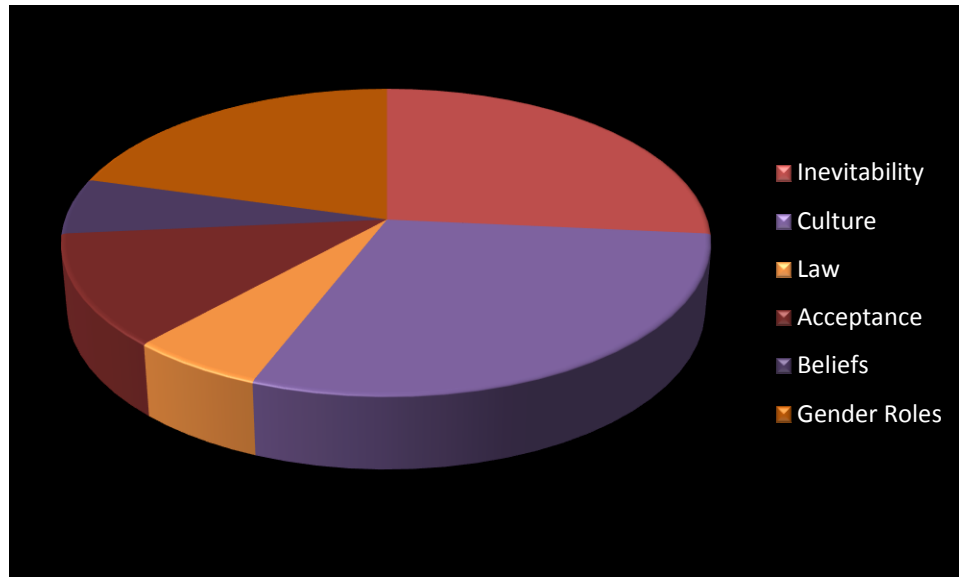


Figure 3 Chart of Expectations

Figure 4 indicates how these dimensions compared to one another and the importance of each one in terms of this discussion. In terms of change, culture had the highest rating of importance, with inevitability coming in slightly less. The interviews indicated that law and beliefs are going to have very little impact on how change occurs. There was a very strong understanding that the culture of the nation and their belief systems were different. The culture of the nation was somewhat defined by how the law affected their behaviors, but their belief systems were not likely to change even if the structures of culture did change. In other words, if women were allowed to drive or to become pilots in Saudi Arabia, that was not going to affect their beliefs on that issue.

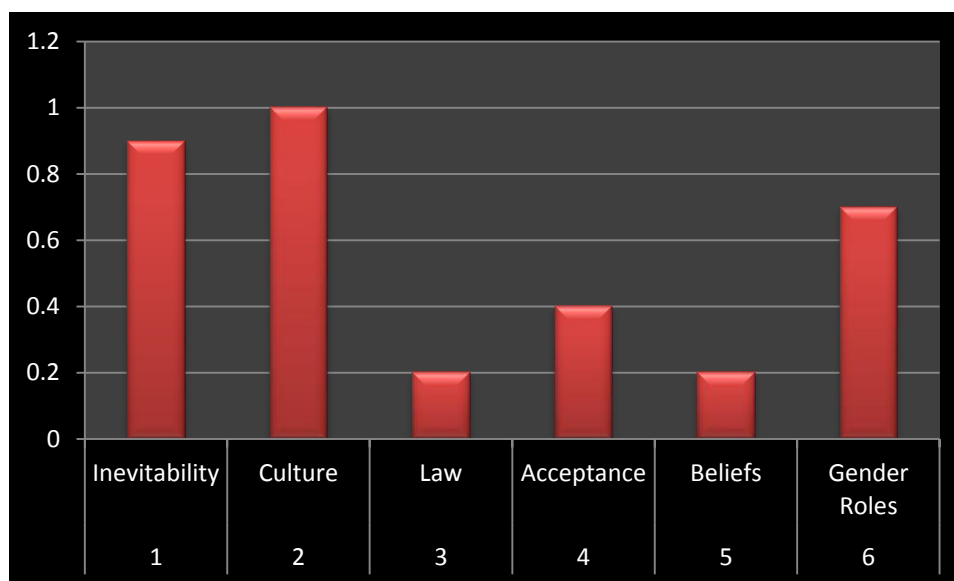


Figure 4 Comparison of Dimensions of Women becoming Pilots in Saudi Arabia

Discussion

Belief and Change.

The first research question asked how the participants perceived necessary changes in the belief systems for the nation of Saudi Arabia so that women can begin to seek opportunities for technologically modern careers such as becoming a pilot. According to the interviews, belief is not likely not to have a direct effect on the changes that would take place in Saudi Arabia concerning women becoming pilots. While it is belief systems that are preventing women from being able to take advantage of these kinds of opportunities, most of the participants see the change will happen even though their personal beliefs are not necessarily aligned with those changes. Changes in relationship to allowing women to become airline pilots will be part of an overall system of change that places modern technologies into social spaces. The changes that will occur that allow women to become airline pilots will involve political and legislative change. Although the law does not prevent a woman from becoming an airline pilot, social

construction would not allow her to work as one currently. This change will take place through political maneuvering and social belief system changes will have to follow in order for this change to be accepted.

Most of the participants accepted the current status for women in Saudi Arabia. Their beliefs about change did not seem to reflect the idea that they can effect change themselves. The one male participant who was adamantly against the idea of women becoming airline pilots also resigned himself to the idea that social change will likely occur that allows this opportunity. The connection between belief and social construction did not seem to be strong. Those who believed that it was okay for women to become pilots and work as pilots did not feel that this could be supported any more than those who were under the belief that women did not belong to this profession.

The agreement that change would occur exists because there are global pressures that are affecting the overall status of women in Muslim societies. The agreement between all the participants that change was inevitable shows that change is not necessarily within the control of the population. It is possible this can be associated to race relations in the United States, in the sense that laws and policies were changed in order to support what was right as opposed to looking at social beliefs in order to define law. However, with the belief systems being attached to religious construction it is also likely that change will not be about what is believed to be right or wrong but about providing for the greater global community in order to continue to be economically viable. Acceptance of the global community may be more important than the belief systems of the population in this case.

Reconciliation.

The second research question addresses the idea of reconciling traditions and beliefs in Saudi Arabia with the idea of women pursuing a career in aviation. The example of Hanadi al Hindi reveals that reconciliation between culture and societal change is not going to be easy. As a role model for women becoming pilots and working as pilots in Saudi Arabia, her sacrifices have had to be balanced against the opportunity that she shows for women. The goal is to find a way for women to not have to sacrifice their social roles just to be able to fulfill their dreams of becoming an airline pilot. The problem is that society will have to find a way to accept being an airline pilot as a respectable role for a woman. While the participants varied in their beliefs about whether this is acceptable or not, those who did accept it also did so with caution. Reconciliation between belief systems and this opportunity to become an airline pilot must occur before women will be able to live in both roles, as an airline pilot and as a respectable woman and Muslim.

It is clear that women will be more accepting of this change than men will be because of the wide diversity of beliefs in the male participants. All of the male and most of the female participants believed that becoming an airline pilot needed to be restricted for women so that they could fulfill their duties as mothers and wives. The idea that there are restrictions means that even if change comes so that women can become airline pilots, they still would not be free to fill that role in the same way that men fulfill it. Suggestions that they only fly inside of the nation or that they only take certain flights that would make sure that they were home at night suggests that full acceptance of the idea of a woman in this career is a long way off.

The idea of reconciliation of the idea of women becoming pilots in Saudi Arabia and still being accepted as respectable Muslim women will require a great deal of negotiation in the social space. What will be accepted is still in question. If women are given the opportunity to

become pilots in Saudi Arabia it is likely that day is still a long way off before they can ever fulfill that role full-time.

Gender Role Perceptions.

The third research question concerns the perceptions of the participants about how becoming a pilot would affect gender roles as they relate to culture, law, and religious belief. The participants had a variety of perceptions about what it would mean for women to become airline pilots in Saudi Arabia. Conservative views within the participant group showed that acceptance of the women themselves would not likely happen easily. The case of Hanadi al Hindi shows that as the first female pilot she has not been accepted in terms of culture, law, and religious belief. Although she is a pioneer for this career for women, her example has not been used in order to create change in terms of her acceptance in the role of a Muslim woman.

Hostilities toward this idea suggest that some people will ostracize women who choose to become airline pilot in Saudi Arabia. Even those participants who were not hostile towards the idea indicated that restrictions were needed; therefore this negotiation between what is acceptable and what is not acceptable will likely mean that some women are disenfranchised through choices that they make that fall on the wrong side of the line. The struggle for technological autonomy which includes being allowed to drive cars, fly airplanes, and work in fields that are outside the scope of what is currently allowed will require a high level of negotiation between culture and acceptance. Even with challenges to changing the law, gender role perceptions will take more than just political bodies giving permission for these changes.

The fourth research question addresses the beliefs of Hanadi al Hindi in relationship to her choice to become a pilot Hanadi al Hindi serves as a role model for women who want to become pilots in Saudi Arabia. She also serves as a cautionary tale because she has had to sacrifice much

in the way of her social status as a woman in order to pursue her goals. She believes that change is inevitable as well. Her experiences show that competency is not the issue for whether or not women can become airline pilots. She adequately finished her education and served as an airline pilot, irrevocably changing her life and the representation of women from Saudi Arabia. Because she has had to make personal sacrifices, it is clear that social change may not be as easy as legislative change. Social change will be needed in order to allow women the opportunity to be hired as pilots. Legislative change may require airlines to hire women as pilots, but creating that social change so that women can be married, act as airline pilots, and continue to be a part of legitimate and acceptable social roles will require much more than just changes in law.

The sacrifices that Hanadi al Hindi has had to make have clearly impacted the course of her life. Social things that she desired such as being married and having children were something that she could not do when she made the decision to become an airline pilot and work as a pilot. The meaning of this can be multidimensional. Her decision was that she sacrificed her privacy and became a celebrity. Her celebrity is at the core of why she could not believe that she would be able to marry and have children in Saudi Arabian culture.

The example of Hanadi al Hindi shows that change will always come at a cost. In this case, she has been deprived of being able to express her female role in Saudi Arabian culture and has embraced the role which she chose through her course of career. Others to follow her will likely have to make the same sacrifices until a point in time when culture is able to reconcile women working as airline pilot and taking advantage of other opportunities in technological fields with their role as Muslim women.

Recommendations

Saudi Arabia needs to begin to integrate modern technology with religiously constructed social ideas. Women are highly respected in the Muslim community, but the need to protect them from expressions that are considered outside of their female role is in conflict with modern technological capacities. In other words, where once driving a car meant having a more technological knowledge, cars are now easy to drive and transportation is not a difficult accomplishment or choice. The ability to work in fields that have high levels of technology means allowing for knowledge rather than physical skill, something that women have proven capable of performing.

The intentions that males have in Saudi Arabia for control and guardianship are antiquated in the opinions of much of the Western world. However, the social construction is something that is supported through religious and cultural belief systems. Despite Western belief systems that are contrary, the cultural system works to support family, modesty, and appropriateness within the Muslim world. Women becoming airline pilots will challenge is what is believed to be the appropriate behavior. The inevitability of this change is forcing this culture to reevaluate how they define gender roles and how it is integrated with modern technology. Cultural change comes when institutions begin to change. Through changes in the messages that come from both political and religious leaders, the potential for women to work as airline pilots in Saudi Arabia can occur.

Limitations

The limitations of this study included the small number of participants that were interviewed and the location of those participants. In order to more fully explore this topic it would be beneficial to go to Saudi Arabia and the people who are still currently living under the

cultural structures that are in place. It would also be beneficial to expand this study to include interviews with high-ranking officials in order to understand the political dynamics that are restricting women to a level that is beyond sharia law. The belief systems that were discussed related to these 10 particular participants and this could also show bias because they currently live in the United States.

Further research is needed in order to fully understand this problem and to address the idea of expanding the opportunities for women, which would include allowing them to come airline pilots. Research is going to be needed across multiple dimensions including political implications, cultural implications, as well as the impact that it will have on social relationships. Further research will also include quantitative studies that can map out statistical information on population impact so that these changes can be made in a way that are for the best possible benefit.

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Appendices

Appendix A



2/18/2014

Investigator(s): Ahmad Baraqabah, Wendy Beckman
Department: Aerospace
Investigator(s) Email: Ab4u@mtmail.mtsu.edu; Wendy.Beckman@mtsu.edu

Protocol Title: "Female Pilots and Saudi Arabian Culture "

Protocol Number: 14-241

Dear Investigator(s),

The MTSU Institutional Review Board, or a representative of the IRB, has reviewed the research proposal identified above. The MTSU IRB or its representative has determined that the study poses minimal risk to participants and qualifies for an expedited review under 45 CFR 46.110 and 21 CFR 56.110, and you have satisfactorily addressed all of the points brought up during the review.

Approval is granted for one (1) year from the date of this letter for 20 participants.

Please note that any unanticipated harms to participants or adverse events must be reported to the Office of Compliance at (615) 494-8918. Any change to the protocol must be submitted to the IRB before implementing this change.

You will need to submit an end-of-project form to the Office of Compliance upon completion of your research located on the IRB website. Complete research means that you have finished collecting and analyzing data. **Should you not finish your research within the one (1) year period, you must submit a Progress Report and request a continuation prior to the expiration date.** Please allow time for review and requested revisions. Failure to submit a Progress Report and request for continuation will automatically result in cancellation of your research study. Therefore, you will not be able to use any data and/or collect any data. Your study expires **2/18/2015**.

According to MTSU Policy, a researcher is defined as anyone who works with data or has contact with participants. Anyone meeting this definition needs to be listed on the protocol and needs to complete the required training. **If you add researchers to an approved project, please forward an updated list of researchers to the Office of Compliance before they begin to work on the project.**

All research materials must be retained by the PI or faculty advisor (if the PI is a student) for at least three (3) years after study completion and then destroyed in a manner that maintains confidentiality and anonymity.

Sincerely,

Kellie Hilker
Compliance Officer/ MTSU Institutional Review Board Member

Appendix B

Middle Tennessee State University Institutional Review Board Informed Consent Document for Research

Principal Investigator: Ahmed Baraqabah
Study Title: Female Pilots in Saudi Arabia
Institution: Middle Tennessee State University

Name of participant: _____ Age: _____

The following information is provided to inform you about the research project and your participation in it. Please read this form carefully and feel free to ask any questions you may have about this study and the information given below. You will be given an opportunity to ask questions, and your questions will be answered. Also, you will be given a copy of this consent form.

Your participation in this research study is voluntary. You are also free to withdraw from this study at any time. In the event new information becomes available that may affect the risks or benefits associated with this research study or your willingness to participate in it, you will be notified so that you can make an informed decision whether or not to continue your participation in this study.

For additional information about giving consent or your rights as a participant in this study, please feel free to contact the MTSU Office of Compliance at (615) 494-8918.

1. Purpose of the study:

You are being asked to participate in a research study because you are originally from Saudi Arabia and over the age of 18.

2. Description of procedures to be followed and approximate duration of the study: During your participation you will be asked a series of questions about your opinions, based on your own cultural experiences as a Saudi citizen. The interview will last about 30-45 minutes depending on the depth of your answers.

3. Expected costs: No costs will be involved

4. Description of the discomforts, inconveniences, and/or risks that can be reasonably expected as a result of participation in this study: You are allowed to refuse to answer a question or end your participation at any point during the interview. There should be no risks or discomfort and the answers that you give will be kept in strict confidence.

5. Anticipated benefits from this study:

- a) The potential benefits to science and humankind that may result from this study are that a deeper understanding of the obstacles and opportunities about change for women in Saudi Arabia can be evaluated.

b) The potential benefits to you from this study are that you will be able to think about this issue and formulate opinions that will help to have an effect in Saudi Arabia.

- 6. Compensation for participation:** This is a voluntary study with no compensation being offered to participants other than my deepest appreciation
- 7. Circumstances under which the Principal Investigator may withdraw you from study participation:** There are no known reasons that a participant would be withdrawn from the study.
- 8. What happens if you choose to withdraw from study participation:** You are free to withdraw at any time before, after, or during the interview without any consequences.
- 9. Contact Information.** If you should have any questions about this research study or possible injury, please feel free to contact **Ahmed Baragabah** at **386-334-9670** or my Faculty Advisor, **Wendy Beckman** at **615-494-8755**.
- 10. Confidentiality.** All efforts, within reason, will be made to keep the personal information in your research record confidential but total privacy cannot be promised. No identifying information will appear in any publication based on this research. Your information may be shared with Middle Tennessee University Institutional Review Board or the government, such as the Middle Tennessee State University Institutional Review Board, Federal Government Office for Human Research Protections if required by law.

11. STATEMENT BY PERSON AGREEING TO PARTICIPATE IN THIS STUDY

I have read this informed consent document and the material contained in it has been explained to me verbally. I understand each part of the document, all my questions have been answered, and I freely and voluntarily choose to participate in this study.

Date

Signature of patient/volunteer

Consent obtained by:

Date

Signature

Printed Name and Title

Appendix C

Interview Questions for General Participants

Demographics

Gender: M ___ F ___

Age: 18-24 25-31 32-40 41-48 49-55 56-64 65+

National Origin _____

Religion _____

1. The law does not allow Saudi Arabian women to drive. What do you think of that law?
2. Do you think this law has anything to do with restricting women from working?
3. Should women work outside of the home?
4. If you think that women should have more opportunities, how should they be given?
Should they be restricted, but expanded?
5. What do you believe is the reason that women are so restricted under Saudi Arabian law?
6. Do believe that they are too restricted or not enough?
7. Do you know who Hanadi al-Hindi is? If not, would you be surprised to know she is the only Saudi Arabian female pilot? What do you think of her choice to be a pilot?
8. What specifically would restrict a woman from becoming a pilot?
9. Should there be restrictions that could be placed upon her that would allow her to become a pilot?
10. What would it take for men to change their beliefs about women so that this type of cultural change could take place?
11. Prince Al-Waleed bin Talal is the one who supported Hanadi al-Hindi's efforts to become a pilot and then hired her after her education was done. Do you support this idea of helping women to achieve their goals for these kinds of opportunities?
12. What do you see as the consequences of women being able to pursue the same kind of opportunities as men such as becoming an airline pilot?
13. Do you believe that these changes could take place in Saudi Arabian culture? Should they take place?
14. What effect would this have on the relationships that men and women share within the Saudi Arabian culture?

15. How do you feel about the idea of female pilots in general? What about female pilots from Saudi Arabia?

Appendix D

Interview Questions for Hanadi al Hindi

1. Is flying everything that you had hoped it would be?
2. How do you feel about other Saudi Arabian women becoming airline pilots?
3. Do you think it will be something that can realistically happen regarding Saudi women becoming a pilot?
4. What major change in our culture do you think is necessary for more women to become airline pilots?
5. Do you think that women can fly commercial airlines like Saudia?
6. What types of sacrifices have you made in order to become a pilot?
7. Do you have any regrets?
8. You are a role model for other young women who want to follow your example. What would you say to them?
9. What changes in the belief systems in the nation of Saudi Arabia will be needed in order to allow women to seek opportunities for technologically modern careers such as becoming a pilot and how will this affect law as it relates to Muslim beliefs?
10. How might Saudi Arabian woman reconcile their traditions and beliefs with the pursuit of a career in aviation?