

“*Bābā* gave water; *Bābā* gave bread” ... What about *Māmān*?

Educational regime, gender equality attitudes, and gender representation in Iran

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To maman *and* baba: for the water, bread, endless support, and unconditional love.

Abstract

Considering the future of development goals, the importance of attaining gender equality has become increasingly evident, particularly given the increasingly globalizing world context. In confronting gender equality, it is critical to understand and address individuals' attitudes toward gender equality and its potential sources. The Iranian context, as an "Islamic" country, and its geopolitical positioning provides a unique case. This study inquires why Iranians in particular have differing attitudes toward gender equality, and suggests that political regimes' ideology at the time of educational attainment could be a key consideration. This postulation is supported by analyzing political regimes at the time of primary education and Iranians' attitudes toward gender equality. Moreover, this thesis considers the presentation of genders in Iranian elementary school Farsi reading textbooks, given the importance of school books in influencing students' political culture and social outlook. This analysis further considers how such presentations have changed over time, bearing in mind Iran's political context within a globalizing world. The results suggest that women continue to have a lower visibility and be depicted in mainly traditional housework and educational roles in these textbooks, although their visibility has been very slowly and steadily increasing. The findings of this thesis draw attention to the importance of a holistic consideration of education, educational means, and political contexts in pursuing gender equality developmental goals.

Résumé

Considérant l'avenir des objectifs de développement, l'importance d'atteindre l'égalité des genres est devenue de plus en plus pressante, notamment à cause du contexte de mondialisation internationale connu aujourd'hui. Afin de faire face à ces défis, il est crucial de comprendre et d'interpréter les comportements individuels vis à vis de l'égalité des genres et ses sources potentielles. En tant que pays "islamique" possédant une position géopolitique clé, l'Iran constitue un terrain d'enquête unique pour ces questions. Cette étude cherche à savoir pourquoi les iranien(nes) font preuve d'attitudes divergentes vis à vis de l'égalité des genres et suggère que la nature du régime politique lors des moments clés de l'apprentissage pourrait être un élément déterminant dans cette équation. Cette hypothèse est soutenue par une analyse des régimes politiques lors de l'enseignement primaire, en parallèle avec une étude des attitudes iraniennes par rapport à l'égalité des genres. De plus, cette hypothèse considère également la manière dont les genres sont présentés dans les manuels scolaires élémentaires en Farsi, étant donné l'influence importante de ceux-ci sur la culture politique et sociale des élèves. L'analyse prend en considération les changements dans de telles représentations au cours du temps et à travers le contexte politique iranien dans un monde marqué par la mondialisation. Les résultats suggèrent que les femmes continuent d'avoir une présence moindre que celle des hommes, représentées souvent dans des tâches ménagères traditionnelles ou en tant qu'institutrices. Cependant, leur présence semble progresser graduellement et s'accroître tranquillement. Les conclusions de cette étude misent sur l'importance d'une vision holistique de l'éducation, des moyens utilisés dans sa réalisation et sur le contexte politique dans la poursuite des objectifs d'égalité des genres et de développement.

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1. Chapter I: Introduction

A crucial aspect of addressing global development lies in achieving gender equality, as outlined in the Sustainable Development goals adopted by the United Nations (UNDP 2016). Gender equality, and in particular, women's empowerment, has been shown to be essential in improving children's nutrition and health, food security, household spending, and various critical aspects of development (De Schutter 2013, xi-x). However, this goal cannot be achieved without addressing the gender norms and attitudes that result from socially and culturally formed gender roles. Therefore, it is critical to understand the main influences on attitudes toward gender and equality, and the presentation of such roles through society, in order to consider how to then best address them in pursuing gender equality specifically, and progress in development more broadly. Education, and early education in particular, is a specific societal factor often advocated to greatly impact attitudes toward gender equality (Foroutan 2012; Lee and Collins 2008; Chanzanagh 2011). The analysis of the role of education in, and relationship to gender equality attitudes and gender representation is thus essential to pursuing these global goals.

The significance of gender roles within the Iranian context is often considered by scholars, given reports of the various violations of women's rights under its Islamic rule (Moghadam 2013; Hoodfar 1994; Afshar 1985; Sedghi 2007). In addition, Iran's geographic location within the Middle East, a region known for its gap between men and women as characterized in patriarchy and low women's rates of employment and education, render it a case of particular interest (Foroutan 2012, 774). Furthermore, the changes through time in the political regime's ideology in Iran, along with the importance of the role of religion and culture in its political context, all provide for a very intriguing case.

This thesis tests the idea that educational attainment and the political influences on education can impact individuals' attitudes toward gender equality. Considering the early stages of developing one's gender role, children are taught their expected roles by their culture and society (Atay and Danju 2012, 65). Given their formal structure, schools play a critical role in forming children's value systems, and thus influencing their attitudes toward social norms (Mehran 1989). The different responsibilities and work they learn to associate with, based on their gender, then impacts their expected opportunities and aspirations (Taylor 2003, 300). Children are taught the acceptable roles for their age and sex, at home and in school, through the socialization process of education (Atay and Danju 2012, 72). Education is also the means by which political culture is learned, and transmitted from one generation to the next through the use of language (Havelock 1989, 223). Within educational institutes, textbooks, along with other material, are "part of the environment that has been intentionally constructed for practical purposes according to culturally dictated plans" (Crabb and Bielawski 1994, 69).

School and its material content, especially in teaching language, are consequently considered one of the most important influences in affecting individuals' attitudes and beliefs about gender (Foroutan 2012; Lee and Collins 2008). In addition, educational programs are designed according to governments' ideologies, as well as the economic and social structure of the given society, signifying the importance of political regime at the time of educational attainment, and its potential influence on social attitudes (Chanzanagh 2011). Upon first entering the educational system, at the age of primary school commencement, children are capable of differentiating between genders and even gender roles, given their exposure through the family environment (Atay and Danju 2012). Primary school is their first exposure to the formal educational system as an official source of gender role presentation. It is at this school level where

most children are first taught literacy skills, with which they also learn culture, and how to make sense of the world. Accordingly, the role of political regimes at the time of this initial educational attainment is critical and provides insight into a potential source of gender equality attitudes. Furthermore, analyzing the content through which individuals first learn a critical skill (reading) and the way in which they present gender, is crucial in understanding factors that contribute to shaping gender equality beliefs. This analysis does not deny the role of other personal and environmental factors that can influence the realization of students' aspirations and gender equality attitudes. However, this research suggests that such factors and their influence do not minimize the role and effect of initial formal education.

Given the above framework, this thesis seeks to further explore the concept of gender equality in the Iranian setting. This study is effectively divided into two chapters, each addressing separate research questions within the broader theme of considering the role of education in gender equality and representation. Although the concepts addressed are related and may be implicitly causal, this thesis does not attempt to study the causal relation between the two chapters, but rather to provide an analysis of the separate foci of each.

This introductory Chapter provides a brief description of the Iranian educational system and changes in political history. Following this brief overview, Chapter 2 considers an explanation of Iranian's differing views of gender equality. This chapter analyzes the influence of the Iranian political regimes' ideology at the time of primary educational attainment on Iranians' attitudes¹ toward gender equality. The independent variable used for this analysis is the respondents', "Educational Regime", a reflection of the political regime at the time of their primary educational

¹ A further explanation of "attitudes" and their measurement method is provided in Chapter 2, Section 2.2.1.

attainment. The dependent variable of interest is Iranians' gender equality attitudes, measured by responses to specific gender-related questions in the World Values Survey.

Bearing in mind the centralized Iranian educational system, Chapter 3 is concerned with changing gender roles and equality presented in textbooks of primary schools, given the importance of the effects of primary education on individuals' political culture. Thus, the analysis examines how gender equality and gender roles are presented in Farsi reading textbooks used in Iranian primary schools. Subsequently, the study analyzes the changes in these gender presentations and representations over time, as the regime changed ideological orientation. This chapter relies on content analysis of the images to carry out these analyses, which allows for a study of the visibility and occupational roles of females and males in Farsi reading textbooks.

The Iranian Educational System

The educational system in Iran is highly centralized, in that all schools within the country are under the administration of the Ministry of Education. All textbooks and materials used in classrooms, in any given school, are produced by authors specifically hired and instructed by this governmental ministry. Therefore, the analysis of the gender representations in the early stages of this educational system provides an interesting window into the government's presentation of attitudes toward gender equality and its potential influence.

A complete reform in the Iranian educational system occurred after the Islamic revolution of 1979. The revolution overthrew the Shah, who had been altering education towards a more secular system, establishing a national public education system in pursuit of the modernization of Iran (Higgins and Shoar- Ghaffari 1991, 216). Increased access to education, and especially girls' access, was greatly promoted during both Reza Shah Pahlavi, and more so, Mohammad Reza Pahlavi's reign (particularly throughout the late 1960s and 1970s), despite a slow expansion of the educational system in the country (Shaditalab 2005, 38).

Following the revolution of 1979, Ayatollah Khomeini and other religious leaders came to power and declared an Islamic Republic of Iran. New textbooks and curricula were created and implemented in all schools, and only educators deemed to be religious were permitted to continue teaching in schools (Higgins and Shoar-Ghaffari 1991, 337). Some of the major changes that occurred in the educational system were the segregation of previously coeducational schools, and the introduction of mandatory Islamic uniforms (Higgins and Shoar-Ghaffari 1991, 217; Shaditalab 2005, 43). In order to better adhere to the views of the new political system, Ayatollah Khomeini demanded a change in the school textbooks, to clear them of “western” and “degenerate” topics, and ensure that they reflected Islamic themes (Ferdows 1996, 326). The goal of the reforms was to create a new curriculum that better reflected the culture and needs of Iranians, along with their supposed Islamic ideals (Mehran 2007, 54). It must be noted that aside from such changes, the new government continued to promote the accessibility of education for both males and females, at times even allowing male teachers for female classes, or co-educational classes in certain rural areas (Higgins and Shoar-Ghaffari 1991, 218). Thus, both governments used institutions such as schools to promote their view of the ideal citizen and proper gender-roles. Since the educational reform in 1979, the system has been changed several times, though no overhauls of the curriculum have occurred.

Nevertheless, following a system reform in 2012, and the incorporation of a new curriculum, the textbooks were re-written, claiming to best reflect the current situation and needs of students. In introducing the new textbooks, the authors state that changes were made to the books using new goals and policies of teaching. They express their hope that teaching this new curriculum will cause the growth and talent of the students and new learners, and improve the public education of the Islamic nation, as well its quality (Akbari-Sheldreh et al. 2012).

Time Periods Considered

Due to the concern with changes in attitudes toward gender equality and the presentation of gender roles, this thesis considers various distinct time periods. First, the period prior to the Islamic revolution, under the rule of the Shahs, who followed programs of modernization. Second, the first decade following the revolution, often referred to as the “transformation period” (Shaditalab 2005, 41). This was a time characterized by the implementation of Islamization programs, within the context of the Iran-Iraq war (Moghadam 1993, 175). Due to the introduction of the new Islamic values, the implementation of the cultural revolution, and the configuration of this new government, this period is also often regarded as a highly ideological one (Moghadam 2013, 175). The reconstruction period (1989/1992-2005) that followed the initial establishment of the new government, is seen as a period of liberalization under president Rafsanjani, and more so under president Khatami (Shaditalab 2005, 41; Moghadam 2013, 176). Khatami’s presidency is associated with reforms, though still within the Islamic system. Moghadam terms the period of Ahmadinejad’s presidency, beginning in 2005 and lasting until 2013, as “neofundamentalist”, signifying the more hardliner attitude of the government (Moghadam 2013, 181-2). Due to the introduction of stricter measures and contradictory laws, this period reflects, once again, a fluctuation in the degree of conservatism of the regime. A change in this level of conservatism is seen, once more, in the most recent election of Hassan Rouhani, who is depicted as a more secular and thus less conservative president (see Table 1.1). Therefore, the varying degrees of restrictiveness or conservatisms associated with the different presidencies are clear over time.

It is essential to understand such variations in the political regime following the revolution within the context of the consistent Islamic ideologies and system in which all of these presidents have operated, along with the higher power of the supreme leader. Although noticeable, these regime changes all occur within a context of continuity and are therefore not extreme, providing

otherwise similar settings in which Iranians have been socialized. The changes in regime orientation within the time periods under consideration provide comparable units suitable for analyzing the impacts of education on individuals' attitudes toward gender equality, the presentation of gender roles over time, and the potential changes in both.

Table 1.1: Time periods and political changes in Iran

Time period reference	Years considered	Leader/ President(s)	General characterization
Pre-Revolution (Pahlavi Era)	1878-1941 1941-1979	Reza Shah Mohammad Reza Pahlavi	Periods of modernization and "westernization"
"Transformation"	1979-1981 1981- 1989	[various presidents] Ayatollah Ali Khamenei	Implementation of cultural revolution, and new Islamic regime.
"Re-construction"	1989-1997 1997- 2005	Akbar Hashemi Rafsanjani Mohammad Khatami	Increased reforms and liberalization.
"Neo-fundamentalist"	2005-2013	Mahmoud Ahmadinejad	Increased conservative and anti-Western rhetoric.
"Current"	2013- present	Hassan Rouhani	Leader of the moderation and development party; increased relations with the West.

1.1 Literature Review

This thesis contributes to literature concerned with global patterns of changes in attitudes toward gender equality, and the representation and presentation of gender equality in textbooks, particularly in Iran. Within this scholarship, there exists a debate of the global impact of globalization and trends of increasing equality in the West, and questions of whether such patterns will be followed in other contexts. Along with these debates, I consider previous scholars' studies of gender representation and its potential changes over time, specifically in Iranian textbooks. The presentation of the importance of the differences in previous findings and their conceivable implications highlights the potential for this research's contribution.

Various research has established the importance of the role of education in influencing individuals' political culture and social outlook (Chanzanagh 2011; Foroutan 2012; Kalia 1980). Previous work posits that given their formal structure, schools play a critical role in forming

children's value systems (Mehran 1989, 36). Textbooks are important tools in the formation of students' identities, in understanding their surroundings, and life as it should be led. Contents of textbooks are considered normative in that they are precise representations of an ideal standard or model (Poncin 2005, 10). Due to this nature, schools, and their educational material such as textbooks are thus of importance in the formation of a child's sense of social role, responsibility, and identity (Foroutan 772).

While such studies demonstrate the importance of the role of education in influencing individuals' political culture and social outlook, few previous works have analyzed the specific relationship between educational regimes² and attitudes toward gender equality, particularly in the Iranian context. Various scholars have studied cohort effects on social change, including views on gender equality, and many suggest an increasingly egalitarian view of gender equality over time (Dorius and Alwin 2010; Mason and Lu 1988; Alwin and Scott 1996; Brookes and Bolzendahl 2004). However, a majority of these works focus on the changes that have occurred within Western countries, and little detailed studies within other countries exist. Dorius and Alwin's research considers changes in gender attitudes from the 1990s to the mid 2000s, across 75 various countries. Their findings suggest that the trend toward more egalitarian views of gender equality are universal, regardless of a country's income level or geographical position (Dorius and Alwin 2010). Theories of globalization and social and cultural globalism also posit that as ideas and information are now accessible across nations and societies, their practices will subsequently often become imitated by one another. This theory therefore suggests that the trends found in Western countries should be followed by others (Keohane and Nye 2000, 107). Based on such previous findings and those suggesting increasingly secular global trends toward social change and gender

² "Educational Regime" is henceforth used to reference the political regime ideology at the time of educational attainment. This reflects the significant role of the political regime in deciding educational curricula and attainment in Iran.

attitudes, it would be estimated that despite the changes in political and thus educational regime, there should be a positive trend in attitudes toward gender equality in Iran.

Although certain signs of change are evident, research also suggests that such changes are occurring slowly, and certainly unevenly across the world (Foroutan 2012, 774). Contrary to globalization and cultural globalism theories, other studies suggest that changes in social status and viewpoints on equality will differ between developed and less developed nations, based on differences in societies' cultural and especially religious context. In their study of approximately 70 nations using the World Values Survey (WVS) data, Inglehart and Norris demonstrate that the modernization process, or move toward postindustrial societies bolsters societies' attitudinal change (2003). Similar to other scholars, they find that younger individuals, higher-educated individuals, as well as women in general are usually more egalitarian in their gender attitudes. However, Inglehart and Norris further argue that cultural and religious societies alter the pace and effect of such secular trends, suggesting that cultural change is a necessity for gender equality, and certain cultures may consequently be more resistant to change (2003, 9). In demonstrating that "culture matters", while controlling for individual and societal development levels, the authors claim that the change toward increasingly egalitarian attitudes toward women is "mediated by particular religious legacies, historical traditions, and institutional structures... [and that] the Islamic religious heritage [is] one of the most powerful barriers to the rising tide of gender equality" (2003, 159-60). Other scholars have also previously argued the effect and importance of conservative or traditional attitudes regarding women, and their role and place in society (Lopez-Claros and Zahida 2005, 11). Such arguments lead to the assumption that perhaps positive attitudes of gender equality are more closely related to notions and the processes that more developed countries have undergone, such as "industrialization, [and] postmodernism", rendering the issue

irrelevant in non-Western nations (Inglehart and Baker 2000; Dorius and Alwin 2010, 5). From this, it can be further assumed that more secular³ attitudes are expected in Western countries or those with clearer divides between religion and politics. This leads many to suppose that changes to such attitudes will differ in non-Western cultures, particularly in predominantly Muslim countries, whose religious traditions they argue will be more resistant to change (Dorius and Firebaugh 2010).

In light of patterns of convergence, and general trends toward the improvement of the representation of women suggested by concepts of globalization, Iran poses an intriguing case study, considering its geopolitical position. The Iranian society has seen the rise of many signs of modernization such as increased female educational attainment, and involvement in the labour market (Mehran 2003; Moghadam 2013). Furthermore, decreasing fertility rates and delayed ages of marriage all point to factors considered to lead to positive gender attitudes (Mehran 2003; Foroutan 2012). However, the religious orientation of the Iranian regime, and its various changes in intensity, provides a complex case for which the above outlined theoretical debate has no clear answer. Given the very centralized nature of their educational system, along with the highly ideological political regime, the notion of change in Iranians' gender equality attitudes, as well as Iranian textbooks' presentation of gender roles presents a challenging case.

Regarding the presentation of gender roles in school textbooks specifically, there have been numerous analyses, which generally reinforce the presence of clear stereotypical gender roles portrayed in textbooks.⁴ In the various analyses of textbooks considered, it is primarily found that males are more visibly and actively presented as opposed to females, and tend to occupy more

³ "Secular views" are henceforth used to refer to relatively positive/accepting attitudes toward gender equality, rather than regarding the distinction between religion and politics.

⁴ For examples see: Kalia 1980; Touba 1987; Higgins and Shoar-Ghaffari 1991; Chu and McIntyre 1995; Paivandi 2008.

professional roles, and visibility in public spaces (Foroutan 2012, 777). These findings of the differential portrayal of men and women, in terms of visibility, as well as stereotypical roles has been shown in the literature, and even in studies of children's books and television shows (Taylor 2003; Chu and McIntyre 1995).

Concerning Iranian textbooks' content, prior to the Islamic Revolution of 1979, and even within the first decade following the revolution, little literature on the topic of gender representations in Iran was available. Since then, various authors have undertaken studies of cultural aspects of the Iranian society, including analyses of their school textbooks. A majority of such research, however, mainly considers the political, nationalist, and religious aspects of the textbook material. They report the Islamization of the content of textbooks, paying particular attention to religious studies and social studies books (Shorish 1988; Mehran 2003).

Nevertheless, some authors have analyzed the presentation of gender roles in Iranian textbooks, finding that they conform to the general trends of differentiation between men and women (Mehran 2007; Toubia 1987; Paivandi 2008; Higgins and Shoar-Ghaffari 1991). A 1991 study by Higgins and Shoar-Ghaffari presents the results of a comparative content analysis of the representation of women in Iranian primary school language textbooks. Contrary to their hypothesis that the Islamic ideals of the new regime would result in a sharp decline of the visibility of women, the authors found less clearly significant differences between the two sets of textbooks (Higgins and Shoar-Ghaffari 1991, 221). The aspects of gender-roles within which they do find significant difference, is not surprisingly, regarding sex-segregation, and the manner of dress, to reflect the newly implemented Islamic ideals. Conversely, other authors claim a drastic change in the difference in representation of gender roles in the textbooks following the Islamic revolution (Paivandi 2008; Shaditalab 2005; Toubia 1987). In another major content analysis considering

Iranian textbooks, Paivandi states that there are “vast differences” presented between men and women in the textbooks used following the cultural revolution (Paivandi 2008). Paivandi claims that women are generally less visible, and are presented more in the setting of the home, rather than in the work place or as professionals (Paivandi 2008).

Considering the possible trends of changes in gender equality within the Iranian context, on the subject of changes in gender-role representations over time, previous studies suggest a general trend of improvement. These studies consequently indicate a decrease in differentiation between males and females, and an improvement in the portrayal of women (Foroutan 2012, 774; Gharbavi 2012). In seeking comparisons of gender representation in textbooks overtime within the available literature, since Paivandi’s research is based on an analysis of all primary school textbooks, whereas Higgins and Shoar-Ghaffari’s is based solely on the language texts, direct comparisons between the findings of the two studies cannot be drawn. Moreover, although the authors state their method of content analysis, they are not transparent in the specific coding system used, making the replication of their studies more difficult. Additionally, at present, there is no available analysis of the current Iranian textbooks, following the implementation of changes in curriculum in the year 2012, nor are there systematic analyses of the presentation of gender roles in Iranian textbooks over the course of time. Such a comparison of changing presentations over time will contribute to the debate regarding the differentiation in gender equality, and whether a more secular approach is a global trend. After confirming the presentation of the patriarchal orientation of the Islamic regime in elementary texts in her 1987 study, Touba questions whether such an orientation “can be tolerated over a long period of time” (1987, 153- 54); a question, that remains unanswered.

From the literature reviewed, the role and influence of education on attitudes toward gender equality is clear; however, the differing views on the importance of political culture and conservatism, as well as the lack of direct studies of educational regime influence on such attitudes leave room for further study. Chapter 2 of this research contributes to this gap by offering a focused analysis of the relationship between specific educational regimes and attitudes toward gender equality in Iran. Further considering the debates regarding the global trends of convergence and increasingly secular attitudes toward gender equality, the analysis of Iranian textbooks in Chapter 3 allows a closer look at potential patterns of change in gender representation over time. Additionally, the third chapter will contribute to studies of gender representation within Iranian school textbooks, providing a systematic analysis and comparison over various periods of time and political regimes.

1.2 Overview

The second chapter of this study examines why Iranians have differing attitudes toward gender equality, and assesses the impact of political regimes' ideology at the time of educational attainment. This chapter relies on World Values Survey Data for Iran to define and measure Iranians' attitude toward the issue (World Values Survey 2005).⁵ The analysis then draws comparisons in attitudes between individuals who completed their primary school education during the time of three different political regimes, namely: pre-revolution, post-revolution and those with primary education under a mix of the Shah's and Islamic Republic's rule.

The third chapter pertains to a specific mechanism through which political regimes can influence such attitudes, by studying the representation of gender equality, and presentation of

⁵ For a further explanation of the operationalization of this term, see section 2.2.1, "concepts".

gender roles in primary school textbooks. This research does not, however, analyze the causal effect of the textbook material on gender equality attitudes, as the potential impact of early educational far exceeds the content of textbooks. Rather, this chapter considers two questions: first, how are gender roles and gender equality presented in Farsi reading textbooks? Subsequently, have there been changes in these presentations over time? Chapter 3 thus consists of an analysis of primary school reading textbooks, encompassing grades 1 through 5, from each of the four specified time periods⁶ (a total of 20 textbooks). I obtained these textbooks by conducting archival research, given their challenging accessibility. These textbooks enable the systematical analysis of this previously unexplored (cross-comparison) object of analysis. The content analysis of the images in these textbooks results in measures of the frequency of the visibility of males versus females in order to compare the presentation of gender equality through time. Further, the analysis also provides a count of the typical occupational roles assigned to each gender, used then to compare the representation of stereotypical gender roles. In addition, this third chapter includes a qualitative analysis of the textbooks and images, providing an interpretation for the messages they convey. This aspect of the study encompasses elements of the textbooks' lessons not captured by the quantitative content analysis.

⁶ Given the availability of survey data, the analysis in chapter 2 only pertains to the first three time periods explained in Section 1, whereas the third chapter considers the four post-revolution time periods, given the availability of textbooks.

2. Chapter II: Because it's 2016

Educational Regime and Gender Equality Attitudes: the case of Iran

Addressing a question regarding the reason for his gender-balanced cabinet, newly elected Canadian Prime Minister, Justin Trudeau, boldly answered "Because it's 2015". This incontestable response alludes to the global trends of increasingly accepting attitudes toward gender equality, and the significant role of political influence.

2.1 Theoretical Overview

This Chapter contributes to current debates regarding patterns of increasingly secular attitudes toward gender equality, and the role of context-specific influences. Considering the previously established importance of primary school education in influencing individuals' political culture, this analysis tests the relationship between Iranian's educational regime, and their corresponding attitudes toward gender equality. By so doing, it contributes to questions of whether there is a globally uneven rise in the support for gender equality and whether "cultural change is a necessary condition for gender equality" (Norris and Inglehart 2003).

The changes in Iranian society and political regime, particularly those following the Islamic Revolution, provide a case in which cultural changes do not necessarily follow global patterns. The establishment of an Islamic republic provides a case in which to test assumptions of a greater resistance to change in non-Western cultures and predominantly Muslim cultures (Paxton et al. 2006). However, Iran's presence and position in the constantly modernizing and changing global context render it susceptible to the spread of information and ideas. The global spread of ideas regarding the importance of gender equality, raise questions of whether the influence of Iran's cultural context can be surpassed in affecting gender equality attitudes.

2.2 Research Design and Data

This analysis consists of a quantitative analysis of the relationship between the Iranian political regime at the time of primary educational attainment on Iranians' attitudes toward gender equality. By using regression analysis as well as an ordinal-logit estimation, the chapter evaluates the relationship between Iranians' educational regimes and attitudes toward gender equality. The dependent variable of interest is Iranians' gender equality attitudes, a complex concept whose precise definition is often disagreed upon. The independent variable used is the respondents' "Educational Regime", a reflection of the political regime at the time of their primary educational attainment. Given the broad potential scope of these concepts, a specification of their definitions and operationalization for this thesis is necessary.

2.2.1 Concepts and operationalization

Dependent Variable: Gender Equality

The main research interest in this chapter is Iranians' attitudes toward gender equality. For the purposes of this research, "gender roles" refer to the perception of certain responsibilities, activities and behaviours deemed more appropriate for males or females within a given society (Pavlic, Ruprecht, and Sam-Vargas 2000). For this study, and based on the available data, the main dependent variable "gender equality" is defined following the method of Alwin and Dorius, as well as Inglehart, as follows. The concept of gender equality is to be distinguished from one termed "gender roles" which is more reflective of particular beliefs in the innate difference between men and women. This notion is often related to the beliefs regarding gender within the private sphere, concerning roles such as child-bearing and household work. In contrast, gender equality is more reflective of previous scholars' depictions of "male primacy," where men are believed to be inherently superior to women (Charles and Grusky 2004). Furthermore, this concept is concerned

with the perceptions of gender in the public sphere, pertaining to issues such as education and employment (Dorius and Alwin 2010, 7; Bradley and Khor 1993).

This Chapter utilizes the World Survey Data for its analysis (World Values Survey 2005). To operationalize the concept of attitudes toward gender equality using this data, I rely on three consistently asked questions concerning the respondents' views of men versus women within the public sphere. These questions pertain to three specific domains (and are accordingly named): "Job", "University", and "Politics" (Dorius and Alwin 2010). The specific statements used in the surveys are: 'Men should have more right to a job than women when jobs are scarce', 'University is more important for a boy than for a girl', and 'Men make better political leaders than women do' (World Values Survey 2005). The respondents were asked to answer these questions using a Likert scale (rank ordering) between 'strongly agree', 'agree', 'disagree' and 'strongly disagree' for the former two questions, and an order of 'agree', 'neutral' and 'disagree' for the latter.

In order to convert these questions into a single variable representing attitudes toward gender equality, I re-coded the responses on a scale ranging from 1 to 4 respectively for the first two questions, and the responses to "Politics" as 1.5, 2.5, and 3.5 respectively, in order to render them amendable with the other two variables. I then use the re-coded variables (Job, University, and Politics) to create an additive index. The resulting variable termed "Gender Equality" is thus an ordinal scale ranging from 3.5 to 11.5, expressing the sum of respondents' replies to the three aforementioned questions. For simplicity, the scale is recoded to range from 1 to 9, with higher numbers indicating disagreement with the posed questions, and thus increasingly secular attitudes toward gender equality. For even further simplification the scale is also coded as a 3-category ordinal scale of "Agree", "Neutral", and "Disagree", depicting traditional, neutral, and secular attitudes, respectively.

Independent Variable: Educational Regimes

To measure the effect of primary school education under specific political regimes on gender equality attitudes, this study employs an independent variable termed ‘educational regime,’ based upon respondents’ birth year. Respondents are divided into three distinct categories reflecting the governmental regime at the time they would have commenced their primary school education (age 6). The groups “Pre-Rev”, “Transformation” and “Reconstruction” correspond to the modern regime under the Shah, the more conservative regime immediately following the revolution, and the relatively more reformist regime in place from 1989, respectively.

However, with the available data, the true effects of changes in the reconstruction period cannot necessarily be measured, due to the limited number of respondents from this time period involved in the surveys. Consequently, in order to allow for a clearer identification of the effect of educational regime, the relationship between the educational regime and attitudes toward gender equality is tested on a subset of individuals all born within a six-year range, who would otherwise share many similarities in social background, including societal changes such as changes in the labour market. These respondents are grouped based on having completed their primary school education immediately before the 1979 revolution, versus those who began their education immediately following the revolution (transformation period), and those whose education was a mix of the two regimes. This further specified grouping of respondent allows for a sharper identification of the particular effect of educational regime, given the individuals’ otherwise similar backgrounds. Accordingly, this specification also allows a clearer study of the effect of the Islamic revolution. The subsets are consequently coded by birth years corresponding to the following categories:

1. “Pre-Revolution”: Those who completed primary school in 1979, the year of the revolution;
2. “Mixed”: Respondents who attained primary education under a mix of the Pahlavi regime and the transformation regime; and
3. “Post-Revolution” (Transformation): Individuals who began primary school education following the revolution in 1980, post- overhaul in education system.

Alternative Explanations and Control Variables

To test the strength of the potential effect of the independent variable, other factors which are previously believed to affect attitudes toward gender equality must also be considered and controlled for. Alternative explanations of sources of gender equality attitudes suggest the importance of individuals’ socioeconomic conditions. Factors such as changing fertility rates and educational attainment are advocated as both reflecting and influencing increasingly secular gender equality attitudes (Haghighat-Sordellini 2010). Previous studies suggest that family circumstances, and families in which fathers hold more secular views positively affect gender equality attitudes. Females are generally believed to have more secular views toward gender equality given their experiences as women, as are single respondents. Accordingly, to address such explanations, the following individual-level factors are included in the analysis as control variables. Dummy variables are used for respondents’ sex (female, male), marital status (married, divorced/separated, single), and parental status (parent/no children). Education is itself advocated to be positively associated with secular gender equality attitudes, suggesting that individuals with higher levels of education will hold more egalitarian beliefs (Dorius and Alwin 2010, 8). Respondents’ level of education is consequently measured using the World Values Survey (WVS) data of their highest level of schooling completed. This measure is dichotomized into a variable depicting whether respondents had completed primary school, versus no schooling or incomplete primary school education. This dichotomization is ideal as the research is concerned with

educational regimes at the time of primary school education, thus allowing for a separation of respondents who were not subject to the educational regimes' effect being measured. In order to address theories of individuals' varying attitudes based on traditional or religious beliefs, religious beliefs are also accounted for, based upon responses to the question "how important is the following in your life: religion", resulting in a dummy variable indicating "important" versus "not important". Finally, respondents' age is also controlled for, using the WVS data. This addresses previous research regarding cohort effects, and suggesting that younger generations have a tendency to favour and harbor more secular views toward gender equality.

2.2.2 Data and Sample

The World Values Surveys (WVS) used for this chapter are conducted in waves, within which data for Iran are available from the years 2000, and 2005. This WVS data is currently the most comprehensive cross-global and publicly available dataset. Furthermore, its use allows for consistency with previous studies such as Dorius and Alwin's. The dataset used for this study is the WVS' longitudinal data, as it provides the questions repeated in various waves and combines survey results from 1981-2014. It consists of a total of 5199 observations for Iran, from respondents above the age of 16 at the time of the two surveys. Summaries of the sample's characteristics are presented in Table 2.1. Respondents are rather equally distributed in terms of their sex, and the majority are married, or single, with fewest being separated or divorced. A large majority have indeed completed primary school education, and consider religion to be an important aspect of their lives. The large number of individuals who are deemed more religious is quite interesting, given the Iranian context.

Table 2.1: Descriptive statistics of variables considered in Iran dataset

Age		Marital Status		Children		Primary Education		Religion Importance		Sex	
Min	15	Married	3123	Children	2870	Complete/Above primary	4396	Religious	4240	Male	2683
1st Qu	22	Separated/Widowed	128	No Children	2283	No/Inadequate primary	344	Not religious	532	Female	2487
Median	29	Single	1921	NA	46	NA	459	NA	427	NA	29
Mean	33	NA	27								
3rd Qu	41										
Max	80										
NA	18										

2.2.3 Hypotheses

Based on exiting literature and the interest of this research, I propose two competing hypotheses. Initially, following the notion that political regime at time of primary school education does affect attitudes toward gender equality, it is hypothesized that attitudes will be more negative for those who studied in the transformation time period than those who studied during the pre-revolution, but more positive for those educated in the re-construction period than during the transformation. These trends would reflect the effect of the changes in political conservatism that resulted from the revolution and the reforms in the reconstruction period. Such patterns would indicate a reflection of these changes in conservatism on individuals' gender equality attitudes, suggesting a link between educational regimes' ideologies and Iranians' gender equality attitudes. However, due to the limited available survey data, it is not possible for this hypothesis to be tested in this form. This is because the number of respondents educated in the transformation period, who would be at or above the age of 16 at the time of the last available survey (2005) is too low to allow adequate data. Rather, the three "educational regimes" used for this analysis reflect the pre-revolution time period, with individuals who completed their primary schooling under the Shah regime, and transformation time period with respondents beginning primary school immediately following the revolution. As well, the third educational regime utilized consists of a group that attained their education under a mix of the two regimes. Since this latter group, referred to as the

“mixed” educational regime, was exposed to education under both the more “liberal” regime of the Shah, as well as the new ideological regime, their attitudes still provide valid insight. Furthermore, all three educational regimes consist of individuals born within a six-year range, who would share otherwise similar social backgrounds. Using these educational regime subgroups as the categories for analysis, I propose the following two competing hypotheses.

The first posits that the political regime at time of primary education does affect attitudes toward gender equality:

H_{2.1}: Attitudes toward gender equality will continuously follow a negative pattern over time. Thus, they will worsen from pre-revolution to the mixed period, and from the mixed period to the transformation (immediate post-revolution) period.⁷

The second hypothesis assumes that despite the political regime, other factors such as globalization and access to information result in a generally secular trend in attitudes toward gender equality over time:

H_{2.2}: Attitudes toward gender equality will continuously follow a positive pattern over time. Thus, they will improve from pre-revolution to the mixed period, and from the mixed period to the transformation period.

2.2.4 Estimation Strategies

This study first uses an ordinary least squares (OLS) regression analysis, given the initial gender equality additive index of 1-9. This index specifies the dependent variable as a refined continuous variable. Using a regression analysis provides an estimation of each educational regimes’ gender equality attitudes as part of the index (1-9). However, using the linear regression model assumes an equal distance between each of the numerical categories of the scale. Although the ordinal scale in which attitudes are measured can be presented numerically, it does not represent the same distance between categories as the numbers might suggest. Rather, the scale

⁷ Following this proposition, it is hypothesized that the trend would become positive from the transformation to reconstruction period, thus breaking the negative pattern.

represents a rough measure of the interval representing various attitudes. Accordingly, this analysis also employs an ordinal logistical regression analysis, using the same additive index as the dependent variable.⁸ The model produced using this ordinal logit method presents the conditional probability of observing a particular level of attitude in a respondent, given specified scenarios of other variables considered, and does not assume an equal distance between each category of the dependent variable. The use of both the OLS and ordinal logit models allows for a test of the robustness of results. Namely, if the results obtained using the two models are similar, there is more confidence in suggesting that the relationships found are based in evidence, and not influenced by the estimation technique used.

Given the ordered categorical nature of the dependent variable, the OLS analysis cannot be used outside of the created additive index as it requires a continuous variable. However, the ordinal-logit analysis can be utilized with a simplified version of the dependent variable that represents the probability of an individual exhibiting a certain level of attitude toward gender equality taking three possible values. The ordinal logit model allows for an estimation of the predicted probabilities of respondents' attitudes falling within one of the three specified categories (agree/neutral/disagree), permitting direct comparisons between the predicted probabilities of respondents from each educational regime. The model produced enables an understanding of the direction in which educational regimes can affect gender equality attitudes (with a positive direction in change suggesting more secular values), and the substantive size of this effect. All models are generated using the Zelig package in R (Imai, King and Lau 2007).

⁸ This method is also referred to as “ordered logit”, “ordinal logit”, or “o-logit”. The terms are therefore used interchangeably.

2.3 Results and Analysis

2.1.1 Summary Statistics and Distributions

It is evident from the distribution of Iranians' attitudes toward gender equality in Figure 2.1 and Table 2.2 that such attitudes do vary, although the distribution is slightly right skewed. The gender equality variable has a mean of 4.1, reflecting a more "neutral" attitude toward gender equality (on the 1-9 scale, 1 representing most traditional attitudes and 9, the most secular).

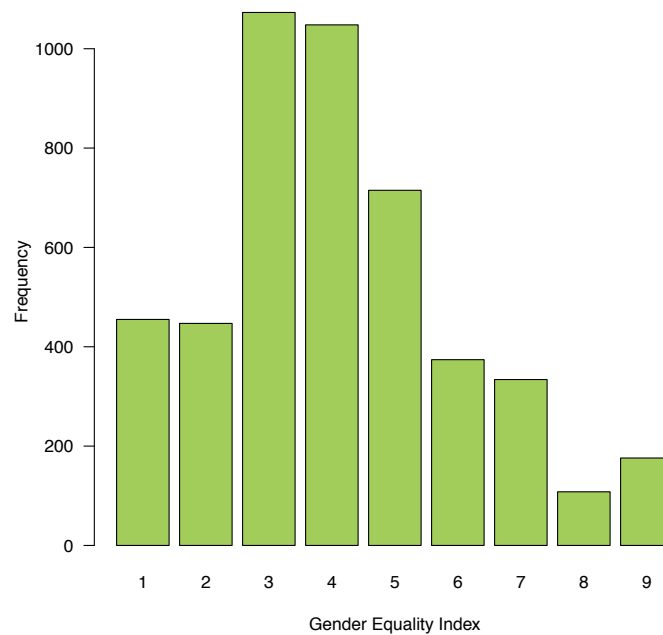


Figure 2.1: Iranian's gender equality attitudes (1 representing most traditional attitudes and 9 the most secular)

Table 2.2: Descriptive statistics of gender equality index

Statistic	N	Mean	St. Dev	Min	Max
Gender Equality Index	4730	4.09	1.97	1	9

2.1.2 Educational Regimes and Gender Equality Attitudes

The distribution of gender equality attitudes by educational regime, for the entire sample of respondents are depicted in Figure 2.2 and Table 2.3. The size of the boxes in Figure 2.2 reflect the smaller number of respondents in the reconstruction group as opposed to the former two educational regimes. This is due to the lower number of respondents within the reconstruction educational regime age group at the time of the surveys. Figure 2.2 also suggests a slight increase

in secular gender equality attitudes from the pre-revolution to the transformation and then reconstruction periods, given the gradual increase in height of the boxes depicted. In all three time periods, a consistent portion of respondents seem to hold neutral attitudes.

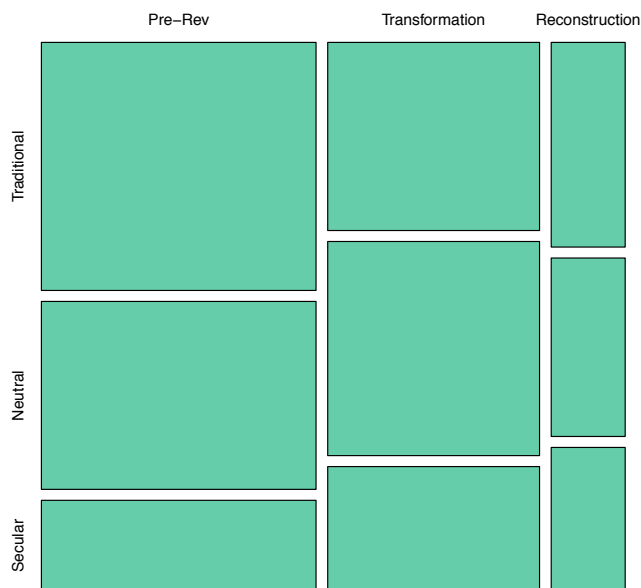


Figure 2.2: Iranians' educational regimes and gender equality attitudes

Table2.3: Iranians' educational regimes and gender equality attitudes (proportions)

	Traditional	Neutral	Secular
Pre-Rev	0.47	0.36	0.17
Transformation	0.36	0.41	0.24
Reconstruction	0.39	0.34	0.27

It is important to note, however, the limitations in the data, given that the reconstruction period did not see many of its reforms in the initial years and that educational changes would not have been implemented right away (unlike the case of the revolution). Therefore, with the available data, the true effects of changes in the reconstruction period cannot necessarily be measured. In order to allow for a clearer identification of the effect of educational regime, the relationship between the educational regime and attitudes toward gender equality is therefore tested on a subset of individuals, grouped based on having completed their primary school education immediately before the 1979 revolution, those who began their primary schooling immediately following the

revolution (transformation period), and those who were educated under a mix of the two regimes. The distribution of gender equality attitudes among these sub-educational regimes is shown in Figure 2.3 and Table 2.4. From this plot alone, the differing frequencies in the “agree” and “disagree” categories (representing “traditional”, and “secular” attitudes, respectively), between the pre and post revolution sub-regimes are visible. The majority of individuals in the post-revolution regime seem to hold traditional attitudes, whereas those in the mixed sub-educational regime have the highest levels of traditional and neutral views. This distribution also suggests that the gender equality attitudes are not simply a result of a generational effect. A generational effect would be indicated by the most traditional attitudes being attributed to the oldest group (the pre-revolution sub-educational regime), and the youngest respondents (the post-revolution sub-educational regimes) having the most secular views. However, the observed variation is indeed in the opposite direction, thus contradicting a simple generational explanation.

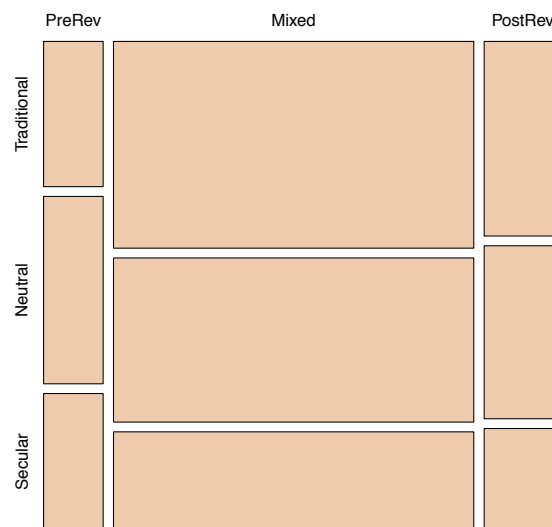


Figure 2.3: Sub-educational regimes' gender equality attitudes

Table 2.4: Iranians' sub-educational regimes and gender equality attitudes (proportions)

	Traditional	Neutral	Secular
Pre-Rev	0.31	0.40	0.29
Mixed	0.44	0.35	0.21
Post-Rev	0.42	0.37	0.22

The OLS and ordered logit models produced using the full ordinal scale are presented in Table 2.5, whereas the ordinal-logit model in Table 2.6 (presenting the final model) utilizes the 3-category ordinal scale. The first two models present a direct comparison of the observed relationship with the same measure of the dependent variable, using the two different estimation methods. Since the results from these two estimations and the final model are similar in terms of magnitude, direction, and significance, they imply the robustness of the outcomes depicted in the final model. All three models suggest similar relationships between the independent and dependent variables. From the final model, it is suggested that gender equality attitudes are more negative from the pre-revolution (reference category) to the mixed group, and negative with a greater magnitude, reflecting more traditional views, from the pre-revolution to the transformation regime. This is indicated by the negative coefficient from pre to mixed (-0.79), and from pre-revolution to post-revolution regimes (-1.02). The negative sign of the coefficient reflects the expected negative directional change in attitudes from the reference category to both the mixed and transformation regimes, suggesting a lower “score” or category, and thus more traditional attitudes. In other words, individuals who obtained their education under a mix of the Pahlavi and post-revolution regime are found to have more traditional gender equality attitudes than those who completed their education under the Pahlavi regime. Furthermore, those who began their primary education following the revolution and the establishment of the Islamic republic, are found to have the most negative, or traditional attitudes toward gender equality. Given that these more traditional attitudes are portrayed within the latter time-period, the idea of the influence of globalization and therefore increasingly secular attitudes over time regardless of regime change, is challenged.

The three models in Tables 2.5 and 2.6 suggest that the likelihood of having more positive, or secular attitudes toward gender equality issues decreases with the later regimes. The directional

findings in the first two models in Table 2.5 are statistically significant ($p < 0.001$), indicating that the probability of the relationship having been observed by chance, is less than 1%. Furthermore, in the final model (Table 2.6), the confidence intervals around the coefficients, -0.79 (CI -1.23: -0.34) for the Mixed regime, and -1.02 (CI -1.62: -0.41) from the pre-revolution to post-revolution regime, signify that the null hypothesis that no relationship between the sub-educational regimes and gender equality attitudes exists, can be rejected. Concerning other control variables' effects, this model suggests a strong relationship between respondents' sex and gender equality attitudes, with women exhibiting more positive or secular views than men. As well, primary education attainment is strongly correlated with gender equality attitudes, as the model suggests that those who have not completed primary education tend to have more traditional views than those who have. Finally, a statistically significant negative relationship is suggested between respondents' age and their attitudes toward gender equality, suggesting that younger individuals are generally more likely to have more positive views toward gender equality.

Table 2.5: Iranians' Sub-Educational Regime and Attitudes Toward Gender Equality (Measured Using Full Index)

	OLS	Ordered Logit
(Intercept)	7.45*** (1.14)	
Mixed	-0.90*** (0.24)	-0.73*** (0.21)
Post-Rev (Transformation)	-1.21 *** (0.33)	-0.99*** (0.29)
Sex (Female)	0.76*** (0.15)	0.72*** (0.13)
Primary Education (No)	-0.86** (0.30)	-0.71** (0.26)
Religion (Not important)	0.59 (0.31)	0.42 (0.29)
Marital Status (Divorced/Separated)	-1.04 (0.52)	-0.78 (0.48)
Marital Status (Single)	-0.21 (0.29)	-0.08 (0.26)
Parent (No)	0.29 (0.25)	0.21 (0.22)
Age	-0.09** (0.03)	-0.08** (0.03)
R ²	0.07	
Adj R ²	0.06	
Num. Obs	787	787
AIC		3147.92
BIC		3227.28
Log Likelihood		-1556.96
Deviance		3113.92
***p< 0.001, ** p < 0.01, * p< 0.05		

Table 2.6: Final Model: Iranians' Sub-Educational Regime and Gender Equality Attitudes (Using Categorical Index)

	Final Model
Mixed	-0.79* [-1.23; -0.34]
Post-Rev (Transformation)	-1.02* [-1.62; -0.41]
Sex (Female)	0.80* [0.53; 1.08]
Primary Education (No)	-0.98* [-1.58; -0.38]
Religion (Not important)	0.32 [-0.27; 0.92]
Marital Status (Divorced/Separated)	-0.62 [-1.58; 0.34]
Marital Status (Single)	0.05 [-0.49; 0.58]
Parent (No)	0.21 [-0.25; 0.66]
Age	-0.08* [0.14; 0-0.02]
AIC	1642.98
BIC	1694.33
Log Likelihood	-810.49
Deviance	1620.98
Num. Obs	787
* 0 outside the confidence interval	

Although the above 3 models provide insight into the direction and significance of changes in attitudes, in order to better understand their implications, I create scenarios of interest, and consider their resulting expected values from simulations. The scenarios constructed are those of average-aged males within each sub-educational regime. These scenarios are an attempt to offer a clearer depiction of an average Iranian's gender equality attitudes (per sub-educational regime), seeing as in the previous models women are generally shown to have more secular attitudes. Thus, the chosen scenarios are meant to reflect the most average Iranian respondent. Table 2.7 displays the results of simulations using these three scenarios, and their corresponding mean expected values (mean from the 1000 simulations). The expected value of each category depicts the predicted probability that an average aged male from each educational regime would relay the corresponding attitudinal categories. Given that each individual must correspond to one attitude level, the sum of predicted probabilities of belonging to the three categories is 1. Considering the specific scenarios, the predicted probability that a male of average age in the pre-revolution educational regime will express "traditional" attitudes, or agree with the posed statements is 0.41 (CI 0.36:0.51). An average aged male in the transformation educational regime has a 0.53 (CI 0.49:0.60) predicted probability of expressing traditional attitudes. This is the most likely attitudinal category associated with males in the post-revolution educational regime. Although this is also the most likely attitudinal outcome for the pre-revolution educational regime, the lower predicted probability demonstrates the differences in gender equality attitudes between the differing regimes. Particularly, an average male in the post-revolution sub-educational regime is most likely to hold traditional attitudes, and more likely to do so than an average male who completed his education in the pre-revolution time period. Similarly, the predicted probability of a post-revolution average male showing secular attitudes (0.15) is lower than a similar individual

from the pre-revolution educational regime (0.22). These differences reinforce the relationship between educational regime and gender equality attitudes, with those having completed their education under the Pahlavi regime having higher probabilities of expressing secular attitudes than those who began their education after the occurrence of the revolution. A visual display of the expected values is depicted in the graphs in Figure 2.4.

Table 2.7: Expected Values of Gender Equality Attitudes for Simulated Quantities of Interests

Scenario	Gender Equality Attitude	Mean	2.50%	97.50%
Pre-Revolution Male				
	Traditional	0.4026	0.3656	0.509
	Neutral	0.3733	0.3584	0.4102
	Secular	0.2241	0.1939	0.3073
Mixed Regime Male				
	Traditional	0.5268	0.5083	0.5884
	Neutral	0.3259	0.3127	0.3613
	Secular	0.1473	0.1387	0.1799
Post-Revolution Male				
	Traditional	0.519	0.491	0.6076
	Neutral	0.3321	0.3153	0.3737
	Secular	0.149	0.1324	0.1981

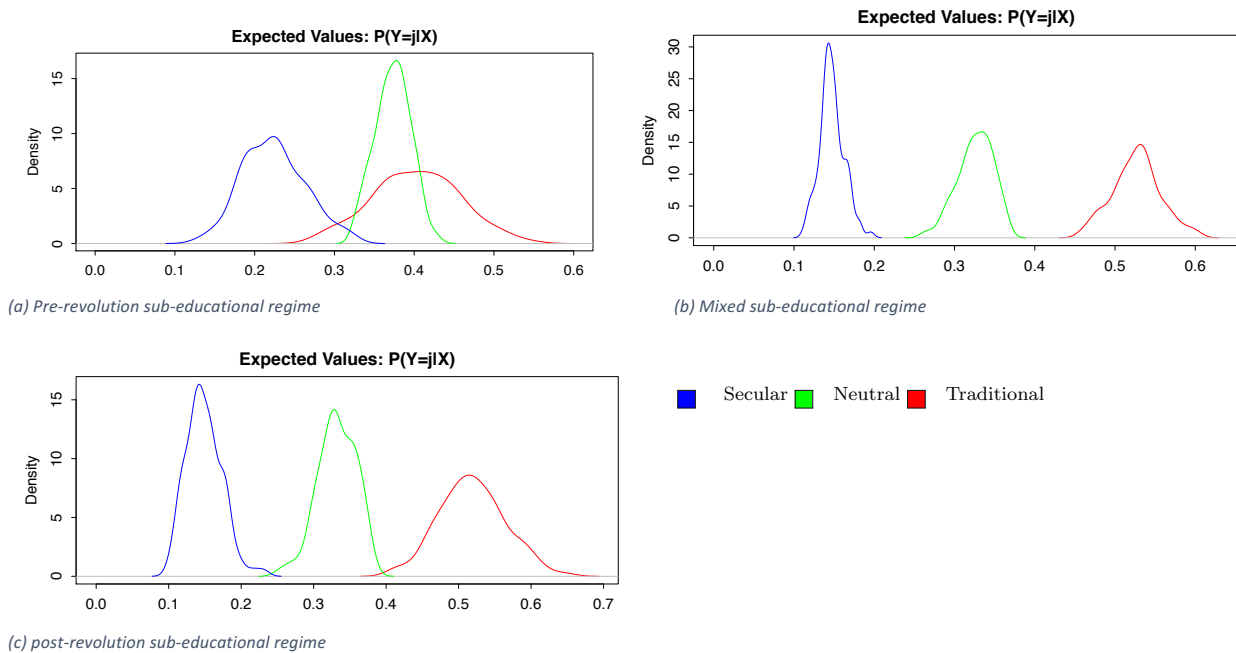


Figure 2.4: Expected values distributions by sub-educational regime simulations

The mean first differences between the expected values for the three simulated scenarios are summarized in Table 2.8, displaying the difference in predicted probabilities of attitudes between the three sub-educational regimes more effectively. The first differences between the pre-revolution and mixed groups, as well as for the pre-and post-revolution educational regimes, are statistically significant (95% confidence interval). These results show that there is a positive expected difference between the predicted probabilities of expressing “traditional” views from the pre-to the post-revolution regime. In other words, those belonging to the post-revolution/transformation educational regime are predicted to express more “traditional” views than those from the pre-revolution educational regime. Similar results can be interpreted regarding the pre-revolution and the mixed educational regimes, with those in the latter group expected to exhibit more traditional views, or have a higher predicted probability of expressing views in the “agree” category. The small coefficients suggest that this may not be a large difference in expected values between those educated in different educational regimes, though the small number of respondents within each group must also be recalled in assessing these results. Considering the effect of educational regime on gender equality attitudes, the mean first difference of holding more traditional attitudes for pre versus post revolution educational regime is approximately 0.12 (CI: 0.075: 0.24). Thus, the predicted probability of holding traditional views is approximately 0.12 higher in the post-revolution than pre-revolution regime, a substantive difference, given that the proportion of individuals in the pre-revolution sub-education regime holding traditional values is 0.31. Conversely, the mean first difference of holding secular attitudes for pre versus post revolution educational regime is approximately -0.07 (CI -0.09: -0.01). These simulations reinforce the higher probability of traditional attitudes being expressed by those who began their primary education following the Islamic Revolution as opposed to those who completed their

primary schooling prior to its onset. This suggests the influence of the traditional ideals promoted by the revolution, and the implementation of the cultural revolution. Consequently, these predicted generally worsening attitudes over time serve to suggest a trend opposing those put forth by ideas of globalization and increasingly positive gender equality attitudes overtime worldwide.

Table 2.8: First Differences in Gender Equality Attitudes between Sub-Educational Regimes

Scenario	Gender Equality Attitude	Mean FD	2.5%	97.5%
Pre-Revolution and Mixed				
	Traditional	0.1265	0.1040	0.1968
	Neutral	-0.0489	-0.0571	-0.0184
	Secular	-0.0775	-0.0972	-0.0228
Mixed and Post-Revolution				
	Traditional	-0.0105	0.104	0.1968
	Neutral	0.0044	-0.0571	-0.0184
	Secular	0.0061	-0.0972	-0.0228
Pre and Post Revolution				
	Traditional	0.1149	0.0749	0.2148
	Neutral	-0.0451	-0.0600	-0.0076
	Secular	-0.0698	-0.0943	-0.0123

2.1.3 Placebo Tests

To further test the strength of the above discussed model, I carry out placebo tests by re-categorizing the sub-educational groups on the same logical basis, but altering the reference year of the revolution. This is done as the occurrence of the revolution and the changes in the educational regime is not an effect that could be singled out or ascribed as a treatment on two test groups. Using this method allows the closest approximation to having such a treatment test with a control-group. This test is done by re-creating the sub-educational regimes based on an assumption of a different year of the revolution's occurrence. The respondents are now grouped based on having completed or begun their education prior to or immediately after the newly assigned revolution date, respectively. The "mixed" groups continue to present respondents who obtained their primary education under both the pre and post revolution regimes (with the imposed revolution date). The purpose of this test is to further establish the strength of the previously found relationship between the two concepts of interest. If the test is successful, the obtained results are

expected to get weaker as the tests move further away from the correct revolution cut-off date (1979), signifying the importance of the changes that occurred in that year. This would be the expected case, as furthering from the correct date reflects greater differences in the true educational regimes; therefore, a continuously weakening relationships would reinforce the significance of the relationship between the true educational regimes and gender equality attitudes.

This placebo test is implemented by using the sub-sample of individuals included in the above model. By applying the same sub-educational regimes, all other variables and factors that could vary within the group are held constant, and the only imposed change is then the year in which the revolution, or changes in political regime that occurred. The sample is categorized, and the date of the revolution altered to reflect the change having taken place for six consecutive years prior to and following the actual date. The results of these placebo tests are presented in Tables 2.9 and 2.10 (Proksch, pers. comm.).

The majority of the placebo test results strengthen the initial relationship found, further supporting the importance of the events of, and consequent changes in 1979. In these tests, although the significance of the relationship between sub-educational regimes and gender equality attitudes remains, the decrease in the magnitude of coefficients, as well as level of statistical significance, suggest a lessening of the strength of this potential relationship. Observing the weakening relationship as the true date is changed reflects the expected results of a successful test, in confirming the strength of the initial relationship between the true educational regimes and gender equality attitudes. The two models in which the coefficient for the relevant difference between the post and pre “revolution” regimes actually increase (slightly) from the model of interest are those simulated in 1977 and 1978. This is interesting, as these models now include individuals of the initial “mixed” educational regimes in the post-revolution regime; this could

therefore be a reflection of the more ideological ideas present or circulating in Iran and other societal changes occurring in the country. For the 1978 model, the post “revolution” group now includes respondents who would have begun primary school education in 1979, during the time that educational system changes were occurring. Therefore, the results from this particular test-year do not necessarily weaken the relationship found, but rather point to issues in deciphering the exact years when respondents’ educational studies would have begun. Overall, these results serve to reinforce the relationship between educational regimes and gender equality attitudes. Specifically, those educated under the immediate post-revolution regime are predicted to hold the most traditional gender equality attitudes, and those having completed their primary education prior to the revolution, more secular attitudes. While these tests point to the importance of nuances such as determining the exact year of individuals’ schooling, they nonetheless emphasize the potential effect of educational regimes on gender equality attitudes. These findings suggest the importance of cultural and particularly, political changes that occurred with the Islamic revolution in Iran. This then calls for considerations of such factors in analyzing attitudes toward gender equality, and disconfirms the notion that secular attitudes will continually increase over time, despite countries’ geopolitical contexts. These results therefore point to the significance of considering changes in political regimes, and educational regimes when questioning sources of gender equality attitudes.

An additional intriguing aspect to note from these resulting models, is the consistently significant, and rather large effect of respondents’ sex and attitudes toward gender equality, with women consistently predicted to portray more secular attitudes, particularly those in the later sub-educational regimes. These attitudes could be related to these women’s experiences of living under the post-revolution regime, and particularly of their experiences as youth (given that this sub-

educational regime also reflects the youngest group of individuals). Experiences of gender inequality in the public sphere, and the differing experiences of everyday life, and any potential obstacles it presents could contribute to the difference in attitudes between the two groups. Furthermore, younger individuals are consistently predicted to hold more secular attitudes than older respondents.

Table 2.9: Placebo Tests: Event Occurrence Prior to True Revolution Year (Main subset of respondents)

	1978	1977	1976	1975
Mixed	-0.78*** (0.23)	-0.73** (0.23)	-0.70** (0.24)	-0.55* (0.27)
Post-Rev (Transformation)	-1.26*** (0.29)	-1.17 *** (0.28)	-0.90*** (0.25)	-0.89*** (0.24)
Sex (Female)	0.80*** (0.14)	0.82*** (0.14)	0.81*** (0.14)	0.81*** (0.14)
Primary Education (No)	-0.98** (0.31)	-0.97 ** (0.31)	-0.97** (0.31)	-0.98** (0.31)
Religion (Not important)	0.35 (0.30)	0.39 (0.31)	0.37 (0.31)	0.36 (0.31)
Marital Status (Divorced/Separated)	-0.63 (0.49)	-0.61 (0.49)	-0.61 (0.49)	-0.59 (0.49)
Marital Status (Single)	0.03 (0.28)	0.05 (0.27)	0.06 (0.27)	0.08 (0.27)
Parent (No)	0.21 (0.23)	0.21 (0.23)	0.21 (0.23)	0.20 (0.23)
Age	-0.12*** (0.03)	-0.12*** (0.03)	-0.09** (0.03)	-0.09** (0.03)
AIC	1637.04	1637.99	1643.03	1641.92
BIC	1688.39	1689.34	1694.38	1693.27
Log Likelihood	-807.52	-807.99	-810.51	-809.96
Deviance	1615.04	1615.99	1621.03	1619.92
Num. Obs.	787	787	787	787

***p < 0.001, ** p < 0.01, * p < 0.05

Table 2.10: Placebo Tests: Event Occurrence Post-True Revolution Year (Main subset of respondents)

	1980	1981	1982	1983
Mixed	-0.57** (0.18)	-0.35* (0.18)	-0.49** (0.19)	-0.54* (0.21)
Post-Rev (Transformation)	-0.75** (0.27)	-0.51* (0.25)	-0.52* (0.24)	-0.42 (0.22)
Sex (Female)	0.82*** (0.14)	0.81*** (0.14)	0.82*** (0.14)	0.79*** (0.14)
Primary Education (No)	-1.02*** (0.30)	-1.01*** (0.30)	-1.02*** (0.30)	-1.03*** (0.30)
Religion (Not important)	0.38 (0.30)	0.41 (0.30)	0.42 (0.31)	0.38 (0.30)
Marital Status (Divorced/Separated)	-0.56 (0.49)	-0.59 (0.49)	-0.59 (0.50)	-0.60 (0.50)
Marital Status (Single)	0.10 (0.27)	0.09 (0.27)	0.10 (0.27)	0.09 (0.27)
Parent (No)	0.18 (0.23)	0.20 (0.23)	0.19 (0.23)	0.19 (0.23)
Age	-0.09** (0.03)	-0.08* (0.03)	-0.09** (0.03)	-0.08* (0.03)
AIC	1645.32	1651.01	1648.14	1648.51
BIC	1696.67	1702.36	1699.49	1699.86
Log Likelihood	-811.66	-814.51	-813.07	-813.25
Deviance	1623.32	1629.01	1626.14	1626.51
Num. Obs.	787	787	787	787

***p < 0.001, ** p < 0.01, * p < 0.05

2.4 Conclusion and Implications

This chapter provides insight on Iranian's differing views of gender equality by considering the influence of the Iranian political regimes' ideology at the time of primary educational attainment. The results of this analysis support the first proposed hypothesis (H_{2.1}), that the political regime at time of primary education attainment affects attitude toward gender equality. This is evident in the results from the study of the effect of sub-educational regimes prior and following the Islamic revolution on individuals' attitudes toward gender equality. Clear differences in attitudes are observed between those educated under the pre-revolution ("modernizing") regime and those in the post-revolution ("ideological") regime. These results are particularly noteworthy, given the importance afforded to educational attainment by both regimes. These findings are insightful in suggesting the potential role of educational regimes, and the traditional understanding of gender equality that may have been implemented following the cultural revolution, in

influencing gender equality attitudes. These results suggest that despite the changing nature of global relations, and the increased availability of information and ideas, other factors such as political regimes and ideologies continue to play a key role in influencing attitudes toward social issues such as gender equality. The establishment of the Islamic Republic and its leaders' aims of spreading their definition of Muslim law, may then have influenced the portrayal of the importance of the role of men and women in the public sphere. This analysis demonstrates the need for contextual considerations in discussions of global trends, and particularly in claiming that trends of gender equality in Western nations will simply be followed worldwide. The need for more detailed studies of gender equality attitudes in non-Western countries is therefore signified. These findings lend support to Inglehart and Norris' claim of the potential need for cultural change for gender equality (2003), by presenting the negative influence of the Iranian revolution on gender equality attitudes.

The importance of the influence of education on shaping such attitudes is also demonstrated, and the need for political outlooks to be eliminated from them highlighted. This importance is demonstrated by the inclusion of the "mixed" educational regime, which consists of individuals exposed to educational materials and methods under both of the "modern" and "Islamist" regimes. The significant differences and relationship presented both in the models, through the simulated scenarios, as well as by the placebo tests all suggest a major change before and after the events of the 1979 revolution. The inclusion of the mixed educational regime, and their relatively "neutral" attitudes, help to advance the suggestion that the political regime's influence through education should be a key consideration in studying attitudes toward gender equality. This particular group is composed of the unique respondents who were exposed to education prior to, and following the Islamic revolution, and their relatively "neutral" attitudes

reflect a mix of the traditional and secular attitudes and ideas associated with, and promoted by each political regime. This research presents one significant aspect of understanding why Iranians' have differing value on gender equality, and in order to truly address the issue in this context, further studies considering various factors must be carried out.

This chapter demonstrates the importance of the relationship between Iranian political regimes' ideological intensity at the time of primary education attainment and attitudes toward gender equality. These findings consequently raise questions of how to address this role in pursuit of gender equality, particularly within the Iranian context. A further expansion of this study, once more data and later surveys are available is imperative. Given more data, educational regimes can be further classified accounting for the changes in political ideology that have taken place in Iran since the decade following the revolution. Such a study will allow for a deeper understanding of the link between educational regimes and gender equality attitudes demonstrated in this analysis, given the less extreme changes in political ideology, and the continual Islamic Republic context. A further expansion of the time periods considered in this analysis will also contribute to an enhanced comprehension of the role of globalization, and the Iranian regimes' ability to maintain traditional outlooks within the context of increasing secular global trends. Furthermore, the specific role of, and interplay between political regime and educational attainment can be further explored through studies of the materials presented and utilized in schools. Given the centralized nature of its educational system, a study of Iranian textbooks and teaching methods will provide further insight into the information and perceptions being taught to students regarding gender equality, and even gender roles.

3. Chapter III: Where is *Māmān*?

Content analysis of gender presentation in Iranian primary school textbooks

3.1 Theoretical Overview

In this chapter, the analysis builds upon previous research, which “recognizes the educational system...and its educational materials as the first official agent and the most powerful engine of gender socialization” (Foroutan 2012, 772). In order to contribute to the existing literature regarding the representation of gender roles in Iranian school textbooks, this chapter provides an analysis of four sets of Farsi reading textbooks.⁹ As made evident through the reviewed literature, stereotypical gender roles continue to be prevalent and manifest in literature broadly, and textbooks specifically, worldwide. The variation in these presentations over time, and across varying geographical locations render this a pertinent study.

Additionally, despite the various advancements women have made in Iranian society, particularly regarding their education and employment, there still exists a differentiation between the perceived roles of each gender. In Iran, the mistreatment of women persists, with continuous cases of the abuse of their human rights. Furthermore, laws such as the mandatory Islamic dress code, or the Muslim Family Law, and their unfair aspects pertaining to women, particularly in the realms of heritage and divorce, effectively reflect a differentiation between men and women, and what is deemed appropriate behaviour for each (Moghadam 2013). However, the implementation of Islamic laws does not have a drastic negative effect on all aspects of women’s societal roles, such as a right to receive an education. Thus, the Iranian society reflects one in which the

⁹ Textbooks are titled “*Farsi*” for the 1981 and 2000 school years, and “*Farsi Bekhanim*” (Let’s read Farsi) in the 2012 and 2015 school years.

government, in attempting to maintain its Islamic ideals, gives men a more significant place in society, whilst still trying to reflect the current level of needs and demands of its greater population.

3.2 Research Design and Data

This chapter is concerned with changing gender roles and equality presented in Iranian primary school reading textbooks, given the importance of the effects of primary education on individuals' political culture and societal outlook. This analysis examines how gender equality and gender roles are presented in Iranian Farsi reading textbooks. Subsequently, the study analyzes the changes in these gender presentations and representations over time, taking into account the changes in Iranian political regimes' ideological orientation. This chapter relies on a content analysis of the images to carry out these analyses, which allows for a study of the visibility and occupational roles of females and males in Farsi reading textbooks. The analysis is further supplemented with a qualitative study in which aspects of gender presentation in images specifically, and the textbooks in general, not accounted for in the content analysis are discussed.

3.2.1 Concepts: Gender Equality and Gender Roles

“Gender roles” refers to the perception of certain responsibilities, activities and behaviours deemed more appropriate for males or females within a given society (Pavlic, Ruprecht, and Sam-Vargas 2000). The concept of gender equality is to be distinguished from one termed “gender roles” which is more reflective of particular beliefs in the innate difference between men and women. This concept is often related to the beliefs regarding gender within the private sphere, concerning roles such as child-bearing and household work. In contrast, gender equality is more reflective of previous scholars' depictions of “male primacy”, where men are believed to be inherently superior to women (Charles and Grusky 2004). Gender equality is also more concerned

with the perceptions of gender in the public sphere, such as education and employment (Dorius and Alwin 2010, 7; Bradley and Khor 1993).

In measuring the presentation of gender in primary school textbooks, the indicators selected for this analysis are visibility, or presence in images, and occupational roles in images, which are also consistent with Higgins and Shoar-Ghaffari's study in 1991. These indicators both allow for variation over time, and reflect key aspects of the manifestation of gender roles in society. Namely, the higher visibility of one gender over the other reflects their greater significance within society, relating to the concept of gender equality. Conversely, occupational roles reflect the activities deemed more appropriate for one gender than the other, reflecting presumed gender roles.

3.2.2 Data

Rationale: Why Farsi Primary School Textbooks

Textbooks have authority, as they are presented as the official texts of classes, and are a result of decisions from sources of higher position and authority, namely the Ministry of Education in Iran (Doumato and Starrett 2007, 21). Since textbooks are written texts rather than oral information, they are statements and the writing presented is objective and impersonal, and thus in ways, "above criticism" (Olson 1980, 239). The authority of the texts is further established for students, as they are given the texts to learn, absorb their knowledge, and are often tested on and held responsible for knowing their contents (Olson 1980, 238-39). It is with this understanding of the influence of such normative texts that this analysis is undertaken.

One purpose of primary school education that has been widely understood is to teach literacy through reading and writing, as well as arithmetic (Olson 1980). These are commonly accepted as critical and fundamental subjects. In learning how to read and write, students are given the necessary tools to undertake many other subjects. Additionally, it is often believed that learning language will allow students to understand themselves better as individuals and as part of the

groups in which they are placed, and to better apply their skills in resolving problems with which they are faced (Foroutan 2012; Lee and Collins 2008; Taylor 2003). Moreover, reading textbooks are selected as reading “allows humans to make sense of objects, events, and other people in our environment” (Taylor 2003, 301). Thus, an analysis of the reading textbooks allows a better understanding of part of the foundation Iranian students utilize to understand their surroundings. The Farsi reading textbooks, in their attempt to teach reading skills, make use of a wide variety of subjects and issues, thus presenting a variety of settings and contexts within which gender roles may be observed. Finally, reading is one of the few subjects that remains consistent from the first year of schooling, throughout all elementary school years, unlike other subjects that are introduced in later years. This consistency allows a sound comparative foundation.

Selected Cases/ Data

This study consists of an analysis of primary school Farsi reading textbooks, encompassing grades 1 through 5, from each of the four specified time periods (a total of 20 textbooks): 1981, 1998/ 2000¹⁰, 2011 and 2015. The books from the 2015-2016 year represent the current and most up-to-date information presently taught to students in primary schools across Iran. In comparison, the 2000 and 1981 texts are reflective of the post- revolution changes in curricula. Although the textbooks were rarely completely changed, until some changes with the introduction of the new curriculum in 2012, these nevertheless allow for a comparison of potential subtle changes. Unlike the 2012 and 2015 textbooks, which are relatively readily accessible online, the textbooks from the earlier time periods considered are not easily accessible. Therefore, in order to obtain these textbooks and permit a systematic analysis of their contents, and this previously unexplored

¹⁰ Despite the author’s best efforts, it was not possible to access a set of textbooks all published in the year 2000; therefore, in this set the first through third grade textbooks were published in 2000, and the fourth and fifth grade textbooks in 1998. However, these years are all within the same time-period of interest for this study.

comparison, I sought out and gained access to copies of the textbooks from Iranians' personal libraries and collections through archival research. Three sets of the utilized textbooks are available in PDF format, while the fourth is accessible in hard-copy format. These textbooks are the official and standard resources of all schools across the country, and thus reflect the opinions of the ministry of Education. As well, due to their use across the entire country, the sample is not biased as they are the material used by all students.

3.2.3 Hypotheses

This chapter examines two research questions regarding the gender representation in the textbooks considered. Namely: how are gender roles and gender equality presented in Farsi reading textbooks? And, has there been a change in these presentations over time? Accordingly, the proposed hypotheses have been separated with the first two regarding the presentation of gender equality and roles in the textbooks, and the second set hypothesizing the trends to be observed over time. Separate hypotheses are also presented pertaining to the indicator being measured.¹¹

Hypotheses regarding the manifest presentation of gender equality and roles

Given the continuous preference for males in Iran and their higher place in society as well as the emphasis on women's family roles, and gender segregation, I hypothesize that:

H_{3.1}: Males will be presented more often, and will thus be more visible than females.

Regarding occupational roles, despite recent advancements of women in the labour force, the formal economy continues to be dominated by men, and women's family duties are emphasized, accordingly:

H_{3.2}: Females will be presented in more traditional household occupational roles, while men will be presented in more professional roles than women.

¹¹ Namely: Visibility, and occupational roles.

Hypotheses regarding change over time

This research proposes that by studying gender equality and gender role presentations over time, despite the various changes in the conservative nature of the regime in power, there will be a generally positive trend in the presentation of gender equality. In comparatively analyzing the difference of gender representations over time, this study considers both the difference in gender presentations (the representation of males versus females), as well as the difference in the representation of females. Overall, the difference between males and females is expected to decrease, while the representation of females will increase.

Given the global secular trend toward an improvement of gender representation, and the increasing importance of women in societies:

H_{3.3}: The difference in the visibility between males and females will generally decrease. The overall visibility of females will increase in each consecutive time period.

Further considering the trends in changing gender roles, and the acceptance of women in professional occupations, it is expected that the difference between males and females presented in professional roles will generally decrease over time, thus¹²:

H_{3.4}: The difference between males and females presented in professional occupations will generally decrease. Female representation in professional occupations will increase in each consecutive time period.

3.2.4 Method

This chapter tests the proposed hypotheses with a content analysis of the Farsi reading textbooks from each specified time period. Content analysis is a technique that consists of a “systematic counting, assessing, and interpreting of the form and substance of communication” (Manheim and Brians 2011, 195). In this study, the communication of interest are the images in

¹² Due to a lower change in views regarding women’s household roles, and the continuous Islamic rhetoric regarding the importance of family and women’s family roles, a significant change in the presentation of women in household roles is not expected, nonetheless whether changes do occur, and the pattern in difference is of interest.

Farsi reading textbooks, within which representation of gender through visibility and occupational roles is systematically assessed. This method allows for a systematic and objective analysis of the lessons and their messages, and inferring latent content (Taylor 2003, 302). A manifest analysis provides a descriptive study of directly identifiable and visible elements, and can be best utilized to measure visibility and occupational roles in regards to gender roles within the textbooks (Neurondorf 2011, 282).

Accordingly, I carry out a manifest content analysis of 20 textbooks (grades 1 through 5, per time period considered). For this analysis, I code and count the images on each page, with its contained lessons and homework assignments. The introductory material, including the title page, table of contents, introductory pages, and note to instructors are excluded. Only clearly visible individuals are counted. In order to measure the visibility of each gender, each image is categorized as either displaying only females, only males, or a mix of the two genders. Furthermore, within each image the following variables are also counted: adult males, adult females, male groups, female groups, boys, girls, joint groups¹³, and families, as a subset of joint groups. A detailed description of each category is provided in Appendix A. The separation of genders by age group is a reflection of findings in previous research that females tend to be represented less as adults than males, and more in group settings than individually (Paivandi 2008; Higgins and Shoar-Ghaffari 1991). These categories are counted by presence in images, and their frequencies recorded. In total, there are 1230 images, and 3770 individuals.

Similarly, I measure the occupational roles ascribed to males versus females, using a combination of the method from Kalia's study of Indian textbooks, and occupational categories used in Higgins and Shoar-Gharaffi's and Toub'a's analyses for consistency. To do so, I first list

¹³ For this research, a joint group is defined as containing minimum one male and one female character.

the occupations attributed to adult male and female characters in images, and record their frequencies (Kalia 1980, 213). Occupations are recorded only for adult males and females presented alone (single male, single female), or in groups (male group, female group). The adults in family groups are not included, as family settings do not display particular occupational roles. As well, although a few children are shown partaking in household work or agricultural roles, the vast majority are depicted as students, or simply as children. Therefore, “boy” and “girl” counts are not included in the occupational content analysis.¹⁴ I then sort the counts of the occupations listed into the following categories: 1) Professional, 2) Educational 3) Agriculture, 4) Blue-collar, 5) Trade-craft, 6) Military, 7) Religious and 8) Housework. Appendix B describes the professions contained in each category.

Finally, I compile and record the above frequency counts, and use the chi-square method to test for significance in difference in gender representations between time periods. Given the nominal variables under consideration, the chi-square coefficient test is the preferred method of statistical significance testing. The chi-square coefficient specifies whether the observed association between the independent and dependent variable are likely to have occurred by chance. This test compares the obtained results with expected results if no relationship exists between the variables, evaluating the goodness of fit between the observed and expected results (Manheim and Brians 2011, 299). To determine the level of statistical significance, the chi-square coefficient is compared with the critical chi-value for the specified level of significance (mainly 95% level confidence). For results that are found to be statistically significant using the chi-squared measure, the Cramer’s V calculation is then used to measure the strength of association between the two

¹⁴ The few images depicting children in specific roles are, however, considered in the qualitative analysis.

variables. Cramer's V values range from 0 to 1, with 0 indicating a very weak strength of association between the two variables (Gingrich 1992, 782).

3.3 Results and Analysis

3.3.1 The Structure of the Textbooks

First, it should be noted that there are no changes for the first and second grade textbooks of the 2012 and 2015 school years. As well, although changes are noticeable and present, much of the material used in the 1981 and 1998/ 2000 textbooks is very similar.

The contents of the 2012 and 2015 school year textbooks are divided thematically, and beginning from the second grade the textbooks follow a similar division of chapters, specifically in their titles and themes. The chapters of the books each reflect an aspect of students' lives, and have titles such as: *nahādhā* (institutions), *behdāsh* (hygiene), *millī va mīhanī* (national and patriotic), and so on.¹⁵ Within each chapter, the textbooks provide students with a combination of stories and poems in conjunction with their language lessons. The lessons follow the presented stories or poetry, in forms of questions directed at the students, asking them to notice particular grammatical rules within the text, or to answer questions about what they have read. In addition to the questions relating directly to the texts, specific sub-sections are included asking the students to "see and tell" or "read and write". However, it must be noted that such sub-sections are more prevalent in the first through third grades, and less frequent in and after the fourth grade books.

The structure of the 2012 and 2015 reading textbooks differs from that used in the 1981 and 1998/2000 textbooks, since despite dividing the content of the book by the title of each piece or story, the older textbooks do not divide into chapters. Particularly, in contrast to the 2012 textbooks, the books from the year 2000 follow initial text with questions and exercises divided

¹⁵ Although these are the specific titles of the chapters for grades 3-5, the textbooks for grades 1, and 2 cover similar themes.

into headings such as “questions” (*porsish*), “pay attention to this point” (*bi īn nokte tavajoh konid*), and “composition practice” (*tamrīn i inshā*). The difference in the structure of such exercises is a result of some changes to the structures of the textbooks, and the decision to divide the Farsi textbooks into separate books geared toward reading and writing in the 2012 year.

All textbooks considered make use of images to supplement and display the content of the stories and poems they accompany. However, images are much more numerous in the first and second grade books, as opposed to the later grades. Particularly, the fifth grade textbooks utilize markedly more texts than images. Although this is the case for all time periods considered, there is a noticeable increase in the number of images used in the first and second grade textbooks for the latter two time periods (2012 and 2015), as compared to the first two.

3.3.2 Visibility

Overall Visibility – Presence per Image

Regarding overall visibility, presence in images is first considered, categorizing images as “female”, “male”, or “mixed”. Operationalizing visibility simply as presence in an image (whether singularly or as part of a group), females are visible in 40% of images in the 1981 textbooks, whereas men are visible in 80%.¹⁶ The female visibility at first decreases to 35% of total images in the 2000/1998 textbooks, but then steadily rises to 42% and 49% of total images in the 2012 and 2015 books, respectively.¹⁷ Next, considering visibility as females’ presence in images depicting only females, it is interesting to note that their presence does not change considerably across the time periods, and actually decreases from 20% of images in the 1981 texts and 19% in the 1998/2000 books, to 17% in the 2012 and 2015 textbooks. Males’ visibility has remained

¹⁶ These overall visibility percentages do not sum to 100%, as both males and females are present/ visible in “mixed group” counts, which refer to images with both genders.

¹⁷ A summary of these findings/ overall presence is presented in Table 3.2.

relatively consistent throughout the time periods, increasing only slightly from 80% in 1981, to 81% then 83% of images in 2000, 2012 and 2015, respectively. In terms of the overall difference between female and male visibility per time period, the proportion of images that include women as often as men decreases from 50% in 1981 to 43% in 2000, but then increases to 51% in 2012, and further to 60% in the 2015 textbooks. These findings are summarized in Table 3.1. The general visibility of females in images in the textbooks initially decreases, but has gradually increased since 2000. As well, their visibility and inclusion compared to males has followed the same pattern. These findings support the idea of increasingly positive global norms regarding gender equality, prompting a global pattern of increased female presence in elementary school textbooks over time regardless of the cultural context and changes in political regime. However, the pattern of changes in the proportion of males and females presented points to the fact that increased female presence has not necessarily meant a more equal representation of the genders.

Having considered the changes in frequencies observed, the chi-square measure is used as a test of significance. The overall patterns observed across all four time periods are significant (p -value 0.003), meaning that a null hypothesis that these results occurred by chance can be rejected (95 % confidence level). However, the Cramer's V value of 0.09 reflects a rather weak association. This measure indicates that simply knowing the year of a textbook's publication does not greatly improve the ability to predict its depiction of gender visibility (per image). Furthermore, Table 3.1 presents the p -values obtained from the chi-square test of the data between each consecutive time period, as well as the first and last time period considered. From these values, it can be seen that the patterns observed between all time periods are significant at a confidence level of 90% or higher, except for that between the 1981 and 2000 textbooks. Namely, the drop in representation that seems to have occurred between the first and second time periods, before increasing once

more, could have occurred by chance. These findings denote the statistical significance of the overall pattern of increasing female visibility in the textbooks over the time periods considered.

Table 3.1: Total Visibility per image per time period

	1981		1998/2000		2012		2015	
	N	%	N	%	N	%	N	%
Female	33	20	41	19	89	17	57	17
Male	99	60	138	64	303	58	166	51
Mixed	33	20	35	16	132	25	104	32
Total	165	100	214	100	524	100	327	100
Measures of Significance								
	chi-square	p-value	x-crit	sig	Cramer V			
Overall	19.706	0.003	12.592	95%	0.090			
1981 & 2000	1.023	0.599	5.991	no	0.052			
2000 & 2012	6.778	0.034	5.991	95%	0.096			
2012 & 2015	5.020	0.081	5.991	90%	0.077			
1981 & 2015	7.620	0.022	5.991	95%	0.124			

Table 3.2: Total Visibility Percentage Per image per time period summary

	1981	1998/ 2000	2012	2015
Female total (%)	40	35	42	49
Male total (%)	80	80	83	83
% Difference	50	43	51	60

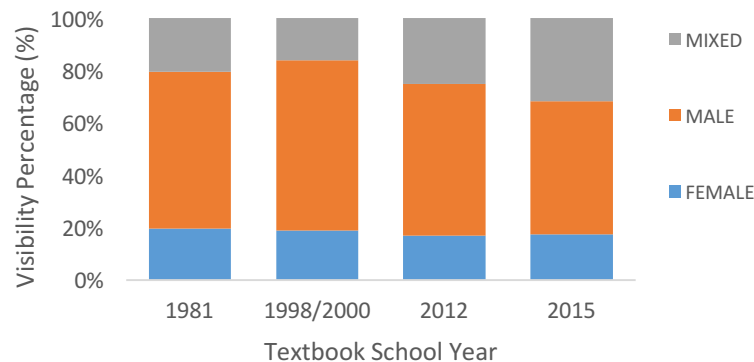


Figure 3.1: Overall gender visibility composition of images across time-periods considered

In order to allow for a more in-depth examination of whether the observed patterns have been consistent across textbooks, Tables 3.3 and 3.4 provide a more detailed look at gender visibility throughout the time periods considered, per school grade. The female and male visibility trends observed in the first and second grade textbooks follow the above overall trend per time

period, with an initial decrease in female visibility in the 2000 textbooks, and gradual increase (past the initial 1981 visibility percentage) in 2012 and 2015. Quite interestingly, in the 2012 and 2015 textbooks, females are present in 79% and 60% as many images as men, in the first and second grade textbooks respectively. Female visibility as compared to males' in images is relatively consistent, with a slight increase per time period. In addition, male visibility in the percentage of image also follows this trend. Within the third grade textbooks, the trend changes to a continuous increase in female visibility in images per consecutive time period. Male visibility, on the other hand, initially decreases in the 2000 textbooks, then increases slightly in the 2012 and 2015 books. The fourth grade books present the same pattern in visibility as those observed in the first and second grades. Overall, and, in general, the trends in the first through fourth grade textbooks conform to the previously found patterns of gradual increase in gender equality and female visibility over time. These patterns support ideas of a global increasingly secular presentation, despite changes in regime over time. These slight increases can reflect a conscious attempt at increasing female visibility and gender equality through visibility, particularly in the earlier grades' textbooks. This idea is even more likely given that the first grade textbooks in the latest years considered (2012 and 2015), contain the most equal proportion of females and males.

The fifth grade textbooks, however, present an interesting case, as no general pattern or trend is observed. Female visibility in images initially decrease from 20% of images in 1981, to 18% in 2000, then increases to 28% in 2012, thus far presenting a similar pattern as the previous grades and overall trend. However, unlike the other four grades' textbooks, overall female visibility then decreases in the 2015 textbooks to 14% of total images, an even lower visibility than that observed in the 2000 textbooks. Similarly, women are present in 17% as many images as men in 1981, 21% as many images as men in 2000, then increase to a visibility in 33% as may

images as men in 2012. However, this difference in presence also decreases to the images including women only 14% as often as they do men in 2015. This varying pattern observed in the fifth grade textbooks, is complemented by a general trend of decreased female visibility as grades increase, throughout all time periods. Generally, females are less visibly presented, and male primacy more pronounced in the latter grades than the earlier grades. These patterns reflect a decreased effort in ensuring gender equality presence in textbooks, or a lack of importance ascribed to the concept as students age. This specification of the general trends in females' visibility increase helps to clarify that the overall trends are more affected by changes to the first grades' textbooks, rather than all textbooks considered. These patterns can be seen as an effort in the latter grades' textbooks to afford more attention to enforcing traditional beliefs regarding men's greater significance, particularly in public portrayal.

An additional key consideration with the 2015 fifth grade textbooks, is that females are not at all portrayed alone. Thus, the 14% overall female visibility in the images, is all accounted for in images of mixed groups, rather than any females (adult or child) being presented alone in an image. Concerning the first through fourth grade textbooks, taking a closer look at the breakdown of female and male visibility, it is evident that females' visibility in images on their own has generally not increased; rather, the increase in overall female visibility in almost all of the cases can be attributed to their increased visibility in images displaying mixed groups, rather than images depicting only women or girls. This pattern demonstrates an attempt to acknowledge females' increased public presence, and conform to modern and global ideas of equality, while still attributing a greater significance to male presence and independence, posing an interesting combination of modern and traditional ideas. A similar pattern is seen accounting for males' overall visibility, where the percentage of images in which males alone are shown generally

decreases over the time periods per grade. This can be reflective of the paradox of Iranian gender equality efforts, as well as conforming to modern ideas of equal presentation of males and females. Appendix C provides visual plots of the visibility breakdown per grade and time period.

The changes in gender visibility observed over time for the first grade textbooks are statistically significant ($p < 0.05$). This confirms the idea that the changes in increasing gender equality patterns through visibility in these textbooks are a result of a conscious effort and are not due to chance. The lack of statistical significance for the differences observed over time for the second through fifth grades, however, do not allow for the rejection of the possibility of these changes being observed due to chance. Nonetheless, these observed patterns and even lack of statistically significant difference in the latter patterns all emphasize the importance of a detailed analysis of overall trends of improved female visibility, as they do not consider the consistency with which students are presented with more gender equal images in their textbooks. Moreover, these findings once more stress the lack of significance associated with gender equality presentations as students age and enter higher grades of study.

Table 3.3: Gender visibility frequencies and percentage per grade, per time period

	1981		1998/2000		2012		2015	
	N	%	N	%	N	%	N	%
Grade 1								
Female	25	28	21	24	27	20	27	20
Male	41	46	47	55	50	37	50	37
Mixed	24	27	18	21	59	43	59	43
Total	90	100	86	100	136	100	136	100
Grade 2								
Female	3	15	7	21	12	18	12	18
Male	12	60	22	67	34	51	34	51
Mixed	5	25	4	12	21	31	21	31
Total	20	100	33	100	67	100	67	100
Grade 3								
Female	2	11	11	19	20	17	8	14
Male	16	84	38	66	72	61	34	61
Mixed	1	5	9	16	26	22	14	25
Total	19	100	58	100	118	100	56	100
Grade 4								
Female	2	12	0	0	18	16	10	26
Male	14	82	14	88	81	73	23	59
Mixed	1	6	2	13	12	11	6	15
Total	17	100	16	100	111	100	39	100
Grade 5								
Female	1	5	2	10	12	13	0	0
Male	16	84	17	81	66	72	25	86
Mixed	2	11	2	10	14	15	4	14
Total	19	100	21	100	92	100	29	100
Measures of Significance								
	chi-square		p-value		x-crit		sig	Cramer V
Grade 1	19.244		0.004		12.592		95%	0.147
Grade 2	5.266		0.510		12.592		no	0.119
Grade 3	5.908		0.434		12.592		no	0.108
Grade 4	7.639		0.266		12.592		no	0.144
Grade 5	5.793		0.447		12.592		no	0.134

Table 3.4: Visibility percentage per image summary; by grade per time period

	1981	1998/ 2000	2012	2015
Grade 1				
Female total (%)	54	45	63	63
Male total (%)	72	76	80	80
Grade 2				
Female total (%)	40	33	49	49
Male total (%)	85	79	82	82
Grade 3				
Female total (%)	16	34	39	39
Male total (%)	89	81	83	86
Grade 4				
Female total (%)	18	13	27	41
Male total (%)	88	100	84	74
Grade 5				
Female total (%)	16	19	28	14
Male total (%)	95	90	87	100

An even more detailed breakdown of female and male visibility per images considered is provided in Appendix D; in this table, visibility is considered as part of six categories: Single Female, Single Male, Female Group (2 or more females), Male Group (2 or more males), Joint Group (a minimum of one female and one male), Family (a minimum of one female and male, in a family setting). Table 3.5 and Figure 3.2 display the overall composition of per image categories in each time period. As it can be seen, females' visibility as single females and female groups in images seem to remain relatively stable throughout all four time periods considered. Male groups and single males make up the majority of images' categorization in all time periods, examining these categorizations, it is evident that although females' overall visibility may have steadily (and in small increments) increased over the time periods considered, this has been a specific variation of visibility – specifically, in group settings rather than individually. These patterns may be reflective of Iran's particular contextual setting, whereby increasing female visibility supports modern and globally extending ideas of gender equality over time, despite changes in political regime. However, the particularities of the variation exhibit the role of cultural influence within the Iranian context, wherein males' power and superior independence persist, and family ideals and roles for women continue to be emphasized.

Table 3.5: Categorizing Gender Visibility Per Image

	1981		1998/ 2000		2012		2015	
	N	%	N	%	N	%	N	%
Single Female	18	11	21	10	45	9	28	9
Single Male	35	21	72	34	145	28	71	22
Female Group	15	9	20	9	44	8	29	9
Male Group	64	39	66	31	158	30	95	29
Joint Group	11	7	12	6	67	13	51	16
Family	22	13	23	11	65	12	53	16
Total	165	100	214	100	524	100	327	100
Measures of Significance								
	chi-sq		p-value		x-crit		sig	
	32.739		0.005		24.996		95%	
							Cramer V	
							0.094	

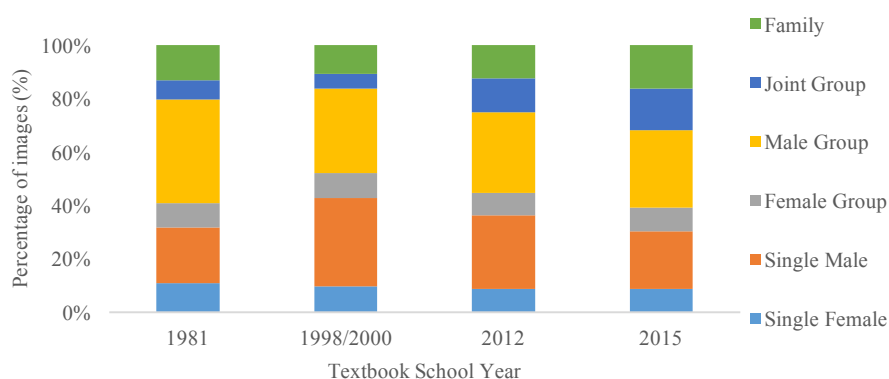


Figure 3.2: Categorizing gender visibility in images per time period: Percentage visibility of gender categories per image

Overall Visibility – Presence Per Individual

A second method used to measure visibility is considering the number of females and males in images, rather than simply their presence or absence. Tables 3.6 and 3.7 provide these findings as an aggregate of the total number of women and men per timer period, and per grade respectively. The overall measures per time period display a positive trend for female visibility, with the percentage of females increasing from 22% of all individuals present in images in 1981, to 27% in 2000, 30% in 2012, and 34% in 2015. Men’s visibility in terms of number of men as a percentage of all individuals in images decreases in each consecutive time period accordingly. Figure 3.3 provides a visual representation of this trend. This is in keeping with H_{3.3} that overall, female visibility would increase and male visibility decrease in each consecutive time period considered, and the difference between the visibility of the two genders would generally decrease. The null hypothesis that these changes could have occurred by chance can be rejected for these overall patterns, with a 95% confidence level. However, once again, the Cramer’s V measure of 0.082, suggests a weak association between the variables, indicating that knowledge of one does not greatly influence the ability to estimate the other. A more in-depth consideration of significance levels between time periods suggests that the strongest relationship and association measures are

the changes occurring between the first and last time periods, and between 2012 and 2015, respectively. This reflects the significance of the differences in visibility found between the first and last set of textbooks, signaling the importance of the overall increase in visibility pattern observed over the time periods considered (from 1981 to 2015). The significance of the strong relationship for changes between the 2012 and 2015 textbooks reinforce the idea of the influence of globalization and gradual increase in gender equality presentation, as they reflect an increase in female visibility observed over the most recent time periods considered, despite the changes in political regimes at the time.

A further consideration of these visibilities by grade, however, provides a less clear trend (Table 3.7). The general increase in female visibility trend holds true for the first and second grade textbooks. In the third grade, the percentage of females in images actually decreases in the 2012 and 2015 textbooks, after a slight increase in the 2000 textbooks. The textbooks for the fourth grade also follow the trend of generally increasing female visibility. Finally, the generally increasing trend from 1981, to 2000 and 2012 in the fifth grade books, is offset with a decrease in overall female visibility in the 2015 textbook. These trends are shown in Figure 3.4.

A more detailed categorization of this visibility count is provided in Appendix E. From these categories, it is once more evident that despite the increasing trend of female visibility, this change is mainly reflected in an increase of girls' and female groups' visibility, rather than female adults. This manner of change may be seen as an intent to portray students' immediate surroundings, with the depiction of younger girls in images. This categorization, however, simultaneously reinforces traditional outlooks on gender equality in images by diminishing females' importance and independence in the public sphere, particularly as adults.

Table 3.6: Visibility/Number of Males and Females per Time Period

	1981		1998/2000		2012		2015	
	N	%	N	%	N	%	N	%
Male	438	78	399	73	1075	70	744	66
Female	126	22	147	27	462	30	379	34
Total	564	100	546	100	1537	100	1123	100
Measures of Significance								
	chi-sq	p-value	X-crit	sig	Cramer V	Odd's Ratio		
Overall	25.594	1.16E-05	7.815	95%	0.082			
1981 & 2000	3.142	0.076	3.841	No	0.053	1.281		
2000 & 2012	1.914	0.166	3.841	No	0.030	1.166		
2012 & 2015	4.087	0.043	3.841	95%	0.039	1.185		
1981 & 2015	23.298	1.387E-06	3.841	95%	0.118	1.771		

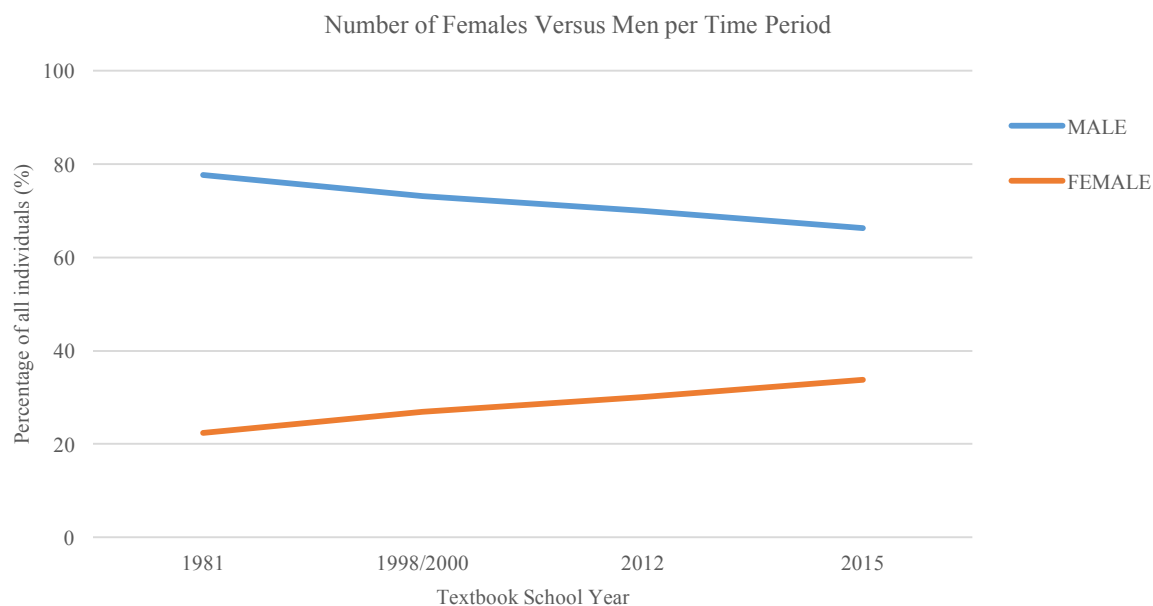
**Figure 3.3:** Female versus male visibility trends over time

Table 3.7: Visibility/Number of Men and Women per Grade, by Time Period

	1981		1998/2000		2012		2015	
	N	%	N	%	N	%	N	%
Grade 1								
Male	189	67.3	173	67.3	341	58.9	341	58.9
Female	92	32.7	84	32.7	238	41.1	238	41.1
Total	281	100	257	100	579	100	579	100
Grade 2								
Male	56	83.6	63	77.8	139	69.5	139	69.5
Female	11	16.4	18	22.2	61	30.5	61	30.5
Total	67	100	81	100	200	100	200	100
Grade 3								
Male	44	81.5	71	67.6	203	69.8	159	76.4
Female	10	18.5	34	32.4	88	30.2	49	23.6
Total	54	100	105	100	291	100	208	100
Grade 4								
Male	64	94.1	31	91.2	222	84.4	50	68.5
Female	4	5.9	3	8.8	41	15.6	23	31.5
Total	68	100	34	100	263	100	73	100
Grade 5								
Male	85	90.4	61	88.4	170	83.3	55	87.3
Female	9	9.6	8	11.6	34	16.7	8	12.7
Total	94	100	69	100	204	100	63	100
Measures of Significance								
	<i>chi-square</i>		<i>p-value</i>		<i>x-critical</i>		<i>sig</i>	<i>Cramer V</i>
Grade 1	10.931		0.012		7.815		95%	0.080
Grade 2	7.055		0.070		7.815		90%	0.113
Grade 3	6.156		0.104		7.815		no	0.097
Grade 4	19.357		0.000		7.815		95%	0.210
Grade 5	3.180		0.365		7.815		no	0.086



Figure 3.4: Gender Trends Per Grade – Total number of males and females as % of total Number of individuals in images

From both measures of visibility, a gradual overall increase in female visibility is seen over the time periods considered, particularly in the 2012 and 2015 textbooks. This general increase supports the idea of more secular trends and acceptance of gender equality worldwide being reflected in the contents of the textbooks, despite variations in regimes' political conservatism. This is evident as females' visibility gradually increases over time, despite the changes in regime ideology, defying a specific political aim to negatively influence gender representations. The details of the increase in visibility, however, follow a less clear pattern, and the lack of increase in female adults, or images of females on their own, leaves questions of the way in which gender equality is being promoted. Specifically, while the overall patterns support theories of globalization and increased gender equality, the lack of increase in women's independent visibility

demonstrate a mode of influence of cultural and contextual factors, and of the political regimes. This can be seen as a reinforcement of the importance the Islamic republic affords to the secondary position of women in society. This manner of increased visibility affords women an increase in presence, but serves to still reinforce notions of male primacy, particularly in the public sphere.

3.3.3 Occupational Roles

The overall Hypothesis ($H_{3.2}$), proposed in section 3.2.3, that females will be presented in more household occupational roles, and males in more professional roles than females, is supported by the results of the content analysis. Tables 3.8 and 3.9 present the frequency of females and males in each occupational category, respectively. It must be noted that the percentages of each category are calculated as a percentage of the total number of females (Table 3.8) and males (Table 3.9) shown in any specific occupational role, rather than as simply a percentage of their presence in images. It is therefore important to first note the difference in the number of females versus males shown in any occupational role. It is evident that overall, significantly more males are depicted in occupational roles than females.

In all four time-periods considered, women who were shown in an occupational role are mainly depicted in three categories: educators, agriculture work, and housework. Only one female is depicted as a non-educator professional in the 2000 textbooks, one as a trade-craft worker, and one as a religious figure in the 2012 and 2015 textbooks. It is interesting to note that, the one religious figure is an angel, rather than a religious leader as men are depicted. A caveat that may have been lost in previous research such as Higgins and Shoar-Ghaffari's study by categorizing educators as professionals, is more finely defined in these findings. Specifically, it can be seen that females are almost never depicted in professional roles outside of education. If educators are to be counted as part of the professional occupational category, the general increase in representation of

females as educators from 29% in 1981, 28% in 2000, to 44% and 48% in 2012 and 2015 respectively, supports the hypothesis (H_{3.4}) that women's presentation in professional roles would increase over time. However, apart from educational roles, the findings are contrary to this hypothesis, as women's depiction in professional roles outside of education, as well as any blue-collar work, remains at zero throughout the time periods.

Unsurprisingly, females are never portrayed in a military role – however, it is important to recall that this category also comprises images of heroes, martyrs, or revolutionary fighters.¹⁸ Male characters are consistently depicted as “heroes” and martyrs, and military personnel throughout the time periods under consideration. Similarly, the number of males shown in household work (including purchasing groceries) is consistently low (1% in 1981 and 2000, 0% in 2012, and 2% in 2015). Therefore, although a general attempt at increasingly showing women in occupational roles outside of household work has been made, the effort has not expanded beyond educational roles. Furthermore, traditional gender roles regarding occupational roles are still somewhat reinforced, as men are rarely shown in household roles, and females never in military, blue-collar, or professional roles.

Table 3.8: Female Occupational Categories Per Time Period

Occupational Category	1981		1998/2000		2012		2015	
	N	%	N	%	N	%	N	%
Professional	0	0	1	5	0	0	0	0
Educator	4	29	5	23	14	44	12	48
Agriculture	6	43	0	0	6	19	4	16
Blue-collar	0	0	0	0	0	0	0	0
Trade-Craft	0	0	0	0	1	3	1	4
Housework	4	29	16	73	10	31	7	28
Religious	0	0	0	0	1	3	1	4
Military	0	0	0	0	0	0	0	0
Total	14	100	22	100	32	100	25	100

¹⁸ It should be noted that in the 1981 and 2000 textbooks, there are images of large revolutionary crowds from the 1979 revolution. However, the individuals within the crowd are non-distinguishable, and therefore not included in the counts.

Table 3.9: Male Occupational Categories per Time Period

Occupational Category	1981		1998/2000		2012		2015	
	N	%	N	%	N	%	N	%
Professional	7	4	7	7	42	17	16	11
Educator	5	3	4	4	19	8	12	8
Agriculture	52	32	32	31	46	19	22	15
Blue-collar	19	12	24	23	47	19	44	31
Trade-Craft	0	0	0	0	10	4	9	6
Housework	2	1	1	1	0	0	3	2
Religious	18	11	10	10	13	5	6	4
Military	58	36	25	24	65	27	31	22
Total	161	100	103	100	242	100	143	100

Figure 3.5 displays the overall categorization of female occupational roles per time period, as a percentage of the total number of females shown in any occupational role. This visual presentation further depicts the increasing presentation of females as educators, and their consistent presentation as undertaking household work.

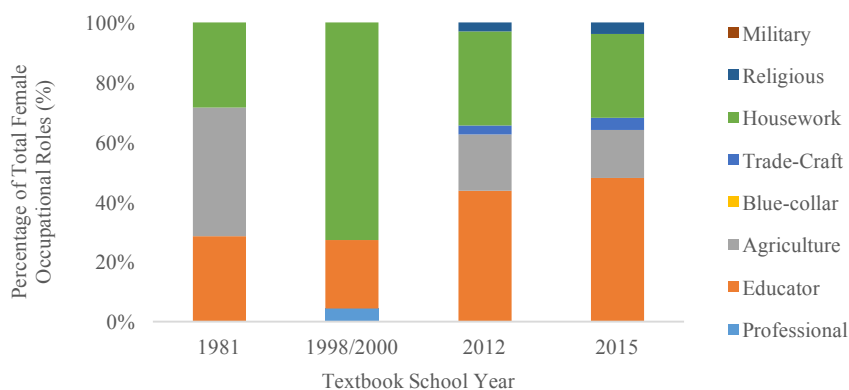
**Figure 3.5: Composition of Female Occupational Roles per Time Period**

Table 3.10 provides the results of the occupational counts for all adult women, except those appearing in family images, and Table 3.11 summarizes a simplified version of these counts, with women's occupations categorized as housework, women shown in a non-occupational role, and all other occupations as one category. From these results, we see a gradual increase in representation of women as educators. However, the most noticeable change is the increase in the percentage of adult women shown in non-occupational roles, particularly in the 2012 and 2015

textbooks. In considering these results, we should note the difference in total number of adult women counted, with a very small total n of 17 in the 1981 textbooks. Intriguingly, the trend in occupational representations observed from the results presented in Table 3.11, reflects a decrease in representation of women in occupations and housework, and an increase in the percentage of women depicted as non-occupationally associated, from 18% in the 1981 textbooks, to 73% in the 2015 textbooks.

Table 3.10: Female Occupational Categories per time period (All adult females)

Occupational Category	1981		1998/2000		2012		2015	
	N	%	N	%	N	%	N	%
Professional	0	0	1	4	0	0	0	0
Educator	4	24	5	20	14	13	12	13
Agriculture	6	35	0	0	6	6	4	4
Trade-Craft	0	0	0	0	1	1	1	1
Housework	4	24	16	64	10	9	7	8
Religious	0	0	0	0	1	1	1	1
Military	0	0	0	0	0	0	0	0
Blue-collar	0	0	0	0	0	0	0	0
N/A	3	18	3	12	74	70	68	73
Total	17	100	25	100	106	100	93	100
Measures of Significance								
	chi-sq	p-value	x-crit	sig	Cramer V			
Overall	98.809	0.000	28.869	95%	0.370			
1981 & 1998/2000	13.269	0.010	9.488	95%	0.562			
2000 & 2012	48.620	0.000	12.592	95%	0.609			
2012 & 2015	0.490	0.992	11.070	no	0.050			
1981 & 2015	27.200	0.000	11.070	95%	0.497			

Table 3.11: Simplified Female Occupational Categories

Occupational Category	1981		1998/2000		2012		2015	
	N	%	N	%	N	%	N	%
Profession	10	59	6	24	22	21	18	19
Housework	4	24	16	64	10	9	7	8
N/A	3	18	3	12	74	70	68	73
Total	17	100	25	100	106	100	93	100
Measures of Significance								
	chi-sq	p-value	x-crit	sig	Cramer V			
	74.096	5.89E-14	12.592	95%	0.392			

This analysis of occupational roles in Iranian primary school textbooks demonstrates that despite globalizing ideas of gender equality and gender roles, traditional gender occupational roles

continue to be depicted and promoted. These findings further the idea that while conforming to some aspects of increasing gender equality, for example by increasing overall female visibility and maintaining occupational depictions, traditional and contextual norms such as women's roles as educators and caregivers continue to be reinforced in Iran. This reinforces the influence of regimes' ideologies and traditional ideas, and their promotion through educational institutions.

3.4 Qualitative Analysis

A qualitative observation of the textbooks' content allows for inferences of implicit messages or portrayals of gender differences not captured by the quantitative analyses in Section 3.3. This permits a more holistic impression of the contents of the Iranian primary school reading textbooks, and nuances regarding the appropriate roles and changes in presentation of each gender, particularly over time. Far from simply portraying specific gender differences, and quite similar to what can be expected of primary school textbooks worldwide, the textbooks under consideration also depict lessons meant to apply to students' daily lives, and portraying the ideal attributes they should strive to achieve.

For this analysis, it is important to note that, as found in the content analysis, the first and second grade textbooks for the 2012 and 2015 school years are identical, and the 1981 and 2000 texts are also similar. Therefore, this discussion places a general focus on a comparison of the two sets that differ most: namely the 1981 and 2000 texts, compared to the 2012 and 2015 textbooks. Furthermore, this qualitative review does not aim to provide a systematic analysis of particular images or content, but rather to highlight particularly interesting aspects of these books. Citations of the books are presented in the text in parentheses in the following order: grade level, year, page number.

3.4.1 Main Mediums of Attribute Portrayal

Stories

The main written mediums for information presented throughout the textbooks are stories and poems. The authors present the students with lessons within each chapter through these methods. Although the stories in the textbooks analyzed are used to teach students reading skills alongside grammar and spelling, they contain important messages regarding each chapter's theme, reflected by its title (for example, hygiene, or religion). The lessons within these stories demonstrate attributes of daily life, or personal characteristics, and their importance for the students. This is a common element of most stories, from which a wide variety of knowledge can be gained, teaching students about "people or things" (Medwell and Wray 1998, 46). The texts frequently use stories about children near the age of the students in the primary school grades, thus allowing for close relations to be drawn, and for the students to learn the lessons of the stories as life lessons for themselves. This is especially important, as stories allow the reader to understand characters within the text, and to feel with them and understand their behaviour (Egan 1989). Therefore, students are able to identify with stories' characters, and to understand and apply their behaviour to their own lives, a particularly important conception in the discussion of gender roles' presentation.

Images

The Farsi reading textbooks make extensive use of images to depict stories and poems, as well as to demonstrate the chapters' lessons, which are the focus of the content analysis in Section 3.3. Images are also used, especially in the first grade, to introduce students to their surroundings, including people, places, and objects. This is done by depicting children around the age of the students, and surroundings that are often familiar to them, such as the classroom, or mosque. By looking at images of environments and surroundings familiar to them, the students learn to relate

3.4.2 Observations

Unsurprisingly, no sections specify titles or stories meant to explicitly define gender roles, or roles for males versus females in the textbooks. However, the activities that young girls and boys are depicted as partaking in, often reflect traditional societal gender roles. Within the occupational counts included in the content analysis (Section 3.3.3), it was not possible to account for activities that children are shown partaking in, as they do not reflect particular occupations. Specifically, boys are often shown in images fixing their bikes, or helping their father with woodwork and building. In contrast, girls are more often shown in household roles, helping their mothers, or sewing, washing dishes, and cooking on their own. Groups of boys are also frequently displayed as playing sports or partaking in athletic activities, while groups of girls are often shown in the home or school setting. Despite this, one very interesting aspect is that although girls are not shown partaking in certain sports or athletic activities (such as wrestling and horseback riding in the 2012/2015 textbooks), they are portrayed participating in physical activity, and some sports such as soccer or Ping-Pong. Although these images are not as frequent as pictures of groups of boys in sports, they are consistently present throughout all time-periods concerned. These images demonstrate the importance placed upon physical activity and health in the daily lives of children. The clearer gendered divide, is therefore observed in daily activities such as playing, building and fixing for boys, in comparison to housework, reading, and arts for girls. These implicit variances are present throughout the textbooks for all time periods.

Nuanced portrayals of traditional gender roles are also clearly seen in Images 3.2-3.5, from the 2012 and 2015 first grade textbooks. These images are part of a “see and tell” exercise following an initial depiction of the family members in their home. Students are asked to answer two questions regarding the four pictures presented: “What do you see in the photos?” and, “what is each member of the family doing” (Farsi 1 2015, 3). Upon close analysis of the four images, it

can be seen that the male characters are depicted as actively partaking in activities, such as the young boy building with blocks, or the father helping with building a plane. While the young boy and girl are shown engaging in activities together with their parents, the young girl is illustrated in a supporting role of supplying materials, while the boy seems to be more actively building the object. Furthermore, the young girl is shown drawing on her own, and the mother, encouraging the children to read. These seemingly normal images of family activities nonetheless contribute to reinforce traditional activities associated with each gender; specifically, hands-on and active roles for males, and more passive, artistic or even educational (reading) activities for females.



Image 3.2 -3.5: “bibīn va bigu”—See and tell (Farsi 1 2015, 3)

Although both genders are presented more frequently in public spaces in the 2012 and 2015 textbooks, women are typically still shown in household roles, such as purchasing groceries, or walking their children. Even in the case of women shown not in any particular role (for example, Image 3.1 in section 3.4.1) they are also not portrayed as professionals in the same way as men are, for example by showing them in western suits, or carrying briefcases. These subtle, yet present differences serve to reinstate the believed differences in gender roles. Although it may be more acceptable and common for women to be in public spaces or working, the textbooks still do not go so far as to actually show these women in their professions or workplaces.

Expectedly, in all images, women are depicted wearing the hijab, and men are also dressed modestly. This is a clear reflection of changes that would have been integrated in the textbooks following the establishment of the Islamic Republic. Nonetheless, a change is evident between the images used in the textbooks analyzed from the 1981 and 2000 school years versus those used in the 2012 and 2015 school years. In the older textbooks, the women are often shown wearing *chador*¹⁹, and both girls and women are shown wearing dark colours such as black, and browns. In the latter textbooks, however, while some women are still shown wearing the traditional *chador* in public, many are drawn wearing the more stylish, and modern *manto*²⁰ (for example, Image 3.1). Furthermore, both women and young girls are more often shown wearing lighter colours, including pinks, yellows, and bright blues. This change can be seen in a direct comparison of the two images of families, in the home setting, around the *sofre* (Images 3.6 and 3.7). Whereas in the picture from the 2000 textbook, all the women are wearing black *chadors* on top of brown clothing, the 2012 image depicts even the grandmother in light yellow colours, and not wearing the *chador*. Moreover, in the older textbooks, men are often drawn with beards, whereas in the current

¹⁹ Long, dark veils used to cover the full body.

²⁰ Long coats worn as part of the hijab, to cover the body, usually drawn to knee-length.

textbooks illustrations of men with beards are less frequent (though still used). The change in images may suggest a change in the understanding of the way in which religion must be a part of the students' daily lives. Rather than focus on the depiction of Islamic dress, the current textbooks focus on Islamic values such as gratitude and devotion. The change in depiction of clothing and use of colour, also reflect a variation in certain aspects of laws (specifically, those relating to dress code) in Iran at the time, and allowance of more secular, or modern trends. This also reflects a change that might have been implemented in the students' own surroundings, such as allowing lighter colours for young students' school uniforms.

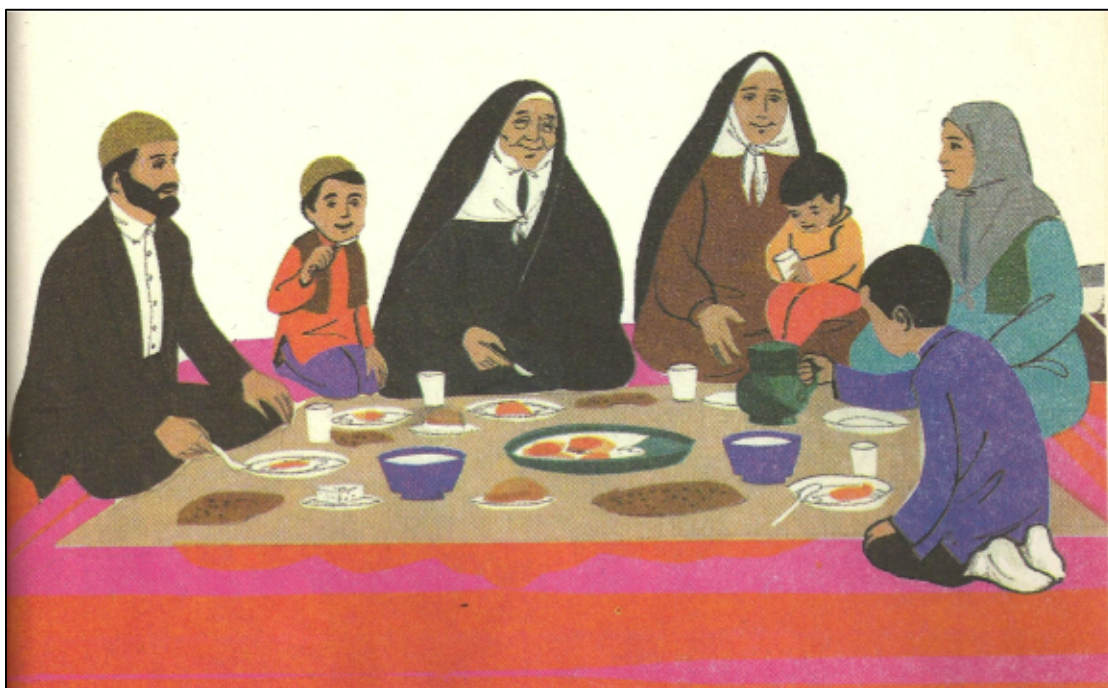


Image 3.6: Family Meal (Farsi 2 2000, 24)



Image 3.7: “noruz dar khāniy i mā”—Norouz in our house (Farsi 1 2015, 23)

In addition to lessons of personal manners and morals, the books also include lessons (and specific chapters) on societal norms, such as respecting public-service workers, or politeness, and their importance. The fifth grade textbooks for the 2012 and 2015 school years include photographs of public-service workers such as a policeman, a garbage man or street cleaner (*roftigar*), as well as that of a soldier. Public service workers are also included as the main characters of one section in the second grade book entitled “Our Friends” (*dustān-i mā*). The text highlights the roles of the following workers: farmer, baker (*nānvā*), street cleaner (*roftigar*), mason (*bannā*), police officer and teachers (Farsi 2 2012, 42-43). With the use of the first-person, the concept of respecting and viewing public workers is presented as part of the identity of, and everyday life of students and the (friendly) community to which they belong.

However, in teaching this sense of community and overall respect for community workers, the gender disparity between the presented occupations is difficult to miss. Throughout all sets of textbooks (and as highlighted in the Section 3.3.3 occupation counts) women are only presented

in educator roles, rather than as other society workers. Although often depicted as teachers (even to a group of male students), female characters are still not associated with traditionally “male” occupational roles. These observations therefore further depict the ways in which the textbooks both increasingly include modern features, such as the portrayals of women’s manner of dress, while still instilling certain traditional gender roles. The implicit messages conveyed by the images in the textbooks continue to portray specific activities as more appropriate for each gender, reinforcing traditional gender roles and defying the expected patterns of change according to increasingly secular attitude toward gender roles.

3.5 Conclusion and Implications

After considering the textbooks in their entirety, it is evident that students in primary schools in Iran are taught a variety of topics through their reading textbooks and classes, which also demonstrate ideal attributes, and more implicitly, gender roles, that they should strive to embody. It is the nature of these texts, namely their authority as official texts and their normative nature in representing a precise ideal model, which renders them an important aspect of understanding lessons taught about ideal roles and attributes in elementary schools.

This chapter addresses two research questions: how are gender roles and gender equality presented in Farsi reading textbooks? And, has there been a change in these presentations over time? From the results of the content analysis, both hypotheses regarding the manifest presentation of genders are supported. Namely, men are presented more often and are more visible than females. As well, females are presented in more traditional household occupational roles and males in more professional roles than females, in all textbooks considered ($H_{3.1}$ and $H_{3.2}$). However, it has also been made evident that depictions of male-dominance, or gender imbalance, are more prevalent in the later grades (specifically the fifth grade in this analysis) as compared to the first primary grades.

This calls into question the overall generalization of patterns, drawing attention to nuances in the means by which students may be subjected to gender inequality in textbooks. This reflects careful attention to gender representation within the first years, rather than the latter (Foroutan 2012, 781). Accordingly, a continuation of this analysis into higher grades' textbooks can enhance these findings by researching whether such patterns continue into higher school years.

The first hypothesis regarding change over time ($H_{3.3}$) is also generally supported by this analysis. Across all four time periods considered, the difference between male and female visibility decreases, and similarly, female visibility increases in each consecutive time period. This supports the idea that despite the various changes in the conservative nature of the political regime, there is a generally positive trend in the presentation of gender equality. These findings support ideas of globally increasing acceptance of gender equality, and an attempt at its implementation in school textbooks. However, a constraint of this observation is the manner of increased female visibility—namely, their presence in group settings in images rather than singly female images. Furthermore, despite the slight increasing trend in female visibility, male visibility has remained relatively consistent. This feature suggests a way in which political regimes, and contextual factors still influence the textbooks' contents and reinforce traditional conceptions of gender, and of male superiority. This caveat in the overall changes of female visibility demonstrates one way in which the Iranian regime may be attempting to balance ideals put forth by global trends such as improved gender equality, while still maintaining traditional outlooks. These findings thus demonstrate the need for detailed analysis, rather than a simple acceptance, of overall improving trends.

The second hypothesis ($H_{3.4}$) regarding changes over time, that the difference between males and females presented in professional occupations will generally decrease, and female representation in professional occupations will increase in each consecutive time period, is not

supported by the results. Rather, females continue to be depicted in a majority of housework roles, or in non-occupationally related images. Considering educators as a separate category than professional occupations, the representation of females in professional, as well as blue-collar, trade-work, or military roles is consistently non-existent. These reinforcements of traditional gender roles, depicting specific activities as more appropriate for one gender rather than the other, are supported by the qualitative findings regarding everyday activities of boys and girls in images. By continuously presenting the majority of girls engaged in household tasks, or not partaking in the same activities as boys, the contents of the textbooks implicitly reinforce traditional gender roles. These implicit features call into question the general trends of global gender equality and increased female presence in textbooks. Specifically, they demonstrate the need for more holistic considerations of textbooks' contents and analysis of these seemingly positive trends.

Addressing Touba's question at the end of her 1987 study, of whether the patriarchal presentations found in Iranian textbooks could be sustained over time, these findings present an intricate answer. Aspects of the patriarchal orientation of the textbooks have indeed changed over time, conforming to global patterns of increased secularity, and importance of gender equality. These changes are specifically reflected in females' increased visibility in textbooks, as well as certain modern notions such as manners of dress. However, acknowledging women's importance in educational roles and their increased public presence does not result in a complete change in the patriarchal orientation of the textbooks' contents. Rather, females' independent absence, the lack of increase in their professional depiction, and continued male supremacy in visibility, depict a continual patriarchal perception of gender roles and males' superiority. These features of the textbooks exhibit the role of the traditional beliefs of the Iranian regime, and demonstrate an influence of their stated beliefs of women's family roles and males' supremacy in the public

sphere. This analysis therefore highlights the need for specified and intricate analyses of Iranian school textbooks, as overall trends of gender visibility or occupational changes would lead to a simple positive conclusion of increased gender equality presentation.

In addition to the authority of textbooks, the classroom and method of classes' conduction also play a role in students' understanding of textbooks' content, as they allow teachers to introduce and explain the texts, as well as to facilitate discussion among students to enhance their own ideas, rather than allowing the texts to have authoritarian power (Havelock 1989, 247-52). Thus a potential study of this impact will greatly complement the findings of this research in assessing the effects of Iranian educational system's portrayal of gender equality and gender roles.

Conclusion

This thesis contributes to existing literature that address attitudes towards gender equality and the role of education in shaping them. It also adds to our knowledge about gender role presentations in Iranian primary school textbooks, tracing changes through time. These findings further the understanding of the cultural formation of gender roles within Iran, and point to the importance of the role of political regimes in shaping educational content. Evidently, educational regimes can indeed be a factor in influencing Iranian's attitudes toward gender equality, as highlighted by the importance of the occurrence of the 1979 Islamic Revolution, and its regimes' entailed traditional outlooks. These findings therefore call for further contextual studies of gender equality attitudes, rather than the supposition that patterns observed in the West will be followed worldwide. In addition, evaluating the effect of the secular trend regarding gender roles has implications for understanding the relative importance and interplay of global trends and the conservatism of the Islamic government. Similar to textbooks worldwide, Iranian textbooks under-represent females in content, although their presence has been gradually increasing despite changes in regimes' conservative rhetoric. The manner of increased presence (in groups, rather than alone), and the lack of depiction of women in professional roles reflects the specificities of the Iran case. The notable mode of change reveals the task of the Iranian government as a continuous effort to balance the traditional and the modern. The regime must acknowledge globalization and the global acceptance of gender equality, but also maintain its promoted traditional Islamic roles of women. Their attempt at attaining this balance is evident in increased female visibility in textbooks to address the former goal, and the continued depiction of women as educators and caregivers to achieve the latter. This twofold task "reflects the dual role assigned to the New Muslim Woman who is asked to be traditional and modern at the same time...illustrative of a deliberate policy to

create the ideal female citizen who is socialized, politicized, and Islamized and can serve the traditional needs of a religious society as well as the modern demands of the country” (Mehran 2003, 269).

The Iranian government’s use of educational institutions to promote their view of the ideal citizen and gender roles, by trying to syndicate and address both their society’s changing needs and demands, as well as their supposed Islamic ideals is thus brought to light. The results of this research should be used in conjunction with various data regarding women’s representation and involvement within Iranian society and the public versus private sphere. Moreover, to ensure a holistic understanding of gender equality within the Iranian society, an examination of women’s advancement despite the promoted traditional gender outlooks, as well as the role of their own agency, is necessary. Given that Iranian women’s participation in the formal labour economy, and more prominently in education, has been increasingly on the rise, the results of this research provide grounds for further analysis and understanding of the intricate interplay and influence between these factors.

Although Iran’s case is distinctive, and its political regime changes particular to the state, the overall importance of this study’s findings is pertinent beyond Iran’s borders. The Iranian case demonstrates that regarding the role of education in the greater goal of pursuing gender equality, access to education alone does not suffice as a measure of its success. In conjunction with gaining access to education, it is essential to consider the material and methods students are exposed to within these institutions. Goals must be put in place to ensure that school materials are created in a manner to enable the true achievement of gender equality goals, and allow enforcements of traditional gender roles to be overcome. The need for tailored goals given the context of educational attainment is proven by demonstrating that political regimes can also play a key role

in influencing educational effects. The need for this tailored approach is a main consideration, given that material such as school textbooks are generally meant to be apolitical.

The importance of society's, and in particular, students' exposure to gender are evident, as is the need to question whether this exposure contains a gender preference. Manifestations of promoted roles impact not only girls or children, but also form boys', adults', and families' perceptions of gender roles and equality. Thus, in assessing the creation and internalization of gender roles, and in considering ways to address such differences, it is imperative to consider multiple societal, political, and cultural aspects. Education is promoted as a fundamental tool of empowerment, particularly for girls and women, used to understand and act against existing injustice (Mehran 2003, 271). It is therefore vital to analyze and ensure that the powers forming these institutions and the material presented through this education do not reinforce the inequalities being experienced, but rather the equalities being pursued.

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6. Appendices

Appendix A: Categorizing Individuals

Dictionary for categorization/count of individuals in images

SM – Single Male: Single adult male – shown alone, without association to any others

SF – Single Female: Single adult female – shown alone, without association to any others

SB – Single Boy: Single child male – shown alone, without association to any others

SG – Single Girl: Single child female – shown alone, without association to any others

FG – Female Group: A group of 2 or more females shown together

FG_ Adult: A sub-count of the adults in the female groups

FG_ Girl: A sub-count of children in the female groups

MG – Male Group: A group of 2 or more males shown together

MG_ Adult: A sub-count of the adults in the male groups

MG_ Boy: A sub-count of children in the male groups

JG – Joint Group: A group containing a minimum of one male and one female not in a family

JG_ M: A sub-count of the males in joint groups

JG_ F: A sub-count of the females in joint groups

FAM – Family: An extension of joint groups – a group containing a minimum of one male and one female member of a family

FAM_ M: A sub-count of the males in family groups

FAM_ F: A sub-count of the females in family groups

Appendix B: Categorizing Occupational Roles:

Dictionary for categorization of occupational roles²¹

P – Professional: Doctor, writer, poet, judge, pilot, elected government official, Member of parliament, officer.

E – Educator: Teacher, principal.

A – Agriculture: Fisherman, forester, hunter, gardener, plower, weeder, irrigation worker, farmer, shepherd, beehive tender, fruit picker, labourer, animal feeder, mat and basket weaver, fruit dryers, tea- leaf picker

B – Blue-collar: Custodian worker, sweeper, firefighter, mason, carpenter, stonecutter, butcher, wool shearer, window glazer, blacksmith, bread baker, porter (carrier of loads), digger, industrial worker.

T – Trade-craft: Electrician, plumber, machine worker, painter.

M – Military: Seaman/woman, soldier, navy officer, military pilot, “freedom fighters”, hero.

R—Religious: Religious figures, prophet, Imam.

H – Housework: Sweeping, washing, ironing, cooking, hanging clothes, food preparation, purchasing groceries, sewing.

²¹ The included roles from the study carried out by Touba are utilized to construct the categories.

Appendix C: Female and Male Visibility per grade per time period

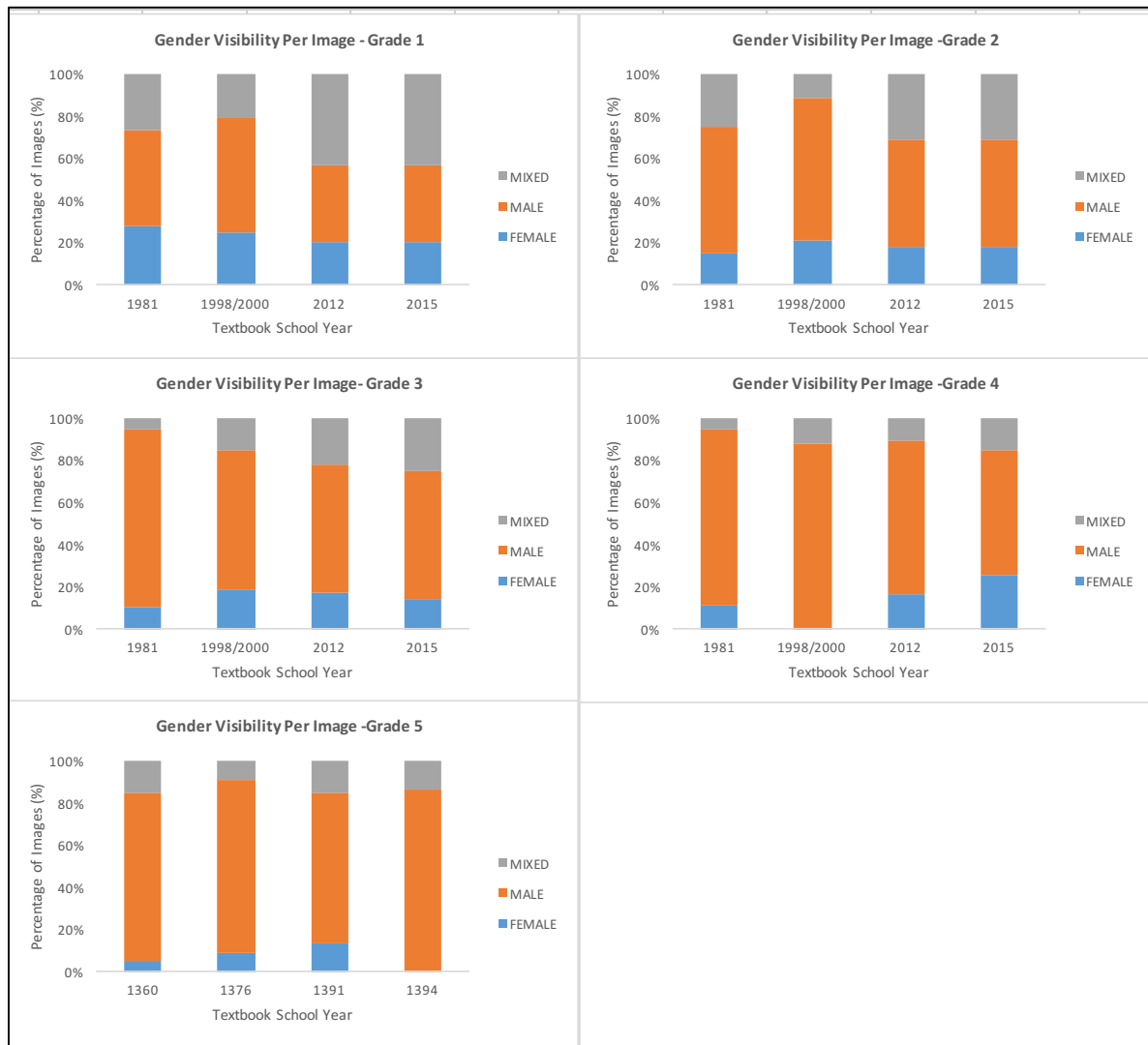


Figure C1: Visibility Percentages in images per grade, per time period considered

Appendix D: Detailed Visibility Categorization per image

Table D1: Gender visibility categorization per image per time period

	1981		1998/2000		2012		2015	
	N	%	N	%	N	%	N	%
Grade 1								
Single Female	15	17	10	12	9	7	9	7
Single Male	14	16	17	20	20	15	20	15
Female Group	10	11	11	13	18	13	18	13
Male Group	27	30	30	35	30	22	30	22
Joint Group	7	8	3	3	27	20	27	20
Family	17	19	15	17	32	24	32	24
Total	90	100	86	100	136	100	136	100
Grade 2								
Single Female	2	10	4	12	7	10	7	10
Single Male	5	25	9	26	18	27	18	27
Female Group	1	5	3	9	5	7	5	7
Male Group	7	35	14	41	16	24	16	24
Joint Group	2	10	1	3	11	16	11	16
Family	3	15	3	9	10	15	10	15
Total	20	100	34	100	67	100	67	100
Grade 3								
Single Female	0	0	6	10	6	5	5	9
Single Male	7	37	27	46	40	34	6	11
Female Group	2	11	5	8	14	12	3	5
Male Group	9	47	12	20	32	27	28	50
Joint Group	0	0	4	7	9	8	6	11
Family	1	5	5	8	17	14	8	14
Total	19	100	59	100	118	100	56	100
Grade 4								
Single Female	1	6	0	0	14	13	7	18
Single Male	4	22	10	63	35	32	16	41
Female Group	1	6	0	0	4	4	3	8
Male Group	11	61	4	25	46	41	7	18
Joint Group	0	0	2	13	7	6	5	13
Family	1	6	0	0	5	5	1	3
Total	18	100	16	100	111	100	39	100
Grade 5								
Single Female	0	0	1	5	9	10	0	0
Single Male	5	25	9	41	32	35	11	38
Female Group	1	5	1	5	3	3	0	0
Male Group	11	55	9	41	34	37	14	48
Joint Group	3	15	2	9	13	14	2	7
Family	0	0	0	0	1	1	2	7
Total	20	100	22	100	92	100	29	100

Appendix E: Categorizing the Number of Females versus Males per grade

Table E1: Female VS Male visibility- number of individuals' categorization

	1360		1379		1391		1394	
	N	%	N	%	N	%	N	%
Grade 1								
SM	21	7	16	6	39	7	39	7
SF	0	0	4	2	15	3	15	3
SG	15	5	8	3	11	2	11	2
SB	15	5	15	6	35	6	35	6
FG_Adult	8	3	9	4	36	6	36	6
FG_girl	28	10	34	13	69	12	69	12
MG_Adult	50	18	21	8	59	10	59	10
MG_Boy	64	23	82	32	88	15	88	15
JG_F	13	5	3	1	47	8	47	8
JG_M	13	5	14	5	55	9	55	9
FAM_M	26	9	25	10	65	11	65	11
FAM_F	28	10	26	10	60	10	60	10
TOTAL	281	100	257	100	579	100	579	100
Grade 2								
SM	4	6	3	4	15	8	15	8
SF	0	0	1	1	6	3	6	3
SG	2	3	3	4	2	1	2	1
SB	4	6	8	10	7	4	7	4
FG_Adult	1	1	2	2	20	10	20	10
FG_girl	1	1	6	7	9	5	9	5
MG_Adult	8	12	9	11	42	21	42	21
MG_Boy	11	16	30	37	46	23	46	23
JG_F	3	4	1	1	12	6	12	6
JG_M	25	37	7	9	13	7	13	7
FAM_M	4	6	6	7	16	8	16	8
FAM_F	4	6	5	6	12	6	12	6
TOTAL	67	100	81	100	200	100	200	100
Grade 3								
SM	4	7	10	10	29	10	12	6
SF	0	0	3	3	6	2	3	1
SG	0	0	5	5	4	1	7	3
SB	3	6	21	20	29	10	15	7
FG_Adult	2	4	4	4	10	3	8	4
FG_girl	7	13	14	13	37	13	11	5

MG_Adult	19	35	16	15	34	12	45	22
MG_Boy	17	31	11	10	68	23	62	30
JG_F	0	0	3	3	7	2	4	2
JG_M	0	0	6	6	16	5	5	2
FAM_M	1	2	7	7	27	9	20	10
FAM_F	1	2	5	5	24	8	16	8
TOTAL	54	100	105	100	291	100	208	100

Grade 4

SM	3	4	10	29	29	11	12	16
SF	0	0	0	0	8	3	2	3
SG	1	1	0	0	9	3	6	8
SB	1	1	6	18	18	7	8	11
FG_Adult	2	3	0	0	2	1	3	4
FG_girl	0	0	0	0	7	3	3	4
MG_Adult	34	50	5	15	60	23	9	12
MG_Boy	25	37	2	6	90	34	4	5
JG_F	0	0	2	6	9	3	8	11
JG_M	0	0	7	21	17	6	15	21
FAM_M	1	1	1	3	8	3	2	3
FAM_F	1	1	1	3	6	2	1	1
TOTAL	68	100	34	100	263	100	73	100

Grade 5

SM	10	11	12	17	36	18	12	19
SF	0	0	1	1	3	1	0	0
SG	0	0	1	1	9	4	0	0
SB	3	3	3	4	12	6	2	3
FG_Adult	4	4	1	1	1	0	0	0
FG_girl	0	0	4	6	5	2	0	0
MG_Adult	58	62	25	36	81	40	30	48
MG_Boy	1	1	20	29	24	12	7	11
JG_F	5	5	1	1	13	6	1	2
JG_M	13	14	1	1	14	7	1	2
FAM_M	0	0	0	0	3	1	3	5
FAM_F	0	0	0	0	2	1	7	11
TOTAL	94	100	69	100	203	100	63	100