# AN ANALYSIS OF GENDER REPRESENTATION IN ENGLISH TEXTBOOKS USED IN JORDANIAN SCHOOLS AND AN EXPLORATION OF JORDANIAN TEACHERS' BELIEFS ABOUT GENDER STEREOTYPES 

A Dissertation<br>by<br>FATMA HASAN

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Chair of Committee, Zohreh Eslami<br>Co-Chair of Committee, Radhika Viruru<br>Committee Members, Janet Hammer Fuhui Tong<br>Head of Department, Yeping Li

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#### Abstract

The purpose of this study was twofold. The first objective was to investigate the extent of gender stereotyping in Jordanian English language textbooks used in Grades 6, 7, and 8. The second objective was to investigate Jordanian teachers' beliefs about gender role stereotypes in the areas of educational role beliefs, domestic role beliefs, professional role beliefs, and adult social role beliefs, in relation to three variables: gender, school type, and grade level. The first study used content analysis, using a set of procedures to make valid inferences from text and illustrations. The second study used a survey instrument. Findings of the first study revealed gender stereotyping in three textbooks that were examined (Action Pack for Grades 6, 7, and 8). The results indicated that, although some aspects have improved (e.g., low use of masculine generic pronouns), the majority of the illustrations and text examples were male dominated. All three textbooks displayed a strong bias for male characters in dominant roles and female characters in passive, domestic, or subservient roles. Findings of the second study indicated that, in general, female teachers gave significantly more egalitarian responses than did male teachers. Overall, the results showed that, while great progress has been made toward gender-egalitarian beliefs in certain domains, this has not automatically led to an enhanced position for women as workers, citizens, or family members. The findings indicate the need for studies of the gendered nature of knowledge and the role of education in shaping gender identities and gender hierarchies. This study is valuable because, to date, no studies have explored gender stereotyping in textbooks and teachers' gender role beliefs in the Middle East and North Africa (MENA) region, particularly in


Jordan. A possible direction for future research is investigation of the beliefs of teachers in other cities in Jordan and in other countries in the MENA region. It would be enlightening to compare findings in the current study with those in countries that surround Jordan to identify commonalties and dissimilarities, as well as implications for teachers' gender role beliefs.

## DEDICATION

To my Mom and Dad. I love you eternally.

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## CHAPTER I

## INTRODUCTION

Extensive studies have been conducted on language and gender since the early 19th century (M. Sadker \& Sadker, 1994). Today, much research continues to be performed on gender stereotyping and linguistic sexism, and their influence on society (e.g., Blumberg, 2008; Kobia, 2009; Lee \& Collins, 2010; M. Sadker \& Sadker, 1994). Such studies have determined that gender stereotypes are strongly held and that culturally constructed beliefs about differences between males and females continue (Miller, Trautner, \& Ruble, 2006). Gender roles are determined by expectations and values held by individuals, groups, and societies regarding how each gender is to participate in society (C. Williams, 1995). West and Zimmerman (1987) defined gender stereotypes as "the constellations of psychological characteristics that are believed to characterize women more or less frequently than men" (p. 144). Likewise, Hyde, Lindberg, Linn, Ellis, and Williams (2008) stated that "gender stereotypes are a culture's shared beliefs about the roles, behaviors, and personality traits of males and females" (p. 26).

In addition to other domains, educational setting has been examined specifically in relationship to gender roles, since schools are a main network through which cultural morals and values are transmitted (Law \& Chan, 2004). As integral components of the educational setting, learning materials have been shown to play a large role in influencing gender roles. Lee and Collins (2008) noted, "Learners, who generally attach great credibility and authority to educational materials, tend to absorb and assimilate the
materials in minute detail without comment and to be susceptible to their influence" (p. 128). Thus, gender-biased material may well contribute to development of sexist attitudes at a subconscious level.

Within the educational environment, textbooks contribute greatly to the socialization of children with respect to the culture at large. These texts communicate important explicit—and perhaps more important, implicit—messages to youth regarding the structure and organization of social relations and beliefs that a society values (Blumberg, 2008; Cincotta, 1978; Sunderland, 2000a). Scholars who have examined textbooks have found that females are often underrepresented in both text and art (photographs, illustrations, and line art) contexts (e.g., Al-Taweel, 2005; Ansary \& Babaii, 2003; Gupta \& Lee, 1990; Ismail, Hamid, \& Othman, 2011; Law \& Chan, 2004; Lee \& Collins, 2010). The collective conclusion of these studies is that gender representation in textbooks and educational materials affects behavior and the social values of students. The gendered messages carried in textbooks through words and images have the potential to influence development of students' self-image and attitudes toward the two genders from an impressionable age.

Teachers also exert critical influence on students' beliefs. The biases of teachers, whether intended or otherwise, are influential and can send clear, sometimes harmful, messages while students are concurrently forming beliefs in their own abilities. Students' perceptions of gender roles are affected not only by explicit forms of gender bias, such as being told that they are either able or unable to do a task because of their gender, but also by the subtle lessons that children encounter daily through feedback,
behavior, and instructional materials (M. Sadker \& Sadker, 1994; Tatar \& Emmanuel, 2001). As Sunderland, Cowley, Rahim, Leontzakou, and Shattuck (2001) emphasized, "The most non-sexist textbook can become sexist in the hands of a teacher with sexist attitudes" (p. 64). Thus, the impact of the textbook on learners is determined not only by the content of the textbook but also by a teacher's use of that textbook (Sunderland et al., 2001). According to Sikes (1991), teachers must be aware of gender stereotypes and their potentially potent impact on student education to "combat the differentiation, discrimination and bias which are characteristic of schools" (p. 145). Given the significance of the need for teachers to be aware of gender bias, several researchers (e.g., Hellinger, 1980; Johansson \& Malmsjö, 2009; Lee \& Collins, 2008; Pihlaja, 2007; Porecca, 1984; Rifkin, 1998) proposed conducting additional studies emphasizing teachers' attitudes and beliefs. Today, a great deal of research across the globe has answered that call by examining school textbooks and teachers' perceptions of gender roles. An examination of these studies has determined that literature on gender roles and the influence of textbooks and teachers on those roles is incomplete: well documented in some global regions and minimal or lacking in others.

The clear majority of studies addressing textbooks and gender roles have been conducted in the West, while only a handful have explored textbooks in Middle Eastern countries, for example. In 2000a, Jane Sunderland noted that underresearched areas with respect to gender and language studies included countries in Africa, Eastern Europe, the Middle East, South America, and China. Despite the fact that some scholars have begun to respond to this need in China (e.g., Lee \& Collins, 2010; Zhang, 2003; Zhao, 2003), in

Iran (e.g., Ansary \& Babaii, 2003; Sharepour, 2005), and in Qatar (Eslami \& Hasan, 2013; Ismail et al., 2011), little or no similar research has been done in Middle Eastern countries in general and in Jordan in particular.

This dissertation is intended to fill this gap in the literature by examining English textbooks used in Jordan public middle schools and by exploring the beliefs held by teachers in Jordanian schools about the gender role beliefs that they exhibit. The work comprises two studies. The first study explores how males and females are represented in Grades 6, 7, and 8 English textbooks used in Jordanian public middle schools. Through content analysis, the researcher examined whether gender stereotyping exists and, if present, the extent to which it exists in the textbooks.

The second study examines Jordanian teachers' beliefs about gender role stereotypes in the areas of educational role beliefs, domestic role beliefs, professional role beliefs, and adult social role beliefs. This study explores teachers' beliefs in relation to three variables: gender, school type, and grade level.

## CHAPTER II

## STUDY 1: AN ANALYSIS OF GENDER REPRESENTATION IN

## ENGLISH TEXTBOOKS USED IN JORDANIAN SCHOOLS

A gender belief system is learned based on the environment in which one is raised and the social norms of the society into which one is born, beginning from the day of birth (Järviluoma, Moisala, \& Vikko, 2003). Harris (2004) noted that females and males are expected to live up to the cultural ideals of gender and "to become intelligible to and accepted members of their communities" (p.14). These gender expectations play a part in socializing individuals into different gender roles, sometimes creating gender stereotypes. Stereotypes can lead to sexism-the idea that one gender is superior to the other. They also create expectations for men and women that pressure them to fit a defined image. Thus, gender stereotyping is the demonstration of biased actions, usually elusive and difficult to detect, that treat males and females in different ways (D. Sadker \& Zittleman, 2005).

Gender stereotyping manifests in many arenas, one of which is the educational system. According to Tannen (2003), gender stereotyping indicates a difference in status; it limits students' aspirations, affects their entire careers, and weakens females' self-esteem. In fact, research in the area of education and gender clearly demonstrates that "within schools, textbooks play a significant role in the gender socialization of children" (Lee \& Collins, 2010, p. 121). School textbooks, being an important aspect of formal schooling, have been extensively studied in terms of gender roles (e.g., AlTaweel, 2005; Ansary \& Babaii, 2003; Blumberg, 2008; Evans \& Davies, 2000; Lee \&

Collins, 2010; Gooden \& Gooden, 2001; Kobia, 2009; D. Sadker \& Zittleman, 2005). These studies have found considerable and persistent differences in how gender roles are portrayed. For example, Ansary and Babaii (2003) explored the status of sexism in two secondary textbooks used in Iran. They concluded that both textbooks were overtly gender biased in that (a) females were underrepresented, and (b) females were portrayed in stereotypical passive roles that no longer represented the advanced position of women position in modern Iranian society, especially in urban areas.

The majority of the studies send a clear message (e.g., Al-Taweel, 2005; Ansary \& Babaii, 2003; Blumberg, 2008; Chick, Heilman-House, \& Hunter, 2002; Clark, Allard, \& Mahoney, 2004; Evans \& Davies, 2000; Gooden \& Gooden, 2001; Kobia, 2009; Lee \& Collins, 2010; D. Sadker \& Zittleman, 2005) that gender portrayal in textbooks and educational materials affects students' behavior and long-term ideas with regard to gender roles. However, it appeared that little research has yet focused on the issues of gender representation in textbooks in Jordan. An examination of the literature revealed that only three studies that have examined contents of textbooks used in Jordan (Al-Taweel, 2005; Hamdan \& Jalabneh, 2009; Shteiwi \& Al-Lawzi, 1999). Al-Taweel examined gender representation in 12th-grade English language textbooks. The content analysis revealed that males outnumbered females in the textbooks. In addition, results reflected traditional stereotypes about gender roles. For example, males were depicted in higher-status occupations, such as doctor and president, and a greater variety of activities, while only females were depicted with lower-status occupations, such as typist and secretary. Males were also represented in greater proportion in intellectual and
physical categories, both verbally and pictorially. Hamdan and Jalabneh (2009) explored the roles of male and female characters in units in the Action Pack (2011) series, the once-used English textbooks for Grades 1 to 9 in Jordan. The results showed exclusion of females as active participants in life events, whereas males were depicted in more activities. In addition, males interrupted conversations in classrooms during discussions more successfully than did females.

Despite the potentially significant influence of textbook content on impressionable adolescent students, little research has investigated middle school textbooks in Jordan. Previous studies have focused on 12th-grade textbooks and primary school textbooks. Recognizing the lack of information in this area, the current study explored middle school textbooks. The purpose of this study was, through textbook analysis, to examine gender representation in English language textbooks used in Grades 6, 7, and 8 in middle schools in Jordan. The aim of this textbook analysis was to determine gender representation in English language textbooks. Content analysis was used to evaluate both the text and art contents of Action Pack textbooks for Grades 6, 7, and 8 (AP6, AP7, and AP8).

## Literature Review

## Overview of Gender and Sex Concepts

Porreca (1984) explained that the roots of sexism are a direct result of attempts to standardize language use. Over time, these standards have been followed, and rarely questioned, which raises serious concerns about their appropriateness. According to scholars such as Lakoff (1975) and Cameron (1992), language does not simply reflect
discriminatory gender ideologies; language is a cause of women's oppression. Likewise, Butler (1990a) argued that people use language to perform acts on their physical bodies. She stated that a person is gendered well before birth and that "the mark of gender appears to 'qualify' bodies as human bodies; the moment in which an infant becomes humanized is when the question, 'is it a boy or girl?' is answered" (p. 142). So the first question that one answers about infants is their sex. As a result, starting at birth, a baby is assigned a predetermined role; at the same time, female or male social gender roles are being imprinted. These roles play a significant part in how people categorize themselves and how society judges them, ultimately leading to assignment of gender roles.

The connection between language and society has been a topic of ongoing deliberation. The two constructs of gender and sex have been long debated and at times have been confused with each other. According to West and Zimmerman (1987), gender and sex are two different things. Gender is not a feature at birth, nor is something that is possessed, rather gender is something that is performed (Butler, 1990b; West \& Zimmerman, 1987). While some scholars have argued that biological differences are a fundamental component of gender differences, others have argued that sex differences do not justify gender-based differences or inequality (Butler, 1990a). Sex differences are determined by nature but gender differences are taught by culture. Inequality is not born; it is nurtured (Butler, 1990a).

Ann Oakley (1972) was one of the first social scientists to distinguish the concept of gender from the concept of sex. She defined "'sex' as a word that refers to the biological differences between male and female, while 'gender' is a matter of culture; it
refers to the social classification into 'masculine' and 'feminine'" (p. 24). Schlegel (1989) further clarified gender as both a social and a cultural construct: As a social construct, gender is a set of expectations about behavior and the assignment of status and roles by sex; a cultural construct, gender, as interpreted by a society, is the more-or-less consistent set of beliefs, evaluative statements, and representations in myth, ritual, and folklore that developed regarding the sexes. (p. 272) Anderson (1988) highlighted the differences between sex and gender as the following:

Sex refers to the genetic and physical identity of the person and is meant to signify the fact that is either male or female. Gender refers to the socially learned behaviors and expectations that are associated with the two sexes. Thus, whereas, "maleness" and "femaleness" are biological facts, masculinity and femininity are culturally constructed attributes. (p. 75)

Prominent feminism scholar Judith Butler (1990a) argued that gender is not attached to bodily realities, but is rather exclusively and completely a social construction.

Because there is neither an "essence" that gender expresses or externalizes nor an objective ideal to which gender aspires; because gender is not a fact, the various acts of gender creates the idea of gender, and without those acts, there would be no gender at all. Gender is, thus, a construction that regularly conceals its genesis. (p. 273)

According to Carl (2012),
gender is defined as the personal traits and position in society connected with being a male or female. Gender is different from sex because sex refers strictly to the biological makeup of a male or a female. Clearly, boys and girls have different biology, but that does not necessarily mean that biology creates personality (p. 27).

In other words, gender is a concept that humans have created, through their interactions and their environments; nevertheless, gender draws heavily on differences between males and females (Erden, 2009). Because gender is constructed, the meaning of how women and men should act has changed over time (Coltrane, 1998, p. 7).

Gender roles are the roles that men and women are expected to perform based on their sex (C. Williams, 1995). Gender roles are created mainly on the basis of stereotypes about gender. Gender stereotypes are overgeneralized understandings of males and females and the differences between them. Hyde et al. (2008) stated, "Gender stereotypes are a culture's shared beliefs about the roles, behaviors, and personality traits of males and females" (p. 26). Guimond and Roussel (2001) noted that gender stereotypes are not "traits that people ascribe to themselves as individuals but traits that are ascribed to groups of people" (p. 275).

Individuals may base their opinions about proper gender roles on gender stereotypes. Gender stereotypes tend to include either embroidered or inaccurate assertions about the nature of females and males. For instance, a typical gender stereotype is that males are categorized as unemotional or rational whereas females are
categorized as emotional or irrational. However, political activists such as those in the feminist movement work to deconstruct and decompose gender stereotypes and offer alternate images of gender roles that stress and highlight equality between men and women (Erden, 2009).

According to social learning theorists, what males and females observe in the world around them also influences the two sexes (Haslanger, 2005). Hence, socialization helps to teach the two sexes to be different. Damon (1983) defined socialization as "one's tendencies to establish and maintain relations with others, to become an accepted member of society-at-large, to regulate one's behavior according to society's codes and standards, and generally to get along well with other people" (p.30). One of the most evident ways by which people are socialized is through language. Language is part of everyday social life and is far from neutral. In truth, some forms of language regularly emphasize gender inequality in ways that are not immediately obvious (Lakoff, 1975).

The study of language and gender began to flourish in 1975 with the publication of Lakoff's book Language and Woman's Place (Lakoff, 1975), which has had a lasting influence on later sociolinguistic works. Since then, sociolinguists have shown continuing interest in the relationship between gender and language and the influence of that relationship on language users (Ansary \& Babaii, 2003). Lakoff (1975) argued that the expression of culturally and socially created male-biased discursive practices created and strengthened male authority. She emphasized that the language differences emerging between men and women comprise a significant part of communication of power between the genders. Lakoff termed this occurrence women's language. She claimed that
women's language lacks power and contains features that eventually weaken their interpersonal power as compared with men. She identified elements of "women's speech" such as "more polite expressions," "empty" adjectives," and "useless" discriminations in color terms and the like; use of tag questions and rising intonations in seemingly declarative sentences; use of other hedges such as the phrases "sort of," "kind of," "it seems like," and other such terms; use of italics to hedge; use of intensive "so"; hypercorrect forms; and nontelling and nonappreciation of jokes (Lakoff, 1975, p. 38). On the other hand, other scholars have argued that language merely reflects society and the culture of its speakers, which means that sexist language is a reflection of sexist thought (Cameron, 1998). Thus, the question of gender as an influence in language education continues to interest researchers (Rifkin, 1998, p. 218).

Porreca (1984) explained that sexism is by no means a minor problem, as it easily integrates sex-based biases into people's own value systems. Along the same lines, Parks and Robertson (1998) argued that sexist language contains "words, phrases, and expressions that unnecessarily differentiate between women and men or exclude, trivialize, or diminish either gender" (p. 455). Sexism is also defined as "the belief that women are weaker, less intelligent, and less important than men" (Longman Group, 1995, p. 12). Renner (1997) defined sexism as that which "pervades social relations and institutions, affecting everything from people's domestic arrangement to their career choices" (p. 4). Renner explained that sexism is found in the English language itself, whereby the masculine gender is considered "normative": The pronoun "he" and the item "man" are both prescribed for generic and indefinite use. As a result, sexist
language alludes to the use of language expressions in such a way that these expressions portray an unequal representation of the genders (Lee, 2007). Therefore, sexism within language has led to the need for de-gendering, a process calling for creation of a "new linguist structure that places both sexes on equal footing" (p. 4).

As shown above, sexism has been a popular topic that has been debated and written about for the past several decades (e.g., Cameron, 1992; Kramer, 1975). A major milestone in education was the new wave of feminist campaigns in Western countries in the 1960s that prompted research into gender inequality. Specifically, research into gender stereotyping began with textbooks in the early 1970s. This research revealed that textbooks were powerful, authoritative tools in shaping children's views of society during their foundational years. It was (and remains) imperative that textbook content be studied to reveal what messages are conveyed in the education of students (Evans \& Davies, 2000).

## Gender Bias in Textbooks

The anthropological, psychological, and educational literature describes the role of the school in forming gender-related attitudes (LeMaster \& Hernandez-Katapodis, 2002). Schooling is one of the most important socialization processes for a child outside of the home and the influence of family. Schools and teachers have a critical role in a student's life, especially shaping identity in the formative years (Kobia, 2009; LeMaster \& Hernandez-Katapodis, 2002; M. Sadker \& Sadker, 1995). "Learners, who generally attach great credibility and authority to educational materials, tend to absorb and
assimilate the materials in minute detail without comment and to be susceptible to their influence" (Lee \& Collins, 2008, p. 128).

Hence, gender-biased material may well contribute to development of sexist attitudes on a subconscious level. One way in which sexism is manifested in textbooks is through language and pictorial content. Britton and Lumpkin (1977) noted the oftenmisleading nature of gender bias in textbook writing.

This subliminal repetitious implanting of bias influences their [children's] lifelong aspirations; indeed it leaves a permanent distorted imprint upon our children's future. It not only limits their choices in terms of life styles and career selections but it distorts their self-image and the images of the opposite sex. (p. 41)

The rise of the Women's Liberation Movement of the late 1960s and 1970s, which originated in the United States and spread progressively to Europe and other parts of the world, called attention to gender inequality in many arenas, particularly in education and textbooks (Nash et al., 2007; Tao, 2008). No doubt as a result of this movement, the concern about sexism moved from a philosophical topic to a legal issue as many countries enacted laws against sexist practices, such as the Sex Discrimination Act of 1975 in the United Kingdom and Title IX, an amendment to The Higher Education Act in 1972 in the United States (Nash et al., 2007).

Title IX became an important pathway that legally directed publishers and educators to avoid bias and stereotyping in instructional practice, content, and materials. Title IX does not specifically prohibit gender bias in textbooks but it does prohibit
gender stereotypes in materials aimed at recruiting males and females into different careers (Blumberg, 2008). Specifically, institutions must "ensure that recruitment practices, classroom treatment, assignments, facilities, career assessment tests, career counseling, and evaluations are free from sex stereotypes" (Zittleman, 2007, p. 84). Because of this directive, those who are responsible for advancing gender equity have monitored content to ensure that the curriculum promotes an understanding of the perspectives of both sexes and their roles in life (Zittleman \& Sadker, 2003).

Although such laws do not often provide many specific directions, they make it "illegal to treat one sex more favorably than the other" in all professional arenas of life (Walford, 1981, p. 261). Therefore, to adhere with the provisions of Title IX, more emphasis has been put on developing textbooks that promote gender equality, ensuring equal representation of both sexes. In addition, more emphasis has been put on highlighting the significance of textbooks in educating students and the potential effects of textbooks on children (Britton \& Lumpkin, 1977; Evans \& Davies, 2000).

As Gupta and Lee (1990) indicated, proving that textbooks actually have an effect on students' values and behaviors is difficult. Yet, the literature often portrays textbooks as "primary vehicles for delivering content knowledge, for determining in large measure what goes on in a class" (Lebrun et al., 2002, p. 54) and for assessing what students do and do not acquire (Oakes \& Saunders, 2004). Textbooks play a necessary role in the educational arena, as they provide students with "a rich array of new and potentially interesting facts, and open the door to a world of fantastic experience" (Chambliss \& Calfee, 1998, p. 7).

Ginn and Company (1973) expressed their views on the influence of educational materials on students:

Educational materials teach far more than information and a way of learning. In subtle often unconscious ways, the tone and development of the content and the illustrations foster in a learner positive or negative attitudes about self, race, religion, regions, sex, ethnic and social class groups, occupations, life expectations, and life chances. Inadvertent bias, as often the result of omission as commission, can influence the impact of educational programs. (p. 40) Holt, Rinehart, and Winston (1975) revealed that educational materials influence students' attitudes and perceptions of societal roles. Based on their findings, they recommended that textbooks be gender-bias free. Moreover, due to students' trust in textbooks, the influence of textbooks can be much more powerful than the words that students hear from their parents or teachers. According to Porreca (1984), this impact is particularly true of younger learners, who tend not to question what they read and trust the printed word more than they trust adults.

Another reason textbooks play a critical role in education is the extensive amount of time that students spend using them. D. Sadker and Zittleman (2007) noted that "students spend as much as $80 \%$ to $95 \%$ of classroom time using textbooks and teachers make a majority of their instructional decisions based on the textbook" (p. 144). In a Canadian study, "Baldwin and Baldwin showed that teacher use of textbooks for teaching as being on average $70 \%$ to $90 \%$ of classroom time" (Blumberg, 2008, p. 346). Blumberg noted that gender bias in textbooks is a significant issue and must be taken
seriously because textbooks occupy $80 \%$ of classroom time and may contribute to lowering girls' achievements, especially in weak schools in poor countries. Textbooks play a significant role in students' gender role education because students use them both in school and at home (Hartman \& Judd, 1978; E. Moore, 2007). Authors convey sexist attitudes by many methods, including photographic materials and narrative content of textbooks. In the following sections, some of these areas are reviewed.

## Ratio of Female and Male Characters

Prior studies (e.g., Britton \& Lumpkin 1977; Hellinger, 1980; Porreca, 1984) have revealed a quantitative imbalance in the appearance of women and men in textbooks, with females being less often mentioned and therefore implicitly presented as being of lesser importance. Nevertheless, some evidence exists that the representation of men and women in textbooks has become more balanced over time. For example, Clarkson's (1993) study found that $45 \%$ of characters portrayed were male and $39 \%$ were female in Australian mathematics textbooks. Lee and Collins's (2008) study reported a reduction in the numerical dominance of male characters, both in terms of character types and frequency in Hong Kong English language textbooks.

## Occupational and Domestic Visibility

In spite of the fact that many females have entered the work force, the bipolar juxtaposition of masculine and feminine roles often remains, with such high-status occupations as engineer, pilot, space traveler, and professor being considered men's jobs and lower-status occupations such as nurse, homemaker, secretary, and teacher being considered women's jobs (Law \& Chan, 2004).

## Masculine Generic Constructions

According to Lee and Collins (2010), a common indicator of gender sexism in language is the use of masculine nouns and pronouns to refer to people in general or when the sex of the referent is unknown (e.g., Everyone should love his parents; No man is an island). Briere and Lanktree (1983) noted that the use of generic masculine nouns and pronouns in written texts affects female subjects' perceptions of the attractiveness of psychology as a future career. In addition, Crawford and English (1984) found that female subjects recalled information better when that information was presented using feminine pronouns, while male subjects recalled information better when masculine pronouns were used.

## Pictorial Depiction of Males and Females

Images are used to enhance students learning and understanding. According to Basow (1980), gender-role stereotypes define the behaviors and appearance that each gender is expected to follow. Therefore, expectations of appearance can influence social interaction because they serve as standards to conform to, to rebel against, or by which to evaluate others (Workman \& Johnson, 1994). Given the importance of textbooks, a general review of previous studies textbooks in the field on gender stereotyping follows.

## Major Studies on Gender Representation in Textbooks

For the past few decades, a growing criticism has emerged about the materials used in schools, particularly about textbooks that often depict stereotyped male and female roles or exclude women altogether (Peterson \& Lach, 1990; Schau \& Scott, 1984). With the emergence of the Second Women's Movement, studies exposing gender
bias and sexism in textbooks became more prevalent (Blumberg, 2008; Lee \& Collins, 2010). Textbooks in various content areas have been examined, and these examinations have found that the textbooks often portrayed stereotyped sex roles. Many studies have also shown that gender bias often manifests in English language textbooks (ELT) and English as a Second Language (ESL) textbooks with overrepresentation of males (Ansary \& Babaii, 2003; Blumberg, 2008) and with women often assigned stereotypical roles and characteristics. Men were represented as tending to occupy more powerful positions and having a greater range of occupational roles while, generally, women were represented as having inferior status and occupations (Gupta \& Lee, 1990).

Britton and Lumpkin's (1977) study examined 16,176 stories and chapters from 49 reading, literature, and social studies series for Grades 1 through 12. A comparative analysis was conducted to examine whether textbook publishers were adhering to their guidelines, which had been established to diminish gender bias in textbooks. Results revealed that $61 \%$ of the stories had males as major characters and $16 \%$ of the stories had females as major characters. Based on this study, the researchers concluded that a "great disparity remains between male/female representations as major characters in textbook series" (p. 44).

Along the same lines, Hartman and Judd's (1978) review of several then-current textbooks on teaching English to speakers of other languages (TESOL) found numerous cases of gender stereotyping for sexes through biased distribution, apparent putdowns, and simple omissions. They also examined several textbooks for gender presentation of images. They reported that women were much less prevalent in pictures. In some books,
male referents heavily outnumbered female referents. This bias was found even among children's picture books. In one picture book, pictures of boys outnumbered pictures of girls 6:4. In all of the pictures, boys were portrayed in active roles such as climbing trees or rowing a boat and girls had passive roles such as cooking and cleaning. For example, one girl was shrinking with fright behind her mother and another was crying because her dog had run away. The ratio of proper names and titles in some books was as high as $73 \%$ male to $27 \%$ female (Hartman \& Judd, 1978).

Hellinger (1980) conducted a systematic study of 131 passages from three ELT textbooks used in German secondary schools. Linguistic analysis was used to examine the textbooks using the following categories: exclusion, subordination, distortion, and degradation. Results showed that male/female participation in the text was $93 \% / 30 \%$. In addition, $80 \%$ of the speakers in the books were males. Analysis of the characters' talk reflected "some of the traditional stereotypic female behavioral patterns, such as using tag questions and the use of hedges in their speech" (Hellinger, 1980, p. 272). Hellinger concluded that the fact that women spoke less than men was an example of exclusion, subordination, distortion, and degradation. Hellinger warned that textbooks must avoid such sexist language because avoidance was an "important step towards a society with equal rights and opportunities for women and men" (p. 274).

Porreca (1984) applied content analysis to 15 ESL textbooks for the presence of gender bias, including "examples of omissions in texts and illustrations, first-ness (precedence of male or female nouns over the other in a sentence), occupational visibility in text and illustrations, masculine generic constructions, and adjectives"
(p. 705). The analysis revealed distinct imbalance in the occurrences of feminine nouns and masculine nouns and 3 times more examples of first-ness for males than for females. Furthermore, derogatory expressions were often used to describe women in these textbooks, such as the following:

1. My sister's only goal is to find a husband.
2. His wife is jealous of his beautiful secretary.
3. I think his mother-in-law poisoned him. (Porreca, 1984, p. 716)

Evans and Davies (2000) examined the display of masculinity and femininity traits among male characters in the Grades 1,3 and 5 reading textbooks basal series. In particular, they analyzed traits relating to masculine and feminine stereotypes. Results revealed that males were portrayed as significantly more aggressive, argumentative, and competitive than females. Almost $24 \%$ of the males were represented as being aggressive, just more than $21 \%$ were argumentative, and nearly $36 \%$ were competitive, as compared with $4.9 \%, 6.5 \%$, and $11.4 \%$, respectively, for females.

Ansary and Babaii (2003) conducted a study to explore the status of sexism in two ESL or English as a Foreign Language (EFL) textbooks used in secondary school classrooms in Iran. Quantitative and qualitative content analysis was carried out on both textbooks. Results revealed that both textbooks were sexist. For example, "Females were fundamentally shunted into indoor passive activities such as sitting in the classroom, watching TV at home, reading, etc." (p. 9). The researchers indicated that this portrayed an unfair and gender stereotypical image of females in Iran.

Özdoğru, Aksoy, Erdoğan, and Gök (2004) analyzed Turkish elementary school textbooks for gender roles. Results of content analysis revealed that females were depicted as having traditional Turkish female traits, such as caring, diligent, loving, and child rearing. In contrast, males were illustrated as possessing traits such as selfconfidence, independence, and adventurousness. Moreover, women were usually shown in home settings, with their children, and in public markets for shopping, whereas males were presented in work settings in higher-level job opportunities such as physician or judge.

Lee and Collins (2008) investigated whether improvements in the status of women in Hong Kong were reflected in gender representation in Hong Kong secondary school English textbooks. They studied 20 English language textbooks, with three chapters selected from each book for analysis. They performed detailed content analysis of the textbooks and concluded that no significant change, either textually or visually, had taken place in the representation of women in social and domestic settings from earlier textbooks. Women continued to be represented across a limited and stereotyped range of activities and careers and in activities in which they played weaker, more passive roles than men. Lee and Collins (2009) examined the nature and extent of gender stereotyping, both linguistic and pictorial, in a set of 10 Australian English language textbooks for intermediate learners. Three chapters from each book were selected randomly for content and linguistic analysis. Results revealed that, "despite the generally high level of sensitivity to gender issues displayed by most of the writers, the ideal of a truly balanced treatment of men and women has yet to be achieved" (p.353).

Lee and Collins (2010) conducted a comparative study using content analysis of 20 English language textbooks used for intermediate students in Hong Kong (10 textbooks) and Australia (ten textbooks). The Hong Kong books were chosen randomly and were representative of the English textbooks published and used in Hong Kong at the time of the study. Eight of the 10 Australian books were designed for local native speakers of English at tee secondary level and two were designed for intermediate ESL learners. Three chapters from each book were chosen randomly for content and linguistic analysis. A systematic recording and tabulation was made of the characters and mentions of men and women in each selected chapter. Illustrations were also included in the analysis.

The two sets of books did not differ significantly in the heavily biased ratio of male to female characters, in their representation of female and male social and domestic roles, with women continuing to be associated with limited and stereotyped set of activities and careers, and with activities in which they serve weaker more passive roles than men. (p. 133)

Ullah and Skelton (2013) examined 24 school textbooks used in Pakistani schools, applying qualitative content analysis. Illustrations (text and pictures) were examined to determine the frequency of culturally specific names, nouns, pronouns, characters, pictures, and occupational stereotypes. The analysis showed that these textbooks continued to be grounded in traditional discourses of masculinity and femininity. Significantly, more characters, pictures, and pronouns referred to males than to females. In addition to imbalances in the male-to-female ratios in the textbooks, men
and women were represented in traditional "gender roles." Women were depicted as housewives, mothers, homemakers, and working in medicine or teaching, and men were depicted in positions of authority, working in offices or other occupations in the public domain. Such illustrations and depictions continue to reflect the existing idea of a maledominated culture.

Recent studies conducted in Qatar have confirmed the presence of gender stereotyping in mathematics, science, and English language textbooks used in Qatari schools (Eslami \& Hasan, 2013; Ismail et al., 2011). Ismail et al. (2011) showed that in all dimensions (terms of address/salutations, pronouns, kinship, and occupation) a higher frequency of males was depicted and that females clearly were underrepresented in certain occupational dimensions. Similarly, a study of linguistic sexism in Qatari primary mathematics books revealed "a preference of males over females where males are represented as standard," "a bias towards the portrayal of males over females in the depiction of characters in social and occupational activities," and "a bias in the portrayal of personality characteristics" (Yasin, Hamid, Yuen Chee, Othman, \& Jaludin, 2012, p. 60). Eslami and Hasan's (2013) research on Qatari textbooks indicated that sexism and gender stereotyping were present in Qatari textbooks and teaching materials.

Al-Taweel (2005) examined gender representation in 12th-grade English language textbooks (including the workbook) used in Jordan. Content analysis revealed that males outnumbered females in the textbook. In addition, results showed traditional stereotypes about gender roles. For example, males were depicted in higher-status occupations, such as doctor and president, and in activities such as playing sports, while
only females were depicted with lower-status occupations, such as typist and secretary, and in activities such as studying or watching television. Males were also represented, both verbally and pictorially, as in greater proportion in intellectual activities.

A questionnaire administered to 77 Grade 12 English teachers in Jordan revealed that more than half of the teachers were unaware of gender role stereotypes in the textbooks. Sunderland (2000a) noted that, in relationship to gender representation in textbooks, it is worth exploring what is done with materials because textbooks have been the emphasis of much research on a global scale.

The current study investigated English textbooks in Jordan. The research explored how females and males were represented in English textbooks used in Grades 6,7 , and 8 in middle schools in Jordan. The study is important because, to date, the gender role portrayal of men and women has not been investigated in the context of middle school textbooks in Jordan. Thus, the study adds to the emerging literature related to gender role representation and equity in school textbooks.

## Context of the Study

The issue of gender inequality has received increasing academic and public attention in Jordan. During the past several decades, the Jordanian government has made great strides in providing gender equality for its citizens and has attempted to place women in positions equal to those held by men and to provide these women with an array of equal rights. One significant factor in this effort has been the Jordanian Constitution, which has articulated the requirement for equal rights for women in all aspects of life. Article 6 of the Constitution states, "The government shall ensure work
and education within the limits of its possibilities, and it shall ensure a state of tranquility and equal opportunities to all Jordanians" (Constitution of the Hashemite Kingdom of Jordan, 2012).

One significant policy initiative in creating that mandated equality has been in education. As a result of Constitutional requirements and accompanying government policy, the primary school net enrollment ratio of females and males from 2008 to 2012 was $90.7 \%$ and $90.8 \%$, respectively. The secondary net enrollment ratio of females and males from 2008 and 2012 was $88.2 \%$ and $83.2 \%$, respectively (UNICEF, 2012).

Providing equal educational opportunities in Jordan, regardless of sex, language, or religion, is a priority of the country. All schools in Jordan use curricula and textbooks approved by the Jordanian Ministry of Education (JMOE). The textbooks that were the object of the present study were written by Jordanian authors. Each book was reviewed by a supervisory committee of seven people chosen by the JMOE to supervise and guide the authors. The authors and the supervisory committee work together in producing material in textbooks. In Jordan, English is taught as an official second language from first grade. English is a main requirement for all grades throughout the school years. Being a major source of information, an English language textbook becomes important. It is a tool that students need as citizens concerned with their own growth so they can improve their country in terms of economy, cross-cultural communication, and international relations (JMOE, 2011, p. 3).

## Methodology

This section describes the analysis process used to examine the English language textbooks. The first part describes the purpose of the study and the guiding research questions. The second part provides information regarding the textbooks that were analyzed. The third part presents the analytical framework of the study.

## Purpose

The purpose of this study was to examine how females and males are represented visually and verbally in English language textbooks used in Grades 6, 7, and 8 in public middle schools in Jordan.

## Research Questions

The study examined whether the language and images used in the English language textbooks displayed gender role stereotyping depictions. To address this purpose, research questions about three major textbook elements were posed:

1. How are gender role stereotypes depicted in the textual content of English language textbooks in Jordan? The research examined textbook features such as the female-to-male ratio of characters used, the occupational roles portrayed for males and females, the domestic roles portrayed for males and females, the activities that both sexes were depicted as conducting, and the settings in which both sexes were depicted.
2. How are gender role stereotypes depicted in the linguistic content of English language textbooks? The research examined textbook features related to this element, including masculine or feminine generic constructions used, adjectives used to describe females and males, the frequency at which males and females appeared in single-gender
or mixed-gender dialogues, and the frequency with which males preceded females when both were referred to in mixed-gender dialogues.

## 3. How are gender role stereotypes depicted in the pictorial content of English

 language textbooks? The features examined in textbooks related to this element of textbooks included how males and females were depicted in visual representations, the activities that both genders were depicted as conducting, the types of settings depicted for the characters in the textbooks, and the type of clothes that characters were depicted as wearing.
## Materials

The textbooks that were analyzed were English language textbooks used for learning materials for students Grades 6, 7, and 8 in Jordanian public middle schools: Action Pack Sixth Grade Pupil's Book (AP6), Action Pack Seventh Grade Pupils Book (AP7), and Action Pack Eighth Grade Pupils Book (AP8). A chapter-by-chapter description of textbook topics is presented in Appendix A. The JMOE is solely responsible for the creation and publication of these materials. These textbooks use British English. The sixth-grade textbook comprised 20 chapters that discussed various topics, such as family vacations, tourism, computers, and technology. The seventh-grade book comprised six chapters, each chapter discussing a distinct theme. The eighth-grade textbook comprised six chapters, each chapter discussing a distinct theme. Half of the chapters from the Grade 6 textbook ( 10 chapters) and half of the chapters from the Grade 7 and Grade 8 textbooks (three chapters from the Grade 7 textbook and three chapters
from the Grade 8 textbook) were selected for analysis. Table 1 displays information about the three textbooks.

Table 1
Action Pack Sixth, Seventh, and Eighth English Language Textbooks

| Textbook | Total chapters | Semester taught | Length of textbook |
| :--- | :---: | :---: | :---: |
| AP6 | 20 | 1 st and 2nd | 86 pages |
| AP7 | 6 | 1 st and 2nd | 87 pages |
| AP8 | 6 | 1 st and 2nd | 88 pages |

## Analytical Framework

Content analysis is a research method using a set of procedures to make valid inferences from text and illustrations (Krippendorff, 2004). The purpose of using content analysis is to generate descriptive information and to address each research question by determining the amount of coverage and the representations of gender in the three English language textbooks. All of the stories and exercises were investigated in each analyzed chapter. Each chapter was read thoroughly and the number of the characters was tallied as they appeared in the chapter. All of the roles, occupations, settings, activities, adjectives, and clothing associated with the characters were recorded on the coding sheets.

## Description of Categories

Coding sheets were used to record gender representations in terms of textual, linguistic, and pictorial content. Descriptions of the main categories and subcategories are described below.

## Textual analysis.

1. Ratio of male and female characters and subsequent mentions. This category recorded the number of gendered characters mentioned in each chapter. The raw numbers were then converted to frequencies of and number of times the character was mentioned subsequently.
2. Character role. This category recorded the type of roles in which the characters were depicted in the textbooks. This category contained three subcategories: main character, supporting character, and minor character. A main character is the central character of the chapter, a supporting character is the secondary character, and a minor character is a character that is depicted rarely.
3. Occupation. This category provided information about the types of jobs allocated to males and females in the textbooks. This category comprised five subcategories: "male monopolized," "male dominated," "female monopolized," "femaledominated," or "gender shared." In addition, occupations were categorized as high status, low status, and unspecified status. This scheme follows Law \& Chan's (2004) classification system.
4. Setting. This category provided information about the physical settings in which the characters were depicted in the textbook narratives. The settings were recorded according to three subcategories: outside, inside, or unspecified.
5. Activity. This category provided information about the type of activities in which the characters were involved. The activities were recorded according to three subcategories: active, passive, or unspecified.
6. Domestic. This category provided information about the types of domestic roles depicted for characters in the textbooks (e.g., brother, sister, mother, father).

## Linguistic analysis.

1. Masculine generic constructions. This category counted occurrences of the generic pronoun "he," paired pronouns "he/she," and generic masculine nouns (e.g., policeman, sportsman).
2. The gender structure of dialogues. This category counted same-sex (F-F or M-M) and mixed-sex (F-M/M-F) interactions.
3. Adjectives. This category provided information about the adjectives used to describe males and females in textual passages.

Porocca (1984) finds that the categories physical appearance, emotionality/state of mind, physical state/condition and environmentally descriptive adjectives are used more often for females in textbooks for teaching English as a second language. Similar results are found by Barton (2012) on textbooks used in Uganda where many of the adjectives used for the female gender are of the
emotive type, and where many of these are connected to domestic or marriage situations. (Ceesay, 2014, p. 8)

In this category, the aim was to investigate which adjectives are used more often when describing males compared to females.

## Pictorial analysis.

1. Ratio of male and female characters. This category provided the number of character images represented in each chapter and the number of times the character is mentioned subsequently.
2. Activity. This category provided information about the activities in which the characters were involved. The adjectives were recorded according to three subcategories: active, passive, or unspecified.
3. Setting. This category provided information about the kind of physical settings in which characters were depicted in the textbooks. The subcategories were outside, inside, or unspecified.
4. Clothing. This category provided information about the kind of clothing that characters were depicted to wear in the textbooks. Clothing was recorded according to modern (e.g., pants, shirt, dress) and traditional (e.g., hijab, thobe) clothing terms.

## Coding Procedure and Reliability

Two coders measured the data. One coder was the researcher and the second coder was a 32-year-old male colleague with a master's degree. To ensure intercoder reliability, the researcher trained the second coder to identify categories of interest to the study. After training, the second coder independently viewed 5\% of the materials used in
each textbook. Then, the results of the second coder's findings were compared with the researcher's findings on the same material. For the purposes of this study, percentage of agreement was chosen as the method for establishing intercoder reliability (Krippendorff, 2004). The overall percentage of agreement between the two coders for all categories was $97 \%$, which was considered a high level of intercoder agreement.

## Results

The purpose of this study was to examine how gender roles are represented in English-language textbooks used in Jordanian middle schools (Grades 6 to 8). Content analysis was utilized to examine the textual and pictorial contents of the textbooks. The results are reported by frequency and percentages according to the study questions.

## Textual Analysis

Analysis of female and male characters in the written texts. The numbers of female and male characters and the number of subsequent mentions of each were coded. A total of 132 characters was identified in the narratives of the three textbooks. Of 132 total characters from across all grade levels, 94 (71.2\%) were males and 38 (28.8\%) were females (Table 2). In AP6, 32 (66.7\%) male characters and 16 (33.3\%) female characters were identified. In AP7, 21 (70.0\%) male characters and 9 (30.0\%) female characters were identified. In AP8, 41 (75.9\%) male characters and 13 (24.1\%) female characters were identified. The data for characters showed a declining representation of females in the written text as materials progressed from AP6 to AP8 (Figure 1).

Of the 249 total subsequent mentions from across all grade levels, 155 (62.2\%) were male and 94 (37.8\%) were female (Table 3). In AP6, there were 52 ( $55.9 \%$ ) male

Table 2
Characters per Grade Level

| Grade level | Characters per grade level |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| AP6 | 32 (66.7\%) | 16 (33.3\%) | 48 | 48 (36.4\%) |
| AP7 | 21 (70.0\%) | 9 (30.0\%) | 30 | 30 (22.7\%) |
| AP8 | 41 (75.9\%) | 13 (24.1\%) | 54 | 54 (40.9\%) |
| All books | 94 (71.2\%) | 38 (28.8\%) | 132 | 132 (100.0\%) |

${ }^{\text {a }}$ Percentage of total of all textbooks contributed by each grade level.


Figure 1. Characters per grade level.
mentions and 41 (44.1\%) female mentions, in AP7, there were 32 (62.7\%) male mentions and 19 (37.3\%) female mentions, and in AP8, there were 71 ( $67.6 \%$ ) male mentions and 34 ( $32.4 \%$ ) female mentions. The data for mentions, like the data for

## Table 3

Subsequent Mentions per Grade Level

| Characters per grade level |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| AP6 | 52 (33.5\%) | 41 (43.6\%) | 93 | 93 (37.3\%) |
| AP7 | 32 (20.6\%) | 19 (20.2\%) | 51 | 51 (20.5\%) |
| AP8 | 71 (45.8\%) | 34 (36.2\%) | 105 | 105 (42.2\%) |
| All books | 155 (62.2\%) | 94 (34.7\%) | 249 | 249 (100.0\%) |

${ }^{\text {a }}$ Percentage of total of all textbooks contributed by each grade level.
characters, showed a declining representation of females in the written text as those materials progressed from AP6 to AP8 (Figure 2).


Figure 2. Subsequent mentions per grade level.

Analysis of character role in narratives. The next three tables present the gender distribution in the narratives of the textbooks with regard to character role, examined by individual grade level. For AP6 (Table 4), results indicate that males constituted a total of 32 ( $66.7 \%$ ) of the main characters across all textbooks, while females were 16 (33.3\%) main characters. For Main Character roles, 24 (70.6\%) males and $10(29.4 \%)$ females were represented. For Supporting Character roles, 5 (55.6\%) males and 4 (44.4\%) females were represented. For Minor Character roles, 3 (60.0\%) males and $2(40.0 \%)$ females were represented.

Table 4
Character Roles by Grade Level: AP6

| Character role | Male $n(\%)$ | Female $n(\%)$ | AP6 $N(\%)$ |
| :--- | ---: | :---: | :---: |
| Main character | $24(70.6 \%)$ | $10(29.4 \%)$ | $34(70.8 \%)$ |
| Supporting character | $5(55.6 \%)$ | $4(44.4 \%)$ | $9(18.8 \%)$ |
| Minor character | $3(60.0 \%)$ | $2(40.0 \%)$ | $5(10.4 \%)$ |
| All character roles | $32(66.7 \%)$ | $16(33.3 \%)$ | $48(100.0 \%)$ |

For AP7 (Table 5), results indicate that males were 21 (70.0\%) of the main characters across all textbooks, while females were $9(30.0 \%)$ of the main characters. For Main Character roles, 15 (78.9\%) males and 4 (21.1\%) females were represented. For Supporting Character roles, 6 (54.5\%) males and 5 (45.5\%) females were represented. No Minor Character roles were identified in the AP7 data.

Table 5
Character Roles by Grade Level: AP7

| Character role | Male $n(\%)$ | Female $n(\%)$ | AP7 $N(\%)$ |
| :--- | :---: | :---: | :---: |
| Main character | $15(78.9 \%)$ | $4(21.1 \%)$ | $19(63.3 \%)$ |
| Supporting character | $6(54.5 \%)$ | $5(45.5 \%)$ | $11(36.7 \%)$ |
| Minor character | $0(0.0 \%)$ | $0(0.0 \%)$ | $0(0.0 \%)$ |
| All character roles | $21(70.0 \%)$ | $9(30.0 \%)$ | $30(100.0 \%)$ |

For AP8 (Table 6), results indicated that males occupied 41 (75.9\%) of the main characters across all the textbooks, while females occupied 13 (24.1\%). For Main Character roles, 29 ( $82.9 \%$ ) males and 6 (17.1\%) females were represented. For Supporting Character roles, 8 ( $66.7 \%$ ) males and 4 ( $33.3 \%$ ) females were represented. For Minor Character roles, 4 (57.1\%) males and 3 (42.9\%) females were represented.

Table 6
Character Roles by Grade Level: AP8

| Character role | Male $n(\%)$ | Female $n(\%)$ | AP8 $N(\%)$ |
| :--- | ---: | :---: | :---: |
| Main character | $29(82.9 \%)$ | $6(17.1 \%)$ | $35(64.8 \%)$ |
| Supporting character | $8(66.7 \%)$ | $4(33.3 \%)$ | $12(22.2 \%)$ |
| Minor character | $4(57.1 \%)$ | $3(42.9 \%)$ | $7(13.0 \%)$ |
| All character roles | $41(75.9 \%)$ | $13(24.1 \%)$ | $54(100.0 \%)$ |

Table 7 summarizes the character role representations in narratives across all textbook levels from Tables 4, 5, and 6. Results summarized in Table 7 indicate that, in all AP level textbooks, males were represented in 94 (71.2\%) instances and females were represented in 38 (28.8\%) instances. Of those, in AP6, males were represented in 32 ( $66.7 \%$ ) of the cases and females were represented in 16 (33.3\%). In AP7, males were represented in $21(70.0 \%)$ of the cases and females were represented in $9(30.0 \%)$. In AP8, males were represented in $41(75.9 \%)$ of the cases and females were represented in $13(24.1 \%)$. Overall, the data for main character, supporting character, and minor character roles suggest that females appeared less frequently in all roles as the textbooks progressed from AP6 to AP7 to AP8 (Figure 3).

## Table 7

Character Roles Across All Action Pack (AP) Textbook Levels

| Status | Male $n(\%)$ | Female $n(\%)$ | Total $N(\%)$ |
| :--- | :---: | ---: | :---: |
| AP6 | $32(66.7 \%)$ | $16(33.3 \%)$ | $48(36.4 \%)$ |
| AP7 | $21(70.0 \%)$ | $9(30.0 \%)$ | $30(22.7 \%)$ |
| AP8 | $41(75.9 \%)$ | $13(24.1 \%)$ | $50(40.9 \%)$ |
| Total | $94(71.2 \%)$ | $38(28.8 \%)$ | $132(100.0 \%)$ |

Analysis of female and male occupational roles. Table 8 shows the classifications of occupations assigned to male and female characters in AP6, AP7, and AP8 textbooks. Following Law and Chan's (2004) classification system, the


Figure 3. Character roles across all Action Pack (AP) textbook levels.

Table 8
Occupational Roles as a Percentage of Total Roles Across All Grade Levels

| Type of role | AP 6: $n(\%)$ | AP 7: $n(\%)$ | AP 8: $n(\%)$ | Total: $N(\%)$ |
| :--- | :---: | ---: | ---: | :---: |
| Male-monopolized | $9(21.4 \%)$ | $18(42.9 \%)$ | $15(35.7 \%)$ | $42(76.4 \%)$ |
| Male-dominated | $2(22.2 \%)$ | $4(44.4 \%)$ | $3(33.3 \%)$ | $9(16.4 \%)$ |
| Female-monopolized | $1(25.0 \%)$ | $1(25.0 \%)$ | $2(50.0 \%)$ | $4(7.3 \%)$ |
| Female-dominated | $0(0.0 \%)$ | $1(50.0 \%)$ | $1(50.0 \%)$ | $2(3.6 \%)$ |
| Gender-shared | $0(0.0 \%)$ | $1(50.0 \%)$ | $1(50.0 \%)$ | $2(3.6 \%)$ |
| All character roles | $12(21.8 \%)$ | $25(45.5 \%)$ | $22(40.0 \%)$ | $59(100.0 \%)$ |

Note. This scheme follows Law and Chan's classification system.
occupational roles were divided into five major categories: male monopolized, male dominated, female monopolized, female dominated, and gender shared. If only males portrayed the type of occupation, that occupation was classified as male monopolized. For example, the roles of astronaut, scholar, and pilot, for which 10 tokens were present for male and none for female, was classified as male monopolized. Similarly, if only females portrayed an occupation, that occupation was characterized as female monopolized. For example, these included the role of fashion and craft designer, for which there were six tokens for females and none for males.

Male-dominated roles were those as assumed mainly by males, such as doctor, for which there were seven male tokens and two female tokens. Female-dominated roles were those portrayed mainly by women rather than men, such as teacher, for which there were three tokens for females and two tokens for males. Gender-shared roles were those roles performed by males and females equally. An example was headmaster, with two tokens each for males and females (Table 8.)

Most occupational roles presented in all of the texts were male-monopolized or male-dominated occupational roles. Across all materials, 42 (76.4\%) and 9 (16.4\%) were male-monopolized and male-dominated occupational roles, respectively, 4 (7.3\%) were for female-monopolized occupational roles and 2 (3.6\%) were for female-dominated occupational roles, and 2 (3.6\%) were for gender-shared occupational roles. As a percentage of the total male-monopolized occupational roles, the roles were 9 (21.4\%), $18(42.9 \%)$, and $15(35.7 \%)$ for AP6, AP7, and AP8, respectively. As a percentage of the total female-monopolized roles, the roles were $1(25.0 \%), 1(25.0 \%)$, and $2(50.0 \%)$ for

AP6, AP7, and AP8, respectively. As a percentage of total male-dominated occupational roles, there were $2(22.2 \%), 4(44.4 \%)$, and 3 (33.3\%) for AP6, AP7, and AP8, respectively. As a percentage of total female-dominated occupational roles, there were 0 $(0.0 \%), 1(50.0 \%)$, and $1(50.0 \%)$ for AP6, AP7, and AP8, respectively. As a percentage of the total gender-sharing roles, the values were $0(0.0 \%), 1(50.0 \%)$, and $1(50.0 \%)$ for AP6, AP7, and AP8, respectively.

The next three tables present the gender distribution in the textbooks in terms of high- and low-status occupations portrayed as occupied by females and males by AP level. High-status occupations portrayed in the narratives of AP6, AP7, and AP8 textbooks included diverse occupational roles such as pilot, doctor, athlete, hero, journalist, explorer, judge, merchant, engineer, scholar, sailor, astronomer, and poet. Low-status occupations portrayed in the textbooks included teacher, nurse, flight attendant, and fashion designer. Females occupied stereotypical professions such as nursing and teaching but no females were presented as engineers, poets, or judges. Results presented in Table 9 indicate that, in AP6 textbooks, males occupied 32 (66.7\%) occupations and females occupied only 16 (33.3\%). Of those, high-status jobs were portrayed by 19 ( $79.2 \%$ ) males and 5 (20.8\%) females. The low-status jobs were portrayed by 1 (33.3\%) male and 2 ( $66.7 \%$ ) females. The category of "other" contained 12 ( $57.1 \%$ ) males and 9 ( $42.9 \%$ ) females.

Results presented in Table 10 indicate that, in AP7 textbooks, males occupied 20 (64.5\%) occupations and females occupied 11 (35.5\%). Of those, the high-status jobs were occupied by 17 ( $73.9 \%$ ) males and 6 ( $74.2 \%$ ) females. The low-status jobs were

Table 9
Gender Distribution of High- and Low-Status Occupations by Level: AP6

| Status | Male $n(\%)$ | Female $n(\%)$ | AP6 $N(\%)$ |
| :--- | ---: | ---: | :---: |
| High status | $19(79.2 \%)$ | $5(20.8 \%)$ | $24(50.0 \%)$ |
| Low status | $1(33.3 \%)$ | $2(66.7 \%)$ | $3(6.3 \%)$ |
| Other | $12(57.1 \%)$ | $9(42.9 \%)$ | $21(43.8 \%)$ |
| Total | $32(65.3 \%)$ | $16(32.7 \%)$ | $48(100.0 \%)$ |

Table 10
Gender Distribution of High- and Low-Status Occupations by Level: AP7

| Status | Male $n(\%)$ | Female $n(\%)$ | AP7 $N(\%)$ |
| :--- | ---: | ---: | :---: |
| High status | $17(73.9 \%)$ | $6(26.1 \%)$ | $23(74.2 \%)$ |
| Low status | $2(50.0 \%)$ | $2(50.0 \%)$ | $4(12.9 \%)$ |
| Other | $1(25.0 \%)$ | $3(75.0 \%)$ | $4(12.9 \%)$ |
| Total | $20(64.5 \%)$ | $11(35.5 \%)$ | $31(100.0 \%)$ |

occupied by 2 ( $50.0 \%$ ) males and 2 ( $50.0 \%$ ) females. The category of "other" contained 1 (25.0\%) male and 3 (75.0\%) females.

Results presented in Table 11 indicate that, in AP8 textbooks, males occupied 41 (77.4\%) occupations and females occupied 12 (22.6\%). Of those, the high-status jobs were occupied by 35 ( $83.3 \%$ ) males and 7 ( $16.7 \%$ ) females. The low-status jobs were

Table 11
Gender Distribution of High- and Low-Status Occupations by Level: AP8

| Status | Male $n(\%)$ | Female $n(\%)$ | AP8 $N(\%)$ |
| :--- | ---: | :---: | :---: |
| High status | $35(83.3 \%)$ | $7(16.7 \%)$ | $42(79.2 \%)$ |
| Low status | $3(60.0 \%)$ | $2(40.0 \%)$ | $5(9.4 \%)$ |
| Other | $3(50.0 \%)$ | $3(50.0 \%)$ | $6(11.3 \%)$ |
| Total | $41(77.4 \%)$ | $12(22.6 \%)$ | $53(100.0 \%)$ |

occupied by 3 ( $60.0 \%$ ) males and 2 ( $40.0 \%$ ) females. The category of "other" contained 3 (50.0\%) males and 3 (50.0\%) females.

Table 12 summarizes the gender distributions in narratives of all status occupations across all textbook levels from Tables 9, 10, and 11. Results summarized in Table 12 indicate that, in all AP textbooks, males were represented by status in 93 (70.5\%) of the occupations and females were represented in 16 (33.3\%). Of those, in the AP6 case, males were represented in 32 ( $66.7 \%$ ) occupations and females were represented in 16 (33.3\%). In the AP7 case, males were represented in 20 (64.5\%) of the occupations and females were represented in 11 (35.5\%). In the AP8 case, males were represented in 41 ( $77.4 \%$ ) of the occupations and females were represented in 12 ( $22.6 \%$ ). Overall, the data for high-status occupations, low-status occupations, and other occupations suggest that, although females appeared slightly more frequently in AP7 textbooks than in the AP6 textbooks, they were still less frequently represented than males in all roles at all textbook levels (Figure 4).

Table 12
Gender Distribution of High- and Low-Status Occupations Across All Grade Levels

| Level | Male $n(\%)$ | Female $n(\%)$ | Total $N(\%)$ |
| :--- | :---: | ---: | :---: |
| AP6 | $32(66.7 \%)$ | $16(33.3 \%)$ | $48(36.4 \%)$ |
| AP7 | $21(70.0 \%)$ | $9(30.0 \%)$ | $30(22.7 \%)$ |
| AP8 | $41(75.9 \%)$ | $13(24.1 \%)$ | $50(40.9 \%)$ |
| Total | $94(71.2 \%)$ | $38(28.8 \%)$ | $132(100.0 \%)$ |



Figure 4. Gender distribution of high- and low-status occupations across all grade levels.

Analysis of settings. The next three tables show settings by gender and by level.
Outside settings were mostly parks, streets, playing fields, and farms, and inside settings were inside homes or schools. Results presented in Table 13 indicate that, in AP6 textbooks, males occupied 32 (66.7\%) of the portrayed settings and females occupied

Table 13
Settings by Gender by Level: AP6

| Setting | Male $n(\%)$ | Female $n(\%)$ | AP6 $N(\%)$ |
| :--- | ---: | ---: | :---: |
| Outside | $15(71.4 \%)$ | $6(28.6 \%)$ | $21(43.8 \%)$ |
| Inside | $13(65.0 \%)$ | $7(35.0 \%)$ | $20(41.7 \%)$ |
| Unspecified | $4(57.1 \%)$ | $3(42.9 \%)$ | $7(14.6 \%)$ |
| Total | $32(66.7 \%)$ | $16(33.3 \%)$ | $48(100.0 \%)$ |

$16(33.3 \%)$. Of those, outside settings were portrayed by 15 ( $71.4 \%$ ) males and 6 (28.6\%) females. Inside settings were portrayed by 13 (65.0\%) males and 7 (35.0\%) females. Unspecified settings contained 1 (50.0\%) male and 1 (50.0\%) female portrayal. Results presented in Table 14 indicate that, in AP7 textbooks, males occupied 21 (70.0\%) of the portrayed settings and females occupied 9 (30.0\%). Of those, outside settings were portrayed by 18 ( $81.8 \%$ ) males and $4(18.2 \%)$ females. Inside settings were

Table 14
Settings by Gender by Level: AP7

|  |  |  |  |
| :--- | ---: | ---: | :---: |
| Setting | Male $n(\%)$ | Female $n(\%)$ | AP7 $N(\%)$ |
| Outside | $18(81.8 \%)$ | $4(18.2 \%)$ | $22(73.3 \%)$ |
| Inside | $2(33.3 \%)$ | $4(66.7 \%)$ | $6(20.0 \%)$ |
| Unspecified | $1(50.0 \%)$ | $1(50.0 \%)$ | $2(6.7 \%)$ |
| Total | $21(70.0 \%)$ | $9(30.0 \%)$ | $30(100.0 \%)$ |

portrayed by 2 (33.3\%) males and 4 ( $66.7 \%$ ) females. The unspecified settings category contained 1 (50.0\%) male and 1 (50.0\%) female.

Results presented in Table 15 indicate that, in AP8 textbooks, males occupied 41 (75.9\%) of the portrayed settings and females occupied 13 (24.1\%). Of those, outside settings were portrayed by 33 ( $80.5 \%$ ) males and $8(19.5 \%)$ females. Inside settings were portrayed by 5 ( $62.5 \%$ ) males and 3 ( $37.5 \%$ ) females. The unspecified settings category contained $3(60.0 \%)$ portrayals of males and $2(40.0 \%)$ portrayals of females.

## Table 15

Settings by Gender by Level: AP8

| Setting | Male $n(\%)$ | Female $n(\%)$ | AP8 $N(\%)$ |
| :--- | ---: | ---: | :---: |
| Outside | $33(80.5 \%)$ | $8(19.5 \%)$ | $41(75.9 \%)$ |
| Inside | $5(62.5 \%)$ | $3(37.5 \%)$ | $8(14.8 \%)$ |
| Unspecified | $3(60.0 \%)$ | $2(40.0 \%)$ | $5(9.3 \%)$ |
| Total | $41(75.9 \%)$ | $13(24.1 \%)$ | $54(100.0 \%)$ |

Table 16 summarizes the gender representation settings in narratives across all textbook levels from Tables 13, 14, and 15. Results summarized in Table 16 indicate that, in all AP textbooks, males occupied 94 (71.2\%) of the overall portrayed settings and females occupied 38 (28.8\%). Of those, the settings in AP6 were portrayed by 32 (66.7\%) males and 16 (33.3\%) females, the settings in AP7 were portrayed by 21 (70.0\%) males and 9 (30.0\%) females, and the settings in AP8 were portrayed by 41

Table 16
Settings by Gender Across All AP Textbook Levels

| Level | Male $n(\%)$ | Female $n(\%)$ | Total $N(\%)$ |
| :--- | ---: | ---: | :---: |
| AP6 | $32(66.7 \%)$ | $16(33.3 \%)$ | $48(36.4 \%)$ |
| AP7 | $21(70.0 \%)$ | $9(30.0 \%)$ | $30(22.7 \%)$ |
| AP8 | $41(75.9 \%)$ | $13(24.1 \%)$ | $54(40.9 \%)$ |
| Total | $94(71.2 \%)$ | $38(28.8 \%)$ | $132(100.0 \%)$ |

$(75.9 \%)$ males and 13 ( $24.1 \%$ ) females. Thus, the data show that females were less presented in any setting than were males and that the percentage of total representations of females diminished from AP6 to AP7 to AP8 (Figure 5).


Figure 5. Settings by gender across all Action Pack (AP) textbook levels.

Analysis of activity levels. The next three tables show male and female activity levels in narratives across all textbook levels. Results presented in Table 17 indicate that, in AP6 textbooks, males occupied 32 (66.7\%) of the overall portrayed settings and females occupied 16 (33.3\%). Of those, active levels were portrayed by males in 21 ( $72.4 \%$ ) cases and by females in 8 ( $27.6 \%$ ) cases. Passive levels were portrayed by males in 10 ( $66.7 \%$ ) cases and by females in 5 (33.3\%) case. Unspecified levels were found in $1(25.0 \%)$ case involving a male and 3 (75.0\%) cases involving females.

## Table 17

Gender Representation by Activity Level in Narratives of Action Pack Textbooks: AP6

| Activity level | Male $n(\%)$ | Female $n(\%)$ | AP6 $N(\%)$ |
| :--- | ---: | :---: | :---: |
| Active | $21(72.4 \%)$ | $8(27.6 \%)$ | $29(60.4 \%)$ |
| Passive | $10(66.7 \%)$ | $5(33.3 \%)$ | $15(31.3 \%)$ |
| Unspecified | $1(25.0 \%)$ | $3(75.0 \%)$ | $4(8.3 \%)$ |
| Total | $32(66.7 \%)$ | $16(33.3 \%)$ | $48(100.0 \%)$ |

Results presented in Table 18 indicate that, in AP7 textbooks, males occupied 21 (70.0\%) of the overall portrayed settings and females occupied 9 (30.0\%). Of those, active levels were portrayed by males in $20(80.0 \%)$ cases and by females in $5(16.7 \%)$ cases. Passive levels were portrayed by males in 1 (20.0\%) case and by females in 4 $(80.0 \%)$ cases. There were no unspecified levels involving males or females in this AP level.

Table 18
Gender Representation by Activity Level in Narratives of Action Pack Textbooks: AP7

| Activity level | Male $n(\%)$ | Female $n(\%)$ | AP7 $N(\%)$ |
| :--- | :---: | :---: | :---: |
| Active | $20(80.0 \%)$ | $5(20.0 \%)$ | $25(83.3 \%)$ |
| Passive | $1(20.0 \%)$ | $4(80.0 \%)$ | $5(16.7 \%)$ |
| Unspecified | $0(0.0 \%)$ | $0(0.0 \%)$ | $0(0.0 \%)$ |
| Total | $21(70.0 \%)$ | $9(30.0 \%)$ | $30(100.0 \%)$ |

Results presented in Table 19 indicate that, in AP8 textbooks, males occupied 40 (75.5\%) of the overall portrayed settings and females occupied 13 (24.5\%). Of those, active levels were portrayed by males in 34 ( $85.0 \%$ ) cases and by females in $6(15.0 \%)$ cases. Passive levels were portrayed by males in 3 (33.3\%) cases and by females in 6 (66.7\%) cases. Unspecified levels were found in 3 (75.0\%) cases involving males and 1 (25.0\%) case involving a female.

Table 19
Gender Representation by Activity Level in Narratives of Action Pack Textbooks: AP8

| Activity level | Male $n(\%)$ | Female $n(\%)$ | AP8 $N(\%)$ |
| :--- | ---: | ---: | :---: |
| Active | $34(85.0 \%)$ | $6(15.0 \%)$ | $40(75.5 \%)$ |
| Passive | $3(33.3 \%)$ | $6(66.7 \%)$ | $9(17.0 \%)$ |
| Unspecified | $3(75.0 \%)$ | $1(25.0 \%)$ | $4(7.5 \%)$ |
| Total | $40(75.5 \%)$ | $13(24.5 \%)$ | $53(100.0 \%)$ |

Table 20 summarizes the gender representation settings in narratives across all textbook levels from Tables 15, 16, and 17. Results summarized in Table 20 indicate that, in all AP textbooks, males represented $93(71.0 \%)$ of the overall portrayed active roles in the textbooks and females occupied 38 (29.0\%) roles. Of those, the AP6 roles were portrayed by 32 ( $66.7 \%$ ) males and 16 (33.3\%) females, the AP7 roles were portrayed by $21(70.0 \%)$ males and $9(30.0 \%)$ females, and the AP8 roles were portrayed

Table 20
Gender Representation by Activity Level in Narratives of AP Textbooks Across All Levels

| Level | Male $n(\%)$ | Female $n(\%)$ | Total $N(\%)$ |
| :--- | :--- | ---: | :---: |
| AP6 | $32(66.7 \%)$ | $16(33.3 \%)$ | $48(36.6 \%)$ |
| AP7 | $21(70.0 \%)$ | $9(30.0 \%)$ | $30(22.9 \%)$ |
| AP8 | $40(75.5 \%)$ | $13(24.5 \%)$ | $53(40.5 \%)$ |
| Total | $93(71.0 \%)$ | $38(29.0 \%)$ | $131(100.0 \%)$ |

Note. Passive activities included sitting in the classroom, watching television at home, or reading in their room; active activities included running, playing, or saving individuals.
by 40 ( $75.5 \%$ ) males and 13 ( $24.5 \%$ ) females. Thus, the data show that females were less presented in any roles than were males and that the percentage of total representations of females diminished from AP6 to AP7 to AP8 (Figure 6).

Analysis of domestic roles. Textbooks were analyzed to examine male and female representation in domestic roles. As Table 21 shows, both males and females


Figure 6. Gender representation by activity level in narratives across all Action Pack (AP) textbook levels.

Table 21

## Portrayals of Domestic Roles by Males and Females

|  | Males |  | Domestic role | $n$ | Domestic role |
| :--- | ---: | ---: | :--- | ---: | :--- |
| Dather | 31 | 28.4 |  | $n$ |  |
| Females | $\%$ |  |  |  |  |
| Son | 25 | 22.9 | Dother | 30 | 28.0 |
| Grandfather | 17 | 15.6 | Grandmother | 18 | 16.8 |
| Grandson | 14 | 12.8 | Granddaughter | 14 | 13.1 |
| Brother | 11 | 10.1 | Sister | 13 | 12.1 |
| Cousin | 6 | 5.5 | Cousin | 7 | 6.5 |
| Husband | 5 | 4.6 | Wife | 6 | 5.6 |
| Total males | 109 |  | Total females | 107 |  |

were portrayed as carrying out such traditional roles as wife and husband, mother and father, grandfather and grandmother, sister and brother, and daughter and son; the rank order of these portrayals was the same. However, only women were shown as being engaged in domestic chores such as cooking and cleaning; men were never portrayed as homemakers or depicted as helping at home.

## Linguistic Analysis

Masculine generic constructions. Table 22 shows occurrences of the usage of masculine generic nouns, the generic $h e / s h e$, and masculine generic pronouns. Examples of masculine generic nouns include the following:

1. What sportsmen do you admire? (AP8, p. 23)
2. What do policemen, firemen or even stuntmen share in common? (AP7, p. 10)
3. What do people think about fishermen? (AP7, p. 18)
4. Winning isn't everything. If you want to be a truly good sportsman, you must behave well all the time. (AP8, p. 52)

Table 22
Generic Noun and Pronoun Usage

| Level | Masculine noun <br> $n(\%)$ | "He/She" <br> $n(\%)$ | "He" <br> $n(\%)$ | Total <br> $N(\%)$ |
| :--- | :---: | :---: | :---: | :---: |
| AP6 | $0(0.0 \%)$ | $2(50.0 \%)$ | $2(50.0 \%)$ | $4(11.8 \%)$ |
| AP7 | $10(58.8 \%)$ | $4(23.5 \%)$ | $3(17.6 \%)$ | $17(50.0 \%)$ |
| AP8 | $8(61.5 \%)$ | $3(23.1 \%)$ | $2(15.4 \%)$ | $13(38.2 \%)$ |
| Total | 18 | 9 | 7 | 34 |

Examples of generic pronouns include the following:

1. What does a pilot do before the aeroplane takes off? What does he do after landing? (AP7, p. 6)
2. What does a lawyer do? He defends people. (AP8, p. 21)

One strategy used in the textbooks to avoid gender bias is the use of symmetric phrases that include both men and women. Nine such occurrences were recorded, including the following examples.

1. Choose four heroes. They can be men or women, sportspeople, real or dead. (AP8, 2011, p. 33)
2. He/She should then use the periscope to look at the remaining items. (AP7, 2011, p. 15)
3. My brother/sister uses a bicycle to come to school. (AP7, 2011, p. 20)
4. Why did he/she do it? (AP7, 2011, p. 62)

Results showed that generic he was used less often than masculine generic nouns (18 versus 7 instances). Non-sexist writing strategies in the textbooks included the alternative pronouns he/she or him/her to create equality.

Dialogue assignment. Also investigated was the assignment of dialogues to males and females. Dialogue assignment could be same-sex dialogue (male to male or female to female) or mixed-sex dialogue (male to female and female to male). Dialogues are part of the English lessons meant for students to practice correct pronunciation of words and to learn to converse formally and informally in English. Thus, learners are engaged in these activities during lesson hours. Table 23 shows that same-sex dialogues

Table 23
Dialogues by Sex

| Level | Same-sex |  | Mixed-sex |  | Total $N$ (\%) |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Female-female $n$ (\%) | $\begin{gathered} \text { Male-male } \\ n(\%) \end{gathered}$ | $\begin{gathered} \text { Female-male } \\ n(\%) \end{gathered}$ | $\begin{gathered} \text { Male-female } \\ n(\%) \end{gathered}$ |  |
| AP6 | 9 (32.1\%) | 17 (60.7\%) | 1 (3.6\%) | 1 (3.6\%) | 28 (58.3\%) |
| AP7 | 3 (23.1\%) | 5 (38.5\%) | 2 (15.4\%) | 3 (23.1\%) | 13 (27.1\%) |
| AP8 | 1 (14.3\%) | 4 (57.1\%) | 1 (14.3\%) | 1 (14.3\%) | 7 (14.6\%) |
| Total | 13 (27.1\%) | 26 (54.2\%) | 4 (8.3\%) | 5 (10.4\%) | 48 (100.0\%) |
| Categorized | 39 (81.3\%) | 9 (18.8\%) |  |  |  |

comprised 39 ( $81.3 \%$ ) of the dialogues and mixed-sex dialogues comprised $9(18.8 \%)$ of the dialogues.

Across all categories, male-to-male dialogues had the highest frequency at 26 ( $54.2 \%$ ) with respect to total dialogues, followed by female-to-female dialogues at 13 ( $27.1 \%$ ), male-to-female dialogues at 5 ( $10.4 \%$ ), and female-to-male dialogues at 4 (8.3\%). Overall, males participated in more total dialogues than did females. Total dialogues declined from AP6 to AP7 to AP8: AP6 had 28 (58.3\%), AP7 had 13 (27.1\%), and AP8 had 7 (14.6\%).

Adjectives. Table 24 shows gender representation by adjective used to describe males and females in the textbooks. Males more often had adjectives describing them than did females. Of the total adjectives found, 27 (72.9\%) were used to describe males

Table 24
Gender Representation and Adjective Use in the Narratives of Action Pack Textbooks

| Adjective | Male $n(\%)$ | Female $n(\%)$ | Total $N(\%)$ |
| :--- | ---: | ---: | :---: |
| Positive | $23(79.3 \%)$ | $6(20.7 \%)$ | $29(78.4 \%)$ |
| Negative | $4(50.0 \%)$ | $4(50.0 \%)$ | $8(21.6 \%)$ |
| Total | $27(72.9 \%)$ | $10(27.1 \%)$ | $37(100.0 \%)$ |

and $10(27.1 \%)$ were used to describe females. Of the 29 positive adjectives, 23 (79.3\%) described males and $6(20.7 \%)$ described females. Of the 8 negative adjectives, 4 (50.0\%) described males and 4 (50.0\%) described females. Adjectives describing females mainly emphasized the social and biological roles of women in society.

For example, in AP7 Unit 3 the word polite was used in reference to the policeman who stayed composed despite his dissatisfaction at the attempt to bribe him. A headmaster was justifiably furious about students breaking his car window. In an AP8 textbook chapter, male characters were described as famous, young, professional, clever, strong, brave, honest, and great, and a female nurse was described as "a compassionate, kind and caring woman" (AP8, p. 24). The way in which the female was described presented her caring side, whereas the way in which the male was described presented his physical and intellectual side. When societal status was discussed, males were described as rich and wise men, while females were often described as boring and old. A female detective was seen as wiser than her counterpart male simply because "she was older" than he (AP7, p. 34).

## Pictorial Analysis

Pictorial depiction of males and females. This section reports the representation of males and females in the textbook illustrations. Overall, men were portrayed as being more active roles such as a police officer, athlete, or astronaut, and women are portrayed in more passive or supportive roles, such as a nurse who cared for others, a crime victim, or a flight attendant. Additionally, males are shown in positions of authority and power, such as judge, police, doctor, engineer, or pilot at a higher rate than females. When females do appear, they are assigned mostly occupations such as teacher, doctor/nurse, fashion/craft designer, victim, maid and flight attendant. The number of occupations depicted for males, 188 (61.8\%), outnumber the corresponding figure for females, 116 (38.2\%), demonstrating that women are less likely to appear in key/authoritative positions in textbook illustrations.

The next three tables show the gender distribution of illustrations in terms of the physical setting, by AP level. Outside settings were parks, streets, playing fields, and farms; inside settings were homes or schools. Table 25 summarizes the illustrations for the AP6 level for males and females at outside, inside, and unspecified settings. The total male portrayals for this grade level were $87(54.0 \%)$ and the total female portrayals were 74 (46.0\%). Males (28, 62.2\%) and females (17,37.5\%) were portrayed in an outside setting. Males (17, $42.5 \%$ ) and females ( $23,57.5 \%$ ) were portrayed in an inside setting. Males (42, $55.3 \%$ ) and females $(34,44.7 \%)$ were portrayed in unspecified settings.

Table 26 summarizes the illustrations for the AP7 level for males and females at outside, inside, and unspecified settings. The total male portrayals for this grade level

Table 25
Illustrations of Settings by Gender for AP6 Level

| Setting | Male $n(\%)$ | Female $n(\%)$ | AP6 total $N(\%)$ |
| :--- | :---: | :---: | :---: |
| Outside | $28(62.2 \%)$ | $17(37.8 \%)$ | $45(28.0 \%)$ |
| Inside | $17(42.5 \%)$ | $23(57.5 \%)$ | $40(24.8 \%)$ |
| Unspecified | $42(55.3 \%)$ | $34(44.7 \%)$ | $76(47.2 \%)$ |
| Total | $87(54.0 \%)$ | $74(46.0 \%)$ | $161(100.0 \%)$ |

Table 26
Illustrations of Settings by Gender for AP7 Level

| Setting | Male $n(\%)$ | Female $n(\%)$ | AP7 total $N(\%)$ |
| :--- | ---: | ---: | :---: |
| Outside | $25(83.3 \%)$ | $5(16.7 \%)$ | $30(44.8 \%)$ |
| Inside | $5(45.5 \%)$ | $6(54.5 \%)$ | $11(16.4 \%)$ |
| Unspecified | $21(80.8 \%)$ | $5(19.2 \%)$ | $26(38.8 \%)$ |
| Total | $51(76.1 \%)$ | $16(23.9 \%)$ | $67(100.0 \%)$ |

were $51(76.1 \%)$ and the total female portrayals were 16 (23.9\%). Males (25, 83.3\%) and females $(5,16.7 \%)$ were portrayed in an outside setting. Males (5, 45.5\%) and females ( $6,54.5 \%$ ) were portrayed in an inside setting. Males (21, 80.8\%) and females (5, $19.2 \%$ ) were portrayed in unspecified settings.

Table 27 summarizes the illustrations for the AP8 level for males and females at outside, inside, and unspecified settings. The total male portrayals for this grade level

Table 27
Illustrations of Settings by Gender for AP8 Level

| Setting | Male $n(\%)$ | Female $n(\%)$ | AP8 total $N(\%)$ |
| :--- | ---: | :---: | :---: |
| Outside | $38(90.5 \%)$ | $4(9.4 \%)$ | $42(55.3 \%)$ |
| Inside | $5(50.0 \%)$ | $5(50.0 \%)$ | $10(13.2 \%)$ |
| Unspecified | $7(29.2 \%)$ | $17(70.8 \%)$ | $24(31.6 \%)$ |
| Total | $50(65.8 \%)$ | $26(34.2 \%)$ | $76(100.0 \%)$ |

were $50(65.8 \%)$ and the total female portrayals were 26 ( $34.2 \%$ ). Males $(38,90.5 \%)$ and females $(4,9.4 \%)$ were portrayed in an outside setting. Males (5, 50.0\%) and females (5, $50.0 \%$ ) were portrayed in an inside setting. Males ( $7,29.2 \%$ ) and females ( $17,70.8 \%$ ) were portrayed in unspecified settings.

Table 28 summarizes the gender representation in illustrations across all textbook levels from Tables 25, 26, and 27. Results summarized in Table 28 indicate that, in all AP level textbooks, males comprised $188(61.8 \%)$ of the overall portrayed active roles in the textbooks and females comprised 116 (38.2\%). Of those, the AP6 illustrations included 87 (84.0\%) males and 74 (46.0\%) females, the AP7 illustrations included 51 (76.1\%) males and 16 (23.9\%) females, and the AP8 illustrations included 50 (65.8\%) males and 26 ( $34.2 \%$ ) females. While the data in this case show that females were less presented in illustrations than males, the percentage of total representations of females did not show a trend from AP6 to AP7 to AP8 (Figure 7).

Table 28
Illustrations of Settings by Gender Across All AP Textbook Levels

| Level | Male $n(\%)$ | Female $n(\%)$ | Total $N(\%)$ |
| :--- | ---: | :---: | :---: |
| AP6 | $87(54.0 \%)$ | $74(46.0 \%)$ | $161(53.0 \%)$ |
| AP7 | $51(76.1 \%)$ | $16(23.9 \%)$ | $67(22.0 \%)$ |
| AP8 | $50(65.8 \%)$ | $26(34.2 \%)$ | $76(25.0 \%)$ |
| Total | $188(61.8 \%)$ | $116(38.2 \%)$ | $304(100.0 \%)$ |



Figure 7. Illustrations of settings by gender across all Action Pack (AP) textbook levels.

Analysis of activities (active, passive, or unspecified). This section reports the activities connected with male and female characters. The activities connected with male images involved seeking knowledge, managerial activities, religious activities, and
helping others. Female images were associated with seeking knowledge, leisureactivities, and a minute proportion connected to service-oriented work (e.g., flight attendant or maid). The activities associated with women were those perceived to have low status in society. In contrast, the activities assigned to males were those associated with a high and prestigious status in society.

The predominance of males playing sports outside of home was observed not only in texts but in imagery, as well. For example, males were depicted as engaged in football, soccer, and hockey; no females were depicted in similar activities. Males were more often illustrated as involved in a wide range of sports (basketball, football, soccer, bike riding, playing tennis, car racing, and fishing). In contrast, females were shown as involved in shopping, sewing, cooking, or teaching, indicating a stereotypical image of women in such activities. In addition, men tend to be portrayed as involved in physically demanding activities or occupations. The next three tables present the analysis of active and passive activities in the three textbooks.

Table 29 summarizes the activities depicted at the AP6 level for males and females in active, passive, and unspecified roles. The total male portrayals for this grade level were 32 ( $66.7 \%$ ) and total female portrayals were 16 (33.3\%). The portrayal of active activities included 21 (72.4\%) illustrations of males and 8 (27.6\%) illustrations of females. The portrayal of passive activities included 10 ( $66.7 \%$ ) illustrations of males and $5(33.3 \%)$ illustrations of females. The portrayal of unspecified activities included 1 ( $25.0 \%$ ) illustration of males and 3 ( $75.0 \%$ ) illustrations of females.

Table 29
Gender Representation by Activity Level in Images in AP6 Textbooks

| Activity | Male $n(\%)$ | Female $n(\%)$ | AP6 total $N(\%)$ |
| :--- | ---: | ---: | :---: |
| Active | $21(72.4 \%)$ | $8(27.6 \%)$ | $29(60.4 \%)$ |
| Passive | $10(66.7 \%)$ | $5(33.3 \%)$ | $15(31.3 \%)$ |
| Unspecified | $1(25.0 \%)$ | $3(75.0 \%)$ | $4(8.3 \%)$ |
| Total | $32(66.7 \%)$ | $16(33.3 \%)$ | $48(100.0 \%)$ |

Table 30 summarizes activities depicted at the AP7 level for males and females in active, passive, and unspecified roles. Total male portrayals for this grade level were $21(70.0 \%)$ and total female portrayals were 9 (30.0\%). The portrayal of active activities included $20(80.0 \%)$ illustrations of males and $5(20.0 \%)$ illustrations of females. The portrayal of passive activities included 1 (20.0\%) illustrations of males and 4 (80.0\%) illustrations of females. There were no portrayals of unspecified activities at this level.

Table 30
Gender Representation by Activity Level in Images in AP7 Textbooks

| Activity | Male $n(\%)$ | Female $n(\%)$ | AP7 total $N(\%)$ |
| :--- | :---: | :---: | :---: |
| Active | $20(80.0 \%)$ | $5(20.0 \%)$ | $25(83.3 \%)$ |
| Passive | $1(20.0 \%)$ | $4(80.0 \%)$ | $5(16.7 \%)$ |
| Unspecified | $0(0.0 \%)$ | $0(0.0 \%)$ | $0(0.0 \%)$ |
| Total | $21(70.0 \%)$ | $9(30.0 \%)$ | $30(100.0 \%)$ |

Table 31 summarizes the activities depicted at the AP8 level for males and females in active, passive, and unspecified roles. The total male portrayals for this grade level were $40(75.5 \%)$ and total female portrayals were 13 (24.5\%). The portrayal of active activities included 3 (33.3\%) illustrations of males and 6 (66.7\%) illustrations of females. The portrayal of passive activities included 1 (20.0\%) illustrations of males and $4(80.0 \%)$ illustrations of females. The portrayal of unspecified activities included 3 ( $75.0 \%$ ) illustrations of males and 1 ( $25.0 \%$ ) illustration of females.

Table 31
Gender Representation by Activity Level in Images in AP8 Textbooks

| Activity | Male $n(\%)$ | Female $n(\%)$ | AP8 total $N(\%)$ |
| :--- | ---: | ---: | :---: |
| Active | $34(85.0 \%)$ | $6(15.0 \%)$ | $40(75.5 \%)$ |
| Passive | $3(33.3 \%)$ | $6(66.6 \%)$ | $9(17.0 \%)$ |
| Unspecified | $3(75.0 \%)$ | $1(25.0 \%)$ | $4(7.5 \%)$ |
| Total | $40(75.5 \%)$ | $13(24.5 \%)$ | $53(100.0 \%)$ |

Table 32 summarizes the gender distribution of activities in illustrations across all textbook levels from Tables 29, 30, and 31. Results summarized in Table 32 indicate that, in all AP level textbooks, males comprised $93(71.0 \%)$ of the overall portrayed active roles in the textbooks and females comprised 38 (29.0\%). Of those, the AP6 illustrations of activities included 32 (66.7\%) males and 16 (33.3\%) females, the AP7 illustrations of activities included $21(70.0 \%)$ males and 9 (30.0\%) females, and the AP8

Table 32
Gender Representation by Activity Level in Images Across All Textbook Levels

| Level | Male $n(\%)$ | Female $n(\%)$ | Total $N(\%)$ |
| :--- | :---: | ---: | :---: |
| AP6 | $32(66.7 \%)$ | $16(33.3 \%)$ | $48(36.6 \%)$ |
| AP7 | $21(70.0 \%)$ | $9(30.0 \%)$ | $30(22.9 \%)$ |
| AP8 | $40(75.5 \%)$ | $13(24.5 \%)$ | $53(40.5 \%)$ |
| Total | $93(71.0 \%)$ | $38(29.0 \%)$ | $131(100.0 \%)$ |

illustrations of activities included 40 (75.5\%) males and 13 (24.5\%) females. The data show that females were less presented in activities than were males, with a slight reduction in female representation from AP6 to AP7 to AP8 (Figure 8).


Figure 8. Gender representation by activity level in images across all Action Pack (AP) textbook levels.

Analysis of clothing worn. The next three tables present an analysis of what males and females were depicted to be wearing in the illustrations. Dress is a significant marker of gender identity. Dress is a dominant means of communication and making statements about the gender role of a newborn child soon after birth. The reviewed books showed females and males wearing gender-specific attire. More than half of the females were illustrated wearing traditional Jordanian dress with a hijab (head scarf) and long dresses or skirts covering their bodies. Working females were also depicted wearing the hijab and clothing that covered legs and shoulders. Although Jordan law does not require females to cover the head in Jordan (McDermott, 2010), a majority of the images of females depicted them doing so.

Table 33 summarizes the clothing depicted for the AP6 level for males and females in modern, traditional, and other clothing. The total male portrayals for this grade level were 87 ( $54.0 \%$ ) and the total female portrayals were 74 ( $46.0 \%$ ). The portrayal of males in modern clothing comprised 26 ( $60.5 \%$ ) of the illustrations and females were portrayed in 17 (39.5\%). The portrayal of males in traditional clothing comprised 19 (45.2\%) of the illustrations and females were portrayed in 23 (54.8\%). The portrayal of males in other clothing comprised 42 (55.3\%) of the illustrations and females were portrayed in 34 (44.7\%).

Table 34 summarizes the activities clothing for the AP7 level for males and females in modern, traditional, and other clothing. The total male portrayals for this grade level were 87 (54.0\%) and the total female portrayals were 74 (46.0\%). The portrayal of males in modern clothing comprised $26(60.5 \%)$ of the illustrations and

Table 33
Clothing Depictions for AP6 Level

| Clothing | Male $n(\%)$ | Female $n(\%)$ | AP6 total $N(\%)$ |
| :--- | :---: | :---: | :---: |
| Modern | $26(60.5 \%)$ | $17(39.5 \%)$ | $43(26.7 \%)$ |
| Traditional | $19(45.2 \%)$ | $23(54.8 \%)$ | $42(26.1 \%)$ |
| Other | $42(55.3 \%)$ | $34(44.7 \%)$ | $76(47.2 \%)$ |
| Total | $87(54.0 \%)$ | $74(46.0 \%)$ | $161(100.0 \%)$ |

Table 34
Clothing Depictions for AP7 Level

| Clothing | Male $n(\%)$ | Female $n(\%)$ | AP7 total $N(\%)$ |
| :--- | ---: | ---: | :---: |
| Modern | $32(86.5 \%)$ | $5(13.5 \%)$ | $37(55.2 \%)$ |
| Traditional | $11(64.7 \%)$ | $6(35.3 \%)$ | $17(25.4 \%)$ |
| Other | $8(61.5 \%)$ | $5(38.5 \%)$ | $13(19.4 \%)$ |
| Total | $51(76.1 \%)$ | $16(23.9 \%)$ | $67(100.0 \%)$ |

females were portrayed in 17 (39.5\%). The portrayal of males in traditional clothing comprised 19 (45.2\%) of the illustrations and females were portrayed in 23 (54.8\%). The portrayal of males in other clothing comprised 42 (55.3\%) of the illustrations and females were portrayed in 34 (44.7\%).

Table 35 summarizes the clothing depicted for the AP8 level for males and females in modern, traditional, and other clothing. The total male portrayals for this

Table 35
Clothing Depictions for AP8 Level

| Clothing | Male $n(\%)$ | Female $n(\%)$ | AP8 total $N(\%)$ |
| :--- | ---: | ---: | :---: |
| Modern | $38(84.4 \%)$ | $7(15.6 \%)$ | $45(59.2 \%)$ |
| Traditional | $5(26.3 \%)$ | $14(73.7 \%)$ | $19(25.0 \%)$ |
| Other | $7(58.3 \%)$ | $5(41.7 \%)$ | $12(15.8 \%)$ |
| Total | $50(65.8 \%)$ | $26(34.2 \%)$ | $76(100.0 \%)$ |

grade level were $50(65.8 \%)$ and the total female portrayals were 26 (34.2\%). The portrayal of males in modern clothing comprised 38 (84.4\%) of the illustrations and females were portrayed in 7 (15.6\%). The portrayal of males in traditional clothing comprised 5 ( $26.3 \%$ ) of the illustrations and females were portrayed in 14 (73.7\%). The portrayal of males in other clothing comprised 7 (58.3\%) of the illustrations and females were portrayed in 5 (41.7\%).

Table 36 summarizes the clothing depictions, by gender, in illustrations across all textbook levels from Tables 33, 35, and 35. Results summarized in Table 36 indicate that, in all AP level textbooks, males comprised 188 (61.8\%) of the overall clothing depictions in the textbooks and females comprised 116 (38.2\%). Of those, the AP6 clothing depictions included 87 (54.0\%) males and 74 (46.0\%) females, the AP7 illustrations included 51 (76.1\%) males and 16 (23.9\%) females, and the AP8 clothing depictions included $50(65.8 \%)$ males and 26 (34.2\%) females. The data show that

Table 36
Clothing Depictions Across All AP Textbook Levels

| Level | Male $n(\%)$ | Female $n(\%)$ | Total $N(\%)$ |
| :--- | ---: | :---: | :---: |
| AP6 | $87(54.0 \%)$ | $74(46.0 \%)$ | $161(53.0 \%)$ |
| AP7 | $51(76.1 \%)$ | $16(23.9 \%)$ | $67(22.0 \%)$ |
| AP8 | $50(65.8 \%)$ | $26(34.2 \%)$ | $76(25.0 \%)$ |
| Total | $188(61.8 \%)$ | $116(38.2 \%)$ | $304(100.0 \%)$ |

females were less presented in clothing depictions than were males, although there was not a measurable progression from AP6 to AP7 to AP8 (Figure 9). The AP6 data showed the most balanced depictions and the AP7 showed the least balanced depictions.


Figure 9. Clothing depictions across all Action Pack (AP) textbook levels.

## Summary of Results

Results indicated that the majority of the illustrations and text examples were male dominated. The three sets of textbooks were significantly similar (a) in biased ratio of male-to-female characters, and (b) in representation of males in dominant and directing roles and females in limited and stereotypical passive roles.

## Discussion

Females were not only underrepresented in the textbook materials compared to the population enrolled in school and the population at large; they were more often depicted in traditional roles such as wife, more often in lower-status occupations, more likely to be in inside settings where they practiced traditional roles, more likely to participate in less active activities, and more likely to be assigned traditional domestic roles, such as wife and caregiver. With respect to generic constructions, generic masculine nouns and the generic he were used exclusively, and males dominated dialogues and the use of all adjectives and positive adjectives. Many more males were pictured than females, and males were portrayed more often in outside settings and in high-status occupations. Males wore more modern clothing than females, who were more often pictured wearing traditional clothing such as the hijab.

Females were generally underrepresented in textbook materials. In Jordan, the secondary school enrollment figures are $51.1 \%$ females and $48.9 \%$ males and the distribution of enrollment of all school-age children and adolescents is $48.8 \%$ females and $51.2 \%$ males. The gender distribution in Jordanian society is $50.7 \%$ females and $49.3 \%$ males (CIA, 2014). Despite these distributions, $71.2 \%$ of the characters in the
textbooks that were examined were males and $28.7 \%$ were females. Of the total of character mentions, $62.2 \%$ were of males and $37.7 \%$ were of females.

Males were much more often portrayed as the main character. Across all levels, males comprised $77.3 \%$ of all main characters. Although males comprised $59.4 \%$ of supporting roles and females comprised $40.6 \%$ of supporting roles, supporting roles comprised only $20.0 \%$ of the total roles for males but $68.4 \%$ of the total roles for females.

Females were shown in lower-status occupations more often than males. Across all materials, males occupied $79.8 \%$ of all high-status occupations and females occupied only $9.1 \%$ of high-status occupations. Females were portrayed more often in an inside setting and were portrayed as being less active than males. Males were presented in $78.5 \%$ of the outside settings and females in $21.4 \%$ of the outside settings. Males were presented in $80.0 \%$ of the active-level activities, compared to $20.0 \%$ for females. Conversely, females were presented in $51.7 \%$ of the passive-level activities, compared to $48.3 \%$ for males. Only women were portrayed in domestic chores such as cooking and cleaning; men were never portrayed as homemakers or helping at home.

Linguistic analysis also showed dominance of males in the texts. There were no occurrences of a generic she construction but there were several occurrences of masculine nouns and the generic he. Males also dominated same-sex dialogues. Of the 39 same-sex dialogues, $66.7 \%$ were male-to-male and $33.3 \%$ were female-to-female. With respect to adjective use, $72.9 \%$ of the adjectives described males and $27.1 \%$
described females. Of the positive adjectives, 79.3\% described males and 20.7\% described females.

Of the total illustrations in the textbooks, $61.8 \%$ were for males and $38.2 \%$ were for females. Males were much more often portrayed in outside settings. With respect to all illustrations of setting, males were portrayed as being outside in $77.8 \%$ of the settings, compared to $15.4 \%$ for females. Conversely, females were portrayed as being inside in $19.2 \%$ of the settings, compared to $10.0 \%$ for males.

Clothing reflected the traditional styles for females and modern styles for males. Males were portrayed in $76.8 \%$ of the total depictions in modern clothing, compared to $23.2 \%$ for females. With respect to total gender-related depictions, males were portrayed in modern clothing in $51.1 \%$ of the illustrations, compared to $25.0 \%$ for females.

Thus, overall, females were portrayed in more traditional ways than males, and females were underrepresented with respect to the population and with respect to occupational roles in modern Jordanian society. The data also showed trends from AP level to AP level for the various metrics, most of which showed increased portrayal of males and decreased portrayal of females.

## Conclusion

Butler (1999a) stated that issues involving gender are embedded deeply in society. Therefore, the role of gender in society and in the education system cannot be ignored. Textbooks play a prominent role in exposing students to gender stereotypes. As with any source that is used in an educational setting, these books play a vital role in the formation of students' personal views and opinions of society and their views of the
roles played by males and females. The imbalance of such portrayals could result in the continuance and enforcement of gender stereotypes.

The Jordanian government has expressed great interest in bringing about gender equality in its society (Brand, 1998). Jordan has been trying to develop gender equality where females and males have right of access to the same education, the right to marry and divorce freely, and the right to be active members of parliament (Brand, 1998). However, results from the present study showed that gender stereotyping continues to exist in various ways in the English language textbooks used in Jordan. These findings are consistent with earlier research on the portrayal of women in EFL textbooks (e.g., Al-Taweel, 2005; Ansary \& Babaii, 2003; Lee \& Collins, 2010; Ullah \& Skelton, 2013), which found that females were underrepresented in the textbooks and that male characters dominated female characters.

Content analysis of the textbooks revealed that male characters dominated in narrative and pictorial contents in all of the textbooks. In addition, $77.2 \%$ of males were depicted as main characters in the textbooks, compared to $22.8 \%$ for females. Females were most frequently portrayed as supporting characters and in minor roles. These results support previous studies of stereotyped gender roles in textbooks (e.g., Law \& Chan, 2004; Lee \& Collins, 2010).

With regard to settings, the results of this study showed that male characters were seen more often in outdoor settings and female characters were more often at home, the traditional setting for females. The representation of female characters in the textbooks does not reflect the reality of Jordanian society today, as many Jordanian women now
pursue careers. However, the textbooks continue to stereotype women as passive agents of society.

The linguistic analysis was encouraging in that textbook writers have started to use nonsexist writing strategies, including the alternative pronouns sets he/she and him/her to create gender equity. However, the continuing practice of depicting men as models for human representation means that women are reduced to a "subsumed," "invisible," "secondary," or "marked" status (Lee \& Collins, 2009, p. 46).

The results of pictorial analysis confirmed that male and female characters continued to be portrayed stereotypically in the textbooks. Male and female characters were primarily portrayed in gender stereotypical occupations: The majority of males were primarily portrayed in high-status jobs such as pilot, doctor, or lawyer, while female characters were depicted as teachers, housewives, or nurses. No females were portrayed as aristocrats, athletes, or government personnel. This lack of visibility of women in high-status occupations reinforces the traditional belief that men are more vital in society (Lee \& Collins, 2009). Although the textbooks portrayed men and women in traditional stereotyped gender roles, women today fulfill many other roles in Jordanian society, such as judge, police officer, or lawyer (Al-Mahadin, 2004; AlTaweel, 2005).

Male characters were depicted as being more active and involved in sports, and the number of pictures showing male characters at play was about twice the number for female characters in all of the textbooks. The largest number of illustrations about females featured mothers spending free time with their children. These findings align
with those in other studies (Al-Taweel, 2005; Ansari \& Babaii, 2003; Lee \& Collins, 2010).

The interesting aspect about the representation of women in these textbooks is that they do not depict females as working members of current Jordanian society. Today's modern Jordanian women have more control and authority over their environments than did their ancestors; they travel outside the country to pursue higher degrees, they attend schools, and they work in all occupations. They are pilots, engineers, ministers, teachers, taxi drivers, doctors, nurses, and judges. Despite this reality, the images of females in the reviewed textbooks were stereotypes of men and women in historically traditional roles (Al-Taweel, 2005).

As Al-Mahadin (2004) stated, "It is no secret that producers of most school curricula are males, thus the 'dialogue' is mediated, orchestrated and produced by a male author" (p. 79). Textbook writers can and should play an important role in eliminating gender discrimination by offering a more balanced representation of both genders, making women more visible and reducing the number of stereotypical images. Balanced and fair representations of both females and males in textbooks involves changes in authors' perceptions of women's roles and activities and fairly representing the roles of women and men in society at large. Textbook authors should be aware of how boys and girls understand and perceive what is illustrated in textbooks. The ministry that is responsible for design of learning materials should insist on a balanced, modern approach that reflects the Jordanian Constitution and the wishes of King Abdulla II and Queen Rania, who have advocated for the cause of women.

One reason for low visibility of females and their depiction in stereotypical roles could be a reflection of the writers' ideology. Gharbavi and Mousavi (2012) noted that "writers may consider women as unequal to men. They may believe that women cannot play determining roles in their society, due to their physical or psychological nature" (p. 45). If this attitude is truly present, either current textbook writers must be led to reexamine their ideas or new writers should be found.

Another important issue to consider is increasing the number of female authors for the textbook writing, editing, and production. Although the mere presence of a female writer offers no guarantee that females will be given greater exposure in a textbook, unconscious bias can affect the content of a book (Osier, 1994). Ultimately, the decision rests with publishers and publishing companies, perhaps prodded by the government, to include females in nonstereotypical roles in textbooks.

The present study calls for action to increase awareness of gender stereotyping in educational textbooks and calls for educators to recognize both obvious and subtle forms of sexism. Educators should become active in dealing with gender stereotypes in educational settings because gender inequities in schools have the ultimate impact of limiting the potential of all students.

Despite the fact that in Jordan progress has been made in women's rights issues, more must be done. For example, Jordanian women have advanced and currently enjoy legal equality on issues such as health care, political participation, and education (Husseini, 2010). Advancements in education have been achieved by providing opportunities for girls at the primary, secondary, and higher levels of education (Jansen,
2006). As a result, Jordan has some of the highest rates of literacy rates and female school enrollment in the Arab world (Al-Mahadin, 2004). This has created opportunities for females to become part of the work force and productive members of society. Many females now enter the work force upon graduation from university, and female participation in the Jordanian labor force increased from $10.7 \%$ in 1990 to $18.2 \%$ in 2011 (Jordanian Department of Statistics, 2011). However, the findings of this study demonstrate that textbooks do not represent the changing status and role of women in the Jordanian society. Unfortunately, these biased learning materials could send subliminal messages to girls that they do not need a formal education because the type of employment for which they are fated does not demand it.

Analysis of the textbooks showed that the portrayal of females' roles is concentrated in education, health, social, and family fields and that females are not typically shown in the scientific, political, religious, and athletic spheres. These presentations reflect traditional viewpoints that keep females in an unequal status, even as they contradict real life in Jordanian society (Al-Mahadin, 2004). While Jordanian women actually hold positions in Jordan, including, police officer, parliament member, judge, government minister, pilot, lawyer, doctor, therapist, and taxi driver, textbook authors have not acknowledged these facts of modern Jordanian society (Al-Mahadin, 2004). Textbook authors should be asked not only to consider the realities of the society in their portrayal of male and females in textbooks but also to combat sexist language and gender stereotyping and promote gender equality. Changes in new textbooks should not merely be cosmetic; they should reflect the findings of this study.

Investigation of gender representation in textbooks is one way to raise awareness of the issue of gender equity and create a more acceptable notion of the world and the place of women in it. All who are involved with textbook creation must recognize that the development of unbiased gender portrayals in texts must be directed to selection and integration of photographic and textual materials that present a balanced range of women's activities. The visual and textual content should account for the wider context of women in today's society and illustrate women's experiences and changing status in that society (Reese, 1994).

The study has implications for syllabus designers and material developers who are involved in improving the presentation of gender equality in text and illustrations used in textbooks. Material developers and syllabus designers must create a more balanced presentation of male and female characters, domestic and occupational roles, societal activities, and ratio of male-to-female presentations.

In today's education system in Jordan, teachers have a progressively larger and more active role in the education of students. They could address the issues of gender stereotyping found in their students' textbooks in the classroom. The study findings call for teachers to develop an awareness of the type of gender representations to which middle school students are exposed. Similar studies of other subject areas in Jordan should be conducted to raise the awareness in textbook writers and publishers, with the hope that they will be led to contribute to elimination of traditional hidden messages of male supremacy and to promote gender equity.

Future research could examine how teachers deal with gender stereotypes in current textbooks and how students respond to those stereotypes. Sunderland, Cowley, Rahim, Leontzakou, and Shattuck (2002) stated that, because reader response is not evident and is challenging to investigate, attention should focus on the ways in which teachers might contravene traditional gender roles in their use of texts in the classroom.

Curriculum materials should reveal societal realities and broach this subject in education and gender awareness matters. These include traditional representations of women and men in illustrations and texts that send a message that a woman's place is in the home and that man's place is to work and earn the family's living because he is viewed as being more competent. Because the findings of the present study show that females continue to be underrepresented in critical ways in English language AP6, AP7, and AP8 textbooks in Jordan, it is important to increase the portrayal of women in areas of leadership and in political and economic roles.

## Implications and Future Research

Gender stereotypes limit girls and boys to certain modes of behavior, courses of study, and career choices, thereby preventing them from realizing their full potential (AlMahadin, 2004). Such gender stereotyping in textbooks can send incorrect messages to students, hindering their learning experiences and knowledge development. The present study sheds light on the extent of gender stereotyping in Jordanian middle school English language textbooks.

The JMOE is chiefly responsible for administering the national curriculum. It is in charge of the design and development of the primary, middle, and secondary school
curriculum. The JMOE must play a more active role in eradication of gender stereotyping in school textbooks by establishing new guidelines and procedures to evaluate the quality of textbooks in terms of gender.

The JMOE should provide training programs for teachers, administrators, and JMOE personnel designed to help participants to increase awareness of gender biases in instructional materials. Jordanian educators must be trained to enhance their awareness of the potential harm in gender-biased textbooks.

Textbook publishers and writers should recognize the changing roles of Jordanian women and their increasing contributions to society. Textbook authors and publishers must be made aware of research on character portrayals in textbooks, as well as research on the effects of gender-stereotyped reading materials on Jordanian students; they must utilize that knowledge to publish textbooks that provide positive images for women. Teachers must be encouraged to go beyond their textbooks by providing nonbiased supplementary reading materials to students. No matter how carefully a textbook is designed, utilization eventually depends on the teacher's application of that textbook. Teachers should be encouraged to go beyond textbooks and engage in classroom discussions, without a fear of reprisal that would silence their voices.

To help with this change, future research might consider: (a) replicating this study in other subject areas to verify the generalizability of the findings, (b) comparing the English language textbooks in various grades, and (c) collecting interview data to gain insight into how gender stereotypes in textbooks affect students, particularly girls.

Data could be collected to learn how unbalanced learning materials affect students' school experiences, career choices, and future decisions.

This research study was important because, to date, gender role portrayal of women has not been investigated in the context of middle school textbooks in Jordan. Thus, this study adds to emerging literature related to gender and equity in school textbooks.

## CHAPTER III

## STUDY 2: AN EXPLORATION OF JORDANIAN TEACHERS' BELIEFS ABOUT GENDER STEREOTYPES

In 1989, two researchers from the Brisbane College of Advanced Education, Christensen and Massey, published an article about teachers' attitudes regarding gender matters. In the introduction to this work they stated, "It appears that, although policy initiatives have attempted to reduce gender discrimination in schools, real change has been somewhat elusive, very slow and in some ways superficial" (Christensen \& Massey, 1989, p. 257). More than 25 years have elapsed since those comments were made and yet educators still confront these issues. Esen (2013) noted that stereotypes begin to be acquired by students in their preschool years. However, teachers' tendencies do little to lead students to rethink their beliefs about these stereotypes. Instead, teachers tend to ignore the influence of sexist stereotyping in influencing students' educational and professional choices, tendencies that further contribute to inequalities.

Although research indicates that most teachers intend to teach all children equitably, in actual practice boys and girls often receive different treatment in the classroom. Research shows that teachers call on boys more often than girls; wait longer for boys to answer; and provide more feedback and more accurate feedback to boys, even when behavior is comparable between genders (DeZolt \& Hull, 2001; Fennema, 1990; Frawley, 2005; D. Sadker \& Zittleman, 2005; She, 2001).

Teachers play a critical role in students' lives and in shaping students' identities, especially in students' formative years (LeMaster \& Hernandez-Katapodis, 2002; D.

Sadker, Sadker, \& Zittleman, 2009). Although other factors are influential in students’ lives, such as society and family, teachers appear to be especially significant in that they play a key role and "have enormous influence on their students' self-perceptions of esteem and academic ability" (Tracy \& Lane, 1999, p. 94). Even more important, as reported by Zaman (2007), teachers have the ability to lessen, and even neutralize, gender bias in their classrooms and can take steps to prevent children's gender stereotypes. In order to construct a gender-balanced school atmosphere for students, teachers must be aware of and focus on necessary modifications to their own biased beliefs (Erden, 2009; Masland, 1994; Tatar \& Emmanuel, 2001).

Gender bias is present in the classroom partly due to gender-specific attitudes and beliefs held by teachers regarding their students (D. Sadker et al., 2009; Tatar \& Emmanuel, 2001). In a study of equity in teaching behaviors, Tracy and Lane (1999) stated,

Teachers of all experience levels exhibited gender-biased teacher behaviors. When teachers behave in a sexist manner, knowingly or not, they contribute to students' development of sexist beliefs related to affective and cognitive abilities. The cumulative effect of inequitable teacher behaviors may help to create girls who are academically passive and boys who are socially underdeveloped. (p. 94) Considerable research has been conducted regarding gender stereotyping in various fields and in multiple countries and regions (e.g., Erden, 2009; Eslami, Sonnenburg, Ko, Hasan, \& Tong, in press; D. Sadker et al., 2009; Tatar \& Emmanuel, 2001; Wood, 2012). However, little research has focused on the beliefs of teachers with
regard to stereotypes in the Middle East and North Africa (MENA; World Bank, 2014) region in general and in Jordan in particular. The current study was designed to fill this gap in the literature by exploring how Jordanian teachers perceive gender roles and by investigating their beliefs regarding gender role stereotypes.

## Literature Review

The primary focal points of the present study involve teachers' beliefs about gender role stereotypes in various domains, such as educational, domestic, professional, and adult social domains. The unique elements of the study are its location and its comparisons of findings across three lenses: the independent variables of teachers' gender, school type, and grade level. This section begins with a conceptual framework that defines the concept of "beliefs," then examines existing literature about gender stereotyping in general, the potential impact of those stereotypes in the classroom, and the role that teacher attitudes and beliefs play in development and maintenance of those stereotypes. Finally, a review of the major works on which the present study was modeled is presented.

## Beliefs

Psychologist Milton Rokeach was a prominent researcher who contributed significantly to the understanding of beliefs and attitudes and their importance and association with individual values. He defined beliefs as "inferences made by an observer about underlying states of expectancy" (Rokeach, 1968, p. 2). He expanded this definition in the same work, calling beliefs "any simple proposition, conscious or unconscious, inferred from what a person says or does, capable of being preceded by the
phrase 'I believe that . . ."' (p. 113). Psychologist Daniel Katz (1960) stated that beliefs are "a description and perception of an object, its characteristics, and its relationship with other objects" (p. 163). A prominent scholar in the field of education, John Dewey, described belief as "something beyond itself by which its value is tested; it makes an assertion about some matter of fact or some principle or law" (Dewey, 1933, p. 6). Dewey acknowledged the importance of belief as critical because
it covers all the matters of which we have no sure knowledge and yet which we are sufficiently confident of to act upon and also the matters that we now accept as certainly true, as knowledge, but which nevertheless may be questioned in the future. (p. 6)

This study focuses on beliefs as the primary measure. Because the instrument for this study was a survey, no observations of behaviors nor questions about behaviors were considered herein. Values, as defined by Hofstede (1991) in his work on cultures and organizations, are those things that are implicitly held as truths but often remain unconscious, making them difficult to identify by internal consideration or external observation, so values were also not the best primary measure for the study. Rokeach (1968) explained attitudes in terms of beliefs, defining attitude as a "relatively enduring organization of beliefs around an object or situation" (p. 112), thus depicting attitudes as consisting of subsystems of beliefs. Rokeach's (1968) description of beliefs as observable and inferable, Katz's (1960) definition that focuses on relationships, and Dewey's (1933) acknowledgement of the criticality of belief all serve to make belief the optimum measure and the most accurate term for what was measured in this study.

## General Gender Stereotyping

Gender stereotyping is established in many places, including the home, school, and work place (Pinias \& Sharon, 2013). While schools are seen as places where females can learn, experience growth, and feel empowered, two other facts are equally clear: First, educational institutions do not always hold up to these standards; second, school is not the only place where stereotyping, both intentional and unintentional, is prevalent. Understanding general perceptions of gender stereotyping is important for this research because "teacher attitudes and values to issues of gender and sex-role stereotyping are often deeply rooted in traditional social attitudes [that can] constitute a potent force in creating discriminatory school practices" (Christensen \& Massey, 1989, p. 257).

In their study conducted in Zimbabwe, Pinias and Sharon (2013) identified factors outside of the educational system that exert a negative influence on girls' educational opportunities. In the home, girls often work in the kitchen and take on duties that have them serving others. Boys, on the other hand, are allowed more freedom but also grow up with strong perceptions about their roles as breadwinners.

In a 2011 report from Jordan on the Education Reform Support Program (ERSP), one of the program components provides internship opportunities to student participants. In a section called "Challenges," the report stated, "Gender was an obstacle in the internship program; some parents (especially in the rural areas) didn't want their daughters to participate in certain workplaces such as hotels" (USAID Jordan, 2011, p. 19).

Social and cultural impacts can also affect general perceptions of gender identity, sometimes in slight and sometimes in more significant ways. In a study that compared Arab and Jewish women in Israel (D. Moore, 2004), differences in gender identity were noted between the two groups. Jewish women, in general, had nontraditional gender identities marked by the fact that they were less religious, had smaller percentages who were married, had smaller families, were more highly educated, and had higher employment rates. The Arab women, on the other hand, were more traditional, indicated by the facts that they were more devout, with a larger percentage who were married, had bigger families, had lower levels of formal education, and fewer of whom worked outside the home.

In other studies about the role of gender in the Arab world (Aswad, 2005; Joseph, 2005), the authors noted that the gender system in the Arab world privileges males and elders. According to Joseph, females are taught to "respect and defer to their fathers, brothers, grandparents, uncles, and at times, male cousins" (p. 195). Joseph also pointed to the role of women as having interests that are embedded in those of others, a perspective which encourages women to view their own interests as being linked to those of their male kin, which results in reinforcement of the patriarchal hierarchy. "Given the centrality of family, its patriarchal structure is crucial in understanding gender relationships in the Arab world . . . family both supports and suppresses women" (p. 201). This paradox of support and suppression, love and power, generosity and competition, compels both attachment to and struggle within families.

A society often allocates characteristics and abilities to individuals on the basis of gender. For example, in most societies men are labeled as successful, responsible, self-confident, strong, independent, and aggressive, while women are labeled as nurturing, passive, emotional, and warm (Bem, 1974). Some of society's definitions of the male role stress competence and mastery, while the female role is defined as dependent and submissive. As a result, people teach and rear their children according to the expectations and identifications that society establishes. Butler (1999b) indicated that gender should be comprehended by understanding psychological acts rather than mere outer performance. Butler was concerned that outer performance of gender is a manifestation that reflected only social demands.

## Sources of Gender Development

The two constructs of gender and sex have been a long debated matter and at times conflated. According to West and Zimmerman (1987), gender is not a feature with which one is born or something that is possessed; rather it is something that one does, acts that one performs. While some scholars argue that biological differences are a fundamental component for gender differences, others argue that sex differences do not justify gender differences (Butler, 1990a). Sex differences are determined by nature but gender differences are taught by culture; inequality is not born, it is nurtured. According to Butler, gender is by no means attached to physical bodily facts; rather, it is specially and solely a social construction-a fictional one that, therefore, is open to challenge and change.

Gender learning starts early and is a gradual progression over many years; it goes through several stages (Kohlberg, 1966; Ruble, Martin, \& Berenbaum, 2006). Most children develop the ability to label their own and others' gender at 18 to 24 months (Steensma, McGuire, Kreukels, Beekman, \& Cohen-Kettenis, 2013). This is followed by distinct preferences for stereotypical toys (e.g., trucks for boys, dolls for girls) and play behaviors (rough play by boys, cooperative play by girls), and a gradual increase in preference for same-sex playmates (Steensma et al., 2013). Gender stereotyping materializes with development of gender learning in early childhood (Halim \& Ruble, 2010). "Gender stereotypes are beliefs about the characteristics or attributes of men and women that distinguish the two gender groups from each other" (p. 500). Studies have identified that fundamental stereotypes develop by about 2 years of age (Halim \& Ruble, 2010; Kuhn, Nash, \& Brucken, 1978), and many children develop basic stereotypes by age 3 years (Halim \& Ruble, 2010). With age, the range of stereotypes about sports, occupations, school, and societal roles expands; the nature of these associations becomes more subtle and sophisticated, but persists throughout life (Sinno \& Killen, 2009).

The role of schooling in the formation of gender-related attitudes is acknowledged in educational, psychological, and anthropological literature (LeMaster \& Hernandez-Katapodis, 2002). Schooling is one of the most important socialization processes for a child, outside home and family. Consequently, schools and teachers play a critical role in student lives in the shaping of a student identities, especially in a student's formative years (LeMaster \& Hernandez-Katapodis, 2002; Kobia, 2009; M. Sadker \& Sadker, 1995). The beliefs held by teachers that find their way into the
classroom are only some of the numerous environmental influences that influence socialization into adult and gender roles. Other common influences are families, media, peers, and school experiences, including the learning materials used in the classroom (Zittleman \& Sadker, 2002a).

## Teachers and Gender Role Stereotypes

Although parents remain the first and most important socialization agents, the teacher becomes an important adult figure in a child's life once the child begins school (Erden, 2009; Zosuls, Miller, Ruble, Martin, \& Fabes, 2011). Teachers directly influence what and how much students learn, as well as how students interact with each other and with the people around them (Korkmaz, 2007). When students disagree or clash, they call on their teacher to be the "judge." Teachers, like parents, convey their own gender role expectations to children, positively reinforcing behaviors that they deem to be correct and punishing those that they deem to be inappropriate (Erden, 2009). Thus, a teacher not only educates but also transmits norms, values, and traditions shared in a society.

Research from the past 20 years consistently reveals that males receive more teacher attention than do females (Case, 2007; Sunderland, 2000a). The pattern starts in preschool, with teachers giving more attention, more instructional time, and more hugs to male students; this behavior persists through the 12th grade (Ebbeck \& Reus, 2006). Research has also demonstrated that, from preschool on, activities that are chosen for classes are more likely to appeal to boys' interests and presentation formats are those in which boys excel or are encouraged to participate in more than are girls (Ceci \&

Williams, 2009). Investigators have found that in classroom interactions teachers ask males academically related questions about $80 \%$ more often than they ask females (Zittleman \& Sadker, 2005).

Research studies have indicated that, although most teachers want to treat students equitably, they often unintentionally treat male and female students differently in terms of interaction (Erden, 2009; Hendrick \& Stange, 1991; Moss-Racusin, Dovidio, Brescoll, Graham, \& Handelsman, 2012). For example, a study by M. Sadker and Sadker (1995) demonstrated how a sixth-grade science teacher's reaction to a student's observations revealed the teacher's gendered, stereotyped beliefs and how they affected his interactions with the children.

The male teacher was writing a list of inventors and their inventions on the board. A female student, noticing that all of the inventors were men, asked the teacher whether women invented anything. The teacher answered, "Sweetheart, don't worry about it. It's the same with famous writers and painters. It's the man's job to create things and the woman's job to look beautiful so she can inspire him" (p. 7).

This gender-biased message from a teacher could not only damage self-esteem and motivation in female students but reinforce gender stereotypes in the male students in the classroom.

Although gender discriminations and biases are present from elementary to postsecondary classrooms, research supports the theory that these are mostly unintentional biases that tend to result from exposure to cultural stereotypes that portray
men and women with gender-based characteristics or traits (Moss-Racusin et al., 2012). That study in particular noted that female teachers were just as likely as male teacher to favor male students. However, it is most likely that these biases are unintentional, on the part of both female and male teachers, and "generated from widespread cultural stereotypes" rather than from any conscious motive aimed female students (p. 16477).

According to Ebbeck (1984), males call out answers 8 times more often than do females in the elementary and middle grades. Teachers typically listen to boys' comments when they call out but girls are usually corrected (Zittleman \& Sadker, 2002b). Zittleman and Sadker (2005) found that teachers were more likely to request responses from males when they call out answers. Warin (2000) reported that teachers exhibited appreciation for, and felt more akin with, students who exhibited "an earlier grasp of gender constancy" (p.228), that is to say, those who had a clear culturally appropriate masculine or feminine performance, depending on their gender. Dobbs, Arnold, and Doctoroff (2004) reported that teachers praised and rewarded girls more than boys for what the teachers considered gender-appropriate behavior and that they most often asked questions of, and looked to, male students for response.

Teachers give boys more praise, criticism, encouragement, and permission for strategy use than they give girls. Teachers often view boys' rebellious invented strategies as signs of a promising future in math and unconsciously control girls more than boys. (Lavy, 2008, p. 2085)
D. Sadker et al. (2009) noted that some teachers tend to ask female students lower-order factual questions while reserving higher-order critical thinking questions for
male students. M. Sadker and Sadker (1995) found that teachers responded differently to boys and girls when they disrupted class by "calling out" answers to questions. When boys called out, the teachers accepted their answers. However, when girls called out, the teachers corrected their behavior and asked them to raise their hands. In a similar study conducted 10 years later, D. Sadker and Zittleman (2005) noted that the teachers called on boys more often, waited longer for boys to answer, and gave feedback to boys that was more precise; "they also punish[ed] boys more than girls, even when their behavior [was] similar" (p. 30). In spite of their best intentions, not only do teachers call on boys more; they allow boys more time to compose answers and provide them with feedback that is more precise (D. Sadker \& Zittleman, 2005). Similarly, teachers sometimes perpetuate male dominance in the classroom when (often unconsciously) they make males the focus of instruction by giving them more frequent and meticulous attention (D. Sadker, 2000).

Beck (1995) found that in a seventh-grade biology class teachers interacted more frequently with male students than with female students. In addition to differential frequency, the content of the interactions was different. Chick et al. (2002) reported that teachers often emphasized girls' hairstyles and clothing and used gender-biased language, such as referring to students as "you guys." Hall and Sandler (1984) found that some teachers interrupted female students more often than male students or allowed others to interrupt female students easily during class discussions. Teachers praised female students for being polite and waiting their turn (Eccles \& Jacobs, 1986), as well as for their neatness (D. Sadker \& Zittleman, 2005). The quality of teacher contact often
varies by gender, with males receiving more praise, criticism, and remediation from teachers (D. Sadker et al., 2007).

Societies share beliefs about how males and females should behave (Erden, 2009). Because teachers are the products of the societies in which they work, they consequently reflect those shared perceptions, attitudes, and anticipations that include stereotyped beliefs about the roles of females and males, perceptions about student skill sets, and expectations about performance. In all, different expectations by teachers for their male and female students shape and modify the students' intellectual development and limit their capacity to achieve full potential (Edge, Fisher, Martin, \& Morris, 1997). In their book Still Failing at Fairness, D. Sadker et al. (2009) noted that "gender bias was not about girls only: boys were also being shortchanged and convinced to an even tighter gender role of what was, and was not, acceptable behavior" (p. 5).

Several researchers have examined the effect of teachers' gender stereotypes on their students, specifically in the areas of mathematics and sciences (Fennema, 1990; Halpern et al., 2007; Moss-Racusin et al., 2012; Pinias \& Sharon, 2013; Scantlebury, 2006; Tiedemann, 2002). Halpern et al. (2007) described the significant influence that teachers can have on students, reporting, for example, on research indicating that teachers' preconceptions about talent in mathematics (identified early in the year) actually predicted students' later achievements in the subject.

Research into the effects of gender stereotype on elementary school mathematics students confirmed Tiedemann's (2002) first hypothesis, that teacher beliefs about student abilities "show a clear perceptual bias that could be more detrimental to girls'
achievement than to boys'" (p. 58). The second hypothesis, that the teachers' gender stereotypes interactions with the sex of the student are a significant predictor of student achievement, holds possibilities for future directions in building on the current research.

Shepardson and Pizzini's (1992) work on female elementary teachers' perceptions of scientific ability in students noted that differential education treatment toward girls and boys results in performance discrepancy between genders. Baker (1986) reported that in secondary school science classrooms precise teacher comments were directed to males more often than to females in terms of both scholarship and conduct. Kahle (1990) documented that teacher-student interactions in science classes were particularly biased in favor of boys.

Many studies have been designed to determine the results of differing treatment of students based on what is considered gender-appropriate behavior. Brody (1998) stated that teacher beliefs influence classroom conduct, planning and delivery of teaching, and the learning from their own teaching practices. Fennema (1990) stated that classroom instruction is determined by the decisions that teachers make, which are directly influenced by their beliefs. Whether intentional or unintentional, teacher biases are influential and can send clear and potentially harmful messages as impressionable students are forming their beliefs. These biases can limit students' interests and goals, reduce their potential, and undesirably affect their growth and development (Edge et al., 1997).

## Previous Studies and Frameworks

The present study is modeled after three previous works, with the intention of filling gaps and comparing and contrasting study findings. The first two studies were conducted by Christensen and Massey (Christensen \& Massey, 1989; Massey \& Christensen, 1990). The first study (1989) utilized a 32 -item survey related to "commonly held stereotypes of role-appropriate female and male behaviour" (p. 260). Items were based on a 5-point Likert-type scale with one end of the scale representing "an egalitarian perspective" and the other representing "a traditional perspective" (p. 262). Although well designed and implemented, the study was nonetheless limited in scope as it involved only teachers enrolled at a college of advanced education in Queensland, Australia. Given the date, location, and survey population, a follow-up survey seemed appropriate.

Massey and Christensen (1990), apparently in an effort to confirm the previous year's research, conducted the second study on student teacher attitudes to sex role stereotyping, using the same survey instrument as was used in the previous study. As expected, the findings were quite similar to those of the previous study, both studies pointing to "many areas that need to be addressed if schools and society are to operate on principles of equity, free from bias and discrimination" (p. 106). The primary differences between the two studies involved sample size ( $N=751$ in 1989, $N=461$ in 1990) and different methods of data analysis.

The third research study to contribute to the framework of the current research was conducted by Tatar and Emmanuel, reported in a 2001 work titled, "Teachers'

Perceptions of Their Students' Gender Roles." Although built on the cited studies by Christensen and Massey, there were significant differences in this study. Survey respondents were teachers from elementary and secondary schools in Israel, and the original 32 items were reduced to 21 items, which were then converted into two types of statements: 21 items examined teacher attitudes and 20 items examine actual teacher behaviors. The Likert-type scale was used as before, with one end representing egalitarian perspectives and the other representing traditional perspectives. However, the focus of the study was on comparisons between similarly worded items that reflected attitudes versus behaviors, rather than on comparisons between by gender, grade level, and school type, or comparisons across domains. Therefore, the study contributed somewhat to the present study but was not as useful (not as similar) as the two studies by Massey and Christensen.

## Context of the Study

Jordan, a small country in the Middle East, has made a commitment at the highest levels to provide equal rights to all citizens in general and to women and children in particular. Ever since Jordan gained its independence from the British in 1946, persistent endeavors have been made to place the country on the world map. The current commitment is demonstrated in efforts and speeches by King Abdullah II Al-Hussein and Queen Rania Al Abdullah. In 2005, at the first session of the Fourteenth Parliament, King Abdullah II emphasized the importance of Jordanian women's participation in all aspects of political, social and economic life, pointing out that women's participation in such fields would lead to wide-ranging development. King Abdullah expressed a firm
belief that "comprehensive and sustainable development can only be achieved through the active participation of women" (as cited in Al-Miqdad, 2006, p. 3).

Queen Rania has given attention and care to family-related issues in general and to women and children in particular and has continuously followed up with institutions working in this area. To create an environment in which both men and women can thrive requires changing attitudes and expectations of male and female students, employers, and workers. Queen Rania heads efforts to adopt a holistic approach to national education, encouraging agencies and organizations to work on classroom quality, teaching standards, and computer access. Through initiatives such as Madrasati and the Teachers Academy, Queen Rania is helping Jordan's children to get the best start in life by repairing and revamping local schools, while inspiring teachers to be their best (Queen Rania Teacher Academy [QRTA], 2014) .

Education in Jordan generally starts with 2 years of preschool, although preschool is not mandatory; first grade, on the other hand, is required (Al-Hassan \& Lansford, 2009). After preschool, students enter a compulsory 10-year basic education program, then move to either secondary school or vocational education. Secondary school is only 2 years in length; at the end of 2 years, the students sit for an examination. Students who pass the examination receive a secondary school certificate, or Tawjihi (JMOE, 2010). Education in public schools in Jordan is free for all students, while tuition in private schools is often high. Parents generally consider education in private schools to be of better quality than in public schools and are often more willing to spend money for private school education (Jansen, 2006).

Arabic is the official language and the main language of instruction in Jordan. Jordanian students also study a foreign language (English), starting in first grade and continuing through secondary school (JMOE, 2010). The male literacy rate in Jordan is $98 \%$ and the female literacy rate is $97 \%$.

One publicly articulated objective of the Jordanian education system is to offer a learning environment in which all students can attempt to achieve their potential. In spite of that goal, gender inequality is shown in educational differences in male and female student achievement, ambitions, and self-evaluation. For example, females are often directed into generalist streams, which are the literacy and vocational streams, and not the scientific option (PRAVO, 2012). This situation, which contravenes articulated government policy, often deprives girls from taking part in learning that will serve them in some sectors of the work force. It also creates significant gaps in future employment prospects and income potential as compared with male peers (USAID Jordan, 2012). Given the significance of attitudes toward gender roles as one influential factor concerning teachers' differential behaviors and discrepancies in achievement, relatively few studies have addressed the issue of teachers' beliefs and attitudes regarding gender roles, particularly among Jordanian teachers. The main purpose of this study was to close that gap in the existing literature by examining Jordanian teachers' beliefs about gender-related issues.

## Purpose of the Study

The purpose of this study was to investigate Jordanian teachers' beliefs regarding gender role stereotyping. Furthermore, the relationships according to teachers' gender
(male versus female teachers), school type (public school or private school), and school level (primary school or secondary school) to gender role beliefs were examined. Similar to the cited previous studies (Christensen \& Massey, 1989; Massey \& Christensen, 1990), a survey instrument was used to examine teachers' gender stereotype beliefs.

In order to accomplish the purpose of this study, three research questions were examined:

1. Are there significant differences between male and female teachers' beliefs about gender role stereotypes?
2. Are there significant differences between public school teachers' and private school teachers' beliefs about gender role stereotypes?
3. Are there significant differences between primary school teachers' and secondary school teachers' beliefs about gender role stereotypes?

For the purposes of this study, gendered role beliefs were considered to range on a continuum from traditional, with an emphasis on gendered division of labor and childcare, to egalitarian, with more balanced views of equal opportunities for men and women in education, employment, and caregiving (Davis \& Pearce, 2007; Seginer \& Mahajna, 2004). Persons who embrace traditional gender role beliefs regard a woman's primary role to be homemaker and a man's chief responsibility to be family wage earner. In contrast, those with egalitarian gender role beliefs support that women and men should share in financial support of the family, household labor, and child care (Corrigall \& Konrad, 2007).

As Matud (2004) stated, socialization practices stimulate a traditional role for women that is manifested by low levels of assertiveness and an emphasis on showing, dependence, emotion, affiliation, and attending to the needs of others. These socialization patterns are in contrast to roles that are traditionally considered proper for men, which encourage assertiveness and which are expressed through autonomy and self-confidence. As people are gradually exposed to such role models, these socialization patterns from childhood are continuously reinforced (K. Williams \& Kurina, 2002).

## Independent Variables

This study explores the differences between teacher beliefs in relation to three variables: gender, school type, and grade level. Previous studies have indicated differences between male and female teachers' gender role attitudes in classrooms. School type (private versus public) and grade level (primary versus secondary) might also reflect differences in teachers' beliefs about gender. For example, Tatar and Emmanuel (2001) explored differences between primary and secondary school teachers’ attitudes, noting that previous investigations had "resulted in no consistent indications" (p. 217) in those groupings, so that dichotomy was explored here, as well. Previous research has reported significant differences between public and private schools and the ways in which their structures (Al-Natour \& Hijazi, 2012) are associated with measurable differences in teachers' beliefs, so that dichotomy was explored in this study.

## Teachers' Gender

Teachers play a critical role in students' lives and in shaping students' identities, especially in the formative years (Cushman, 2009; LeMaster \& Hernandez-Katapodis,

2002; D. Sadker, Sadker, \& Zittleman, 2009; Wood, 2012). Tracey and Lane (1999) reported that teachers at all instruction levels demonstrated gender-biased teacher behaviors. When teachers behave in a sexist way, whether or not intentionally, they contribute to students' development of sexist beliefs. The cumulative effect of inequitable teacher behaviors may help to develop girls who are academically passive and boys who are socially underdeveloped. These studies suggest that significant differences may be present in male teachers' attitudes versus female tecahers' attitudes and that these differences could significantly influence students' attitudes about gender roles.

## Public Versus Private School Teachers

In contrast to private schools, public schools in Jordan are gender segregated, a factor that would suggest possible differences between teachers' perceptions with regard to gender roles because of the more liberal teaching style in the private schools. In addition, a main difference between the two schools systems is the socioeconomic status of the learners. Since public school education is provided free to learners and, given the high cost of private school education, those who can afford the private system send their children there. Al-Natour and Hijazi (2012) noted that parents tend to send their children to private schools because of the better quality and learning opportunities offered by private schools and the higher education levels of their teachers. In addition, the resources devoted to those classes, in the form of teachers and materials, are of higher quality (Al-Natour \& Hijazi, 2012). Hence, given the clear differences between public
and private school teachers, it was important to investigate teachers' gender role beliefs according to their school type.

## Primary Versus Secondary School Teachers

The attitudes and beliefs of both primary and secondary school teachers with respect to the gender roles of their students have been investigated extensively (Eccles, 1989; Elwood \& Comber, 1996; M. Sadker \& Sadker, 1986; Shepardson \& Pizzini, 1992).

Elementary teachers were generally unaware of the influences of gender stereotypes in their classrooms. However, many researchers found that consistent differences in scholastic attainment of male and female students appeared only in secondary schools. That finding may indicate that, in general, secondary school teachers are more discriminatory compared with their elementary school counterparts. (Tatar \& Emmanuel, 2001, p. 216)

Tatar and Emmanuel (2001) speculated that the effects of stereotyping in elementary schools might require time for their full influence to emerge.

Schwendenman (2012) found that teachers at the K-4 grade level tended to treat students equally regardless of gender. However, in the upper grade levels (5-8 and 912), teachers attributed masculine and feminine gender expectations to the students. More flexibility and less rigidity of gender role expectations appeared at the lower grade levels. Tiedemann (2002) stated, "Gender differences are more prevalent among older students and seem to increase as students' progress through school" (p. 50). This is likely unsurprising, along with findings of more gender role structures at the higher
grade levels. Teachers naturally deal with gender roles more at the middle and upper grades than they do at the lower grades. However, few researchers have investigated the difference in beliefs between primary and secondary school teachers in Jordan. Taking into consideration that no previous studies could be found on this topic in the MENA region, the results of this study will add to emerging literature on this issue.

## Methodology

This section describes the methods used to study Jordanian teachers' beliefs about gender roles stereotypes. It presents the context and participants of the study, identifies the instrument utilized for collecting data, and describes procedures for conducting the study.

## Participants and Setting

The participants in this study were 484 teachers at 24 schools located within a 10-mile radius in Amman, Jordan (the nation's capital). The JMOE granted the researcher permission to approach 30 schools, 6 of which declined to participate due to professional development activities and end-of-semester testing activities, resulting in a response rate of $80 \%$ of schools. The JMOE informed the researcher that the schools were selected based on a random sampling of public and private schools, proportionally by geographic area in the area of Amman.

Of the 24 schools that participated, 9 were private schools, 8 were male public schools, and 7 were female public schools. From the 9 private schools, 205 of 316 (64.9\%) teachers agreed to participate in the survey (Appendix B provides response data). From the 8 male public schools, 175 of 270 (64.8\%) teachers agreed to participate.

From the 7 female public schools, 104 of $192(54.2 \%)$ teachers agreed to participate (Table 37). In total, 484 of a possible 778 teachers participated in the survey, for a total response rate of $62.2 \%$.

Table 37
Response Rate by School Type

| School type | Teachers | Respondents | Response rate |
| :--- | :---: | :---: | :---: |
| Private schools (9) | 316 | 205 | $64.9 \%$ |
| Male public schools (8) | 270 | 175 | $64.8 \%$ |
| Female public schools (7) | 192 | 104 | $54.2 \%$ |
| Total | 778 | 484 | $62.2 \%$ |

## Instrument

The survey instrument was adapted from a 32-item survey devised by Christensen and Massey (1989). The survey presented "commonly held stereotypes of role-appropriate female and male behaviour" (p. 260). A 5-point Likert-type scale was used: $1=$ strongly agree, $2=$ agree, $3=$ not sure, $4=$ disagree, $5=$ strongly disagree.

Each of the survey statements was categorized based on one of the following groupings (called "domains" by Christensen and Massey): educational role beliefs (ERB)—Items 1 through $11(n=11)$, domestic role beliefs (DRB)—Items 12 through 19 ( $n=8$ ), professional role beliefs (PRB)—Items 20 through $28(n=9)$, and adult social role beliefs (ARB)—Items 29 through $32(n=4)$. The four domains were developed by

Christensen and Massey (1989) and were used in their 1990 study. For consistency and comparison, the same domains were used in the present study. The ERB domain addresses stereotypes relating to education (e.g., Item 4, girls and university attendance). The DRB domain addresses stereotypes relating to issues of home and family (e.g., Item 13, final say of fathers). The PRB domain addresses stereotypes relating to the workplace and career choices (e.g., Item 24, men working for a woman boss). The ARB domain addresses stereotypes relating to gender and society (e.g., Item 31, women smoking). The survey (Appendix C) included three sections: (a) eight demographic background items, (b) 32 statements presenting "a variety of commonly held stereotypes of role-appropriate female and male behaviour" (Christensen \& Massey, 1989, p. 260), and (c) one open-ended question to allow respondents to provide additional feedback relating to the topic of the survey.

The first section of the survey (Items 1-8) asked the teachers about their backgrounds. The purpose of collecting this information was to provide for the possibility of examining the data based on various independent variables (teachers’ gender, school type, and grade level). The responses to the first section of the survey are summarized in Table 38.

Some items were modified slightly from the original (Christensen \& Massey, 1989) survey for the current study for three basic reasons. First, the cultural and social environment in Jordan rendered some statements inappropriate. For example, although there may or may not be measurable alcohol use in the population, the practice is widely viewed as unacceptable. Therefore, the original statement, "It is worse for a woman than

Table 38
Participant Backgrounds, Schools, and Classrooms ( $N=484$ )

| Survey item | Category | $n$ | \% |
| :---: | :---: | :---: | :---: |
| Gender | Female | 251 | 51.9 |
|  | Male | 233 | 48.1 |
| Highest level of education | Doctorate | 4 | 0.8 |
|  | Master's | 56 | 11.6 |
|  | Bachelor's | 384 | 79.3 |
|  | Diploma | 37 | 7.6 |
|  | Unidentified | 3 | 0.6 |
| School type | Public | 283 | 58.5 |
|  | Private | 201 | 14.5 |
| Years of teaching experience | $>=20 \mathrm{yrs}$ | 66 | 13.6 |
|  | 15 to <20 yrs | 81 | 16.7 |
|  | 10 to <15 yrs | 105 | 21.7 |
|  | 5 to <10 yrs | 145 | 30.0 |
|  | $<5 \mathrm{yrs}$ | 86 | 17.8 |
|  | Unidentified | 1 | 0.2 |
| Primary subject taught | Science | 108 | 22.3 |
|  | Language (English or Arabic) | 170 | 35.1 |
|  | Islamic studies | 42 | 8.7 |
|  | Mathematics | 73 | 15.1 |
|  | History and Social Studies | 46 | 9.5 |
|  | Other | 45 | 9.3 |
| Grade taught | PreK to 6 (Primary) | 122 | 25.2 |
|  | 7 to 12 (Secondary) | 361 | 74.6 |
|  | Unidentified | 1 | 0.2 |
| Age | 50 or older | 52 | 10.7 |
|  | 34 to 49 | 214 | 44.2 |
|  | 33 or younger | 218 | 45.0 |
| Classroom type | Female only | 219 | 45.2 |
|  | Male only | 116 | 24.0 |
|  | Mixed gender | 149 | 30.8 |

for a man to be drunk," was not considered to be culturally appropriate. The second adjustment to some of the statements was simply a rewording to adjust slang terms used in some items, such as "boys will be boys" (Massey \& Christensen, 1990) or "it's just boys being boys" (Tatar \& Emmanuel, 2001). This statement was changed for this study to "It is inappropriate for boys to play with dolls." The third adjustment consisted of attempts to reword items to make them as direct and simple as possible both for clarity and ease in translation. For example, the original "Boys more than girls need corporal punishment" became "Boys need more discipline than girls."

## Procedure

The survey was translated from English to Arabic because Arabic is the official language in Jordan. Translation was conducted by a professional Jordanian translator hired to perform this service, followed by back translation, the purpose of which was to ensure an accurate translation (Harkness \& Schoua-Glusberg, 1998). The back translation was performed by a bilingual educator who holds a doctorate and is proficient in both Arabic and English. The back translation confirmed that the Arabic version of the survey conveyed the same message as the English version.

The survey was administered by the researcher using a pen-and-paper method to gain a higher response rate. Teachers were asked to participate during their lunch breaks in the teachers' lounge and steps to maintain confidentiality were explained to them. The researcher remained and waited until the surveys were completed and then collected them. The teachers reserved the right to accept or decline to complete the survey. Each survey was completed in less than 30 minutes. The surveys were administered during

November and December 2014, during the regular academic semester at each school. Completed surveys were analyzed using SPSSTM Version 22.0. Analyses were carried out using both descriptive (primarily mean and standard deviation values) and referential statistics ( $t$ tests).

## Reliability and Validity

Reliability measures indicate the overall consistency of a measure .In this study, Cronbach's alpha was used to determine the inter-item reliability of the survey items. The reliability coefficient for all 32 survey items was $\alpha=.774$. George and Mallery (2003) proposed a widely accepted scale that categorizes the reliability of this value as "acceptable" $(\alpha>.7)$. In this study, the reliability coefficient for each domain was as follows: ERB Chronbach's alpha $=0.392(n=11)$, DRB Chronbach's alpha $=0.464$ $(n=8)$, PRB Chronbach's alpha $=0.634(n=9)$, and ARB Chronbach's alpha $=0.457$ ( $n=4$ ).

Validity describes how well a scientific test or a body of research actually measures what it sets out to measure (Black \& Champion, 1976). The researchers in the original studies replicated in this research (Christensen \& Massey, 1989; Massey \& Christensen, 1990; Tatar \& Emmanuel, 2001) did not provide validity information for their studies. Face validity, a measure of how accurately a study's measures appear to participants, was verified for this study during the pilot phase. Participants were informed of the goals of the study. It was explained that the survey items involved examination of commonly held stereotypes of role-appropriate female and male behaviors, thus verifying the study's face validity.

In this study, Bonferroni correction was applied to account for Type I error by comparing a new threshold of significance of $.017(.05 / 3)$ to each of the $p$ values generated from the independent-samples $t$ tests.

## Results

In this report of results, items are reworded to be identified as topics for discussing the findings. Using topics as opposed to the full survey statement reduces the complexity introduced by the wording of some items in one direction (egalitarian versus traditional) in contrast to the items worded in the other direction (traditional versus egalitarian). Neutralized wording combined with reverse scoring (detailed in the following section) was used for clarification purposes only.

## Scoring

In interpreting the results, it should be noted that 15 of the 32 items were reverse scored, so a score of 5 represented the more egalitarian perspective, while on the other 17 items a score of 1 represented the more egalitarian perspective. In order to allow for analysis of the means and standard deviations of the ratings, negatively keyed items were reversed before calculating individual total scores and before conducting analysis. This reverse keying allowed for clear and measureable distinctions between the more egalitarian perspectives and the more traditional perspectives. After completion of the reverse keying, scores of 1 or 2 indicated a less egalitarian view, a score of 3 indicated a neutral view, and scores of 4 or 5 indicate a more egalitarian view.

In the survey document, the scoring choices were $1=$ strongly agree, $2=$ agree, $3=$ not sure, $4=$ disagree, $5=$ strongly disagree. In the analysis, with the reverse
scoring applied, the scores reflected the following: $1=$ strongly traditional, $2=$ traditional, $3=$ ambivalent, $4=$ egalitarian, $5=$ strongly egalitarian. Gendered role beliefs ranged on a continuum from traditional, with an emphasis on women's roles and gendered division of labor and child care, to egalitarian, with a more balanced view of equal opportunities for men and women in education, employment, and caregiving (Davis \& Pearce, 2007; Seginer \& Mahajna, 2004). Persons with traditional gender role beliefs generally regard a woman's primary role to be homemaker and a man's chief responsibility to be family wage earner. In contrast, those with egalitarian gender role beliefs generally support that women and men should share in the financial support of the family, household labor, and child care (Corrigall \& Konrad, 2007).

## Effects and Results of Independent-Samples $\boldsymbol{t}$ Tests

Independent-samples $t$ tests were run on each of the four domains-ERB, DRB, PRB, and ARB-for each of the three pairs of independent variables to determine whether differences were statistically significant. In the comparison of female versus male teachers, a large effect (Cohen, 1977) was found for PRB $(d=.90)$ and DRB $(d=$ .87 ), and a medium effect was found for ERB $(d=.77)$ and ARB $(d=.69)$. Mean scores and effect sizes are reported in Table 39. Results of independent-samples $t$ tests, reported in Table 40, indicated that teachers' gender had a significant effect ( $p<.05$ ) on their gender role beliefs in all four domains.

In the comparison of private school versus public school teachers, no large effects were found. Medium effects were found for all domains: ERB ( $d=.42$ ), DRB $(d=.46), \operatorname{PRB}(d=.27)$, and $\operatorname{ARB}(d=.33)$. Mean scores and effect sizes for this

Table 39
Male and Female Teachers' Gender Role Beliefs in Each Domain

| Domain | Gender | $n$ | $M$ | $S D$ | $d$ |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Educational Role Beliefs (ERB) | Female <br> Male | 251 | 3.36 | 0.42 | .77 |
|  | Female | 233 | 3.05 | 0.38 |  |
| Domestic Role Beliefs (DRB) | Male | 233 | 3.33 | 0.47 | .87 |
|  | Female | 251 | 3.19 | 0.59 |  |
| Mrofessional Role Beliefs (PRB) | Male | 233 | 2.69 | 0.57 | .90 |
|  | Female | 250 | 3.02 | 0.74 | .69 |
| Adult Social Role Beliefs (ARB) | Male | 233 | 2.50 | 0.74 |  |
|  |  |  |  |  |  |

Table 40
Independent-Samples t Tests: Male and Female Teachers' Gender Role Beliefs in Each Domain

| Domain | $t$ | $d f$ | Sig. (2-tailed) |
| :--- | :---: | :---: | :---: |
| Educational Role Beliefs (ERB) | 8.52 | 481 | $.00^{*}$ |
| Domestic Role Beliefs (DRB) | 9.52 | 460 | $.00^{*}$ |
| Professional Role Beliefs (PRB) | 9.90 | 477 | $.00^{*}$ |
| Adult Social Role Beliefs (ARB) | 7.61 | 478 | $.00^{*}$ |

* $p<.01$.
independent variable are reported in Table 41. Results of independent-samples $t$ tests, reported in Table 42, indicated that school type had a significant effect ( $p<.05$ ) on teachers' gender role beliefs in all four domains.

Table 41
School Type and Gender Role Beliefs in Each Domain

| Domain | Type | $n$ | $M$ | $S D$ | $d$ |
| :---: | :--- | :--- | :---: | :--- | :--- |
| Educational Role Beliefs (ERB) | Private | 201 | 3.31 | 0.45 | .42 |
|  | Public | 283 | 3.14 | 0.40 |  |
| Domestic Role Beliefs (DRB) | Private | 201 | 3.26 | 0.52 | .46 |
|  | Public | 283 | 3.02 | 0.55 |  |
| Professional Role Beliefs (PRB) | Private | 201 | 3.04 | 0.62 | .27 |
|  | Public | 283 | 2.88 | 0.59 |  |
| Adult Social Role Beliefs (ARB) | Private | 200 | 2.92 | 0.82 | .33 |
|  | Public | 283 | 2.66 | 0.84 |  |

Table 42
Independent-Samples t Tests: School Type and Gender Role Beliefs in Each Domain

| Domain | $t$ | $d f$ | Sig. (2-tailed) |
| :--- | :---: | :---: | :---: |
| Educational Role Beliefs (ERB) | 4.45 | 403 | $0.00^{*}$ |
| Domestic Role Beliefs (DRB) | 5.00 | 448 | $0.00^{*}$ |
| Professional Role Beliefs (PRB) | 2.93 | 419 | $0.00^{*}$ |
| Adult Social Role Beliefs (ARB) | 3.52 | 401 | $0.00^{*}$ |

* $p<.01$.

In the comparison of primary school teachers versus secondary school teachers, no large effects were found. Medium effects were found for all domains: ERB $(d=.30)$, $\operatorname{DRB}(d=.35), \operatorname{PRB}(d=.26)$, and ARB $(d=.44)$. Mean scores and effect sizes for this independent variable are reported in Table 43. Results of independent-samples $t$ tests, reported in Table 44, indicated that school type had a significant effect ( $p<.01$ ) on teachers' gender roles beliefs in all four domains.

Table 43
Grade Level and Gender Role Beliefs in Each Domain

| Domain | Type | $n$ | $M$ | $S D$ | $d$ |
| :---: | :--- | :--- | :--- | :--- | :--- |
| Educational Role Beliefs (ERB) | Primary | 122 | 3.30 | 0.47 | .30 |
|  | Secondary | 361 | 3.18 | 0.41 |  |
| Domestic Role Beliefs (DRB) | Primary | 122 | 3.26 | 0.53 | .35 |
|  | Secondary | 361 | 3.07 | 0.55 |  |
| Professional Role Beliefs (PRB) | Primary | 122 | 3.06 | 0.56 | .26 |
|  | Secondary | 361 | 2.91 | 0.62 |  |
| Adult Social Role Beliefs (ARB) | Primary | 122 | 3.00 | 0.87 | .44 |
|  | Secondary | 361 | 2.68 | 0.70 |  |

## Open-Ended Item

The survey instrument included one open-ended item, with the prompt, "Please feel free to provide any comments you wish about the survey, or the topic, in the space below." Of the 484 surveys returned, $37(7.6 \%)$ provided feedback in response to this item. Some teachers' statements expressed their interest in the survey and the need for

Table 44
Independent-Samples t Tests: Grade Level and Gender Role Beliefs in Each Domain

| Domain | $t$ | $d f$ | Sig. (2-tailed) |
| :--- | :---: | :---: | :---: |
| Educational Role Beliefs (ERB) | 2.63 | 186 | $0.01^{*}$ |
| Domestic Role Beliefs (DRB) | 3.38 | 218 | $0.00^{*}$ |
| Professional Role Beliefs (PRB) | 2.59 | 229 | $0.01^{*}$ |
| Adult Social Role Beliefs (ARB) | 3.69 | 191 | $0.00^{*}$ |

*p < . 01 .
additional studies of this kind to bring about awareness about gender roles. Other teachers commented that there is no difference between genders except for physical and emotional aspects. Examples follow.

There are certain rights and responsibilities for women and certain rights and responsibilities for men that each gender must adhere to. There is no discrimination between men and women, however, there are differences (physically and emotionally) between them. (Respondent T331)

Women have the right to take decisions and be an active part of society with men, however the man is the one that is in charge of the household. Men are more equipped to lead and be leaders. Allah gave man physical and intelligential skills than women. (Respondent T312)

The questions the survey asks are very good and exhibits many issues we need to talk about as a society. We need more of these studies. (Respondent T182)

Thank you for such a good survey. The survey is good and tackles many important issues that the society suffers from and where there are certain prejudice towards these issues and discrimination males and females. This survey is trying to highlight the importance of such topics and bringing light to such matters. (Respondent T039)

In general, the statements indicate that the teachers agreed that the topic of the study was important and could be used to raise awareness in such a significant area but they had little interest in providing detailed feedback. Statements were general and superficial for the most part and did not contribute to the findings.

## Findings

## Female and Male Teachers' Beliefs About Gender Role Stereotypes

One of the goals of this research study was to investigate whether there were significant differences between male and female teachers' beliefs about gender role stereotypes. Response data indicated a significant difference ( $p<.01$ ) between male and female teachers' gender role beliefs in all four domains. The effect size was most notable (large effect) for $\mathrm{DRB}(d=.87)$ and $\operatorname{PRB}(d=.90)$, with a medium effect for $\mathrm{ERB}(d=$ $.77)$ and ARB $(d=.69)$. Female teachers' beliefs were on the egalitarian side of the scale in all four domains; the weakest egalitarian view $(M=3.02)$ was in ARB items and the strongest ( $M=3.36$ ) was in ERB items. Male teachers' beliefs were on the traditional
side for all domains except ERB, where the results indicated slightly egalitarian beliefs ( $M=3.05$ ). Of the remaining domains, the strongest traditional beliefs $(M=2.50)$ were in ARB items and the weakest traditional views $(M=2.89)$ were found in DRB items. These ERB indications of what both male and female teachers believed about gender role stereotypes in educational areas of interest were more balanced than in any of the other areas; they could be viewed as indicators of factors in the educational system having a positive impact on, primarily, girls' educational opportunities. The ERB items demonstrated the smallest mean difference $\left(\left|M_{\text {female }}-M_{\text {male }}\right|=0.31\right)$ between male and female teachers' beliefs. The ARB items, with the strongest traditional beliefs by males, had the greatest mean difference $\left(\left|M_{\text {female }}-M_{\text {male }}\right|=0.52\right)$ between male and female teachers.

To determine whether differences between male and female teachers' beliefs were more marked in some items than in others, a detailed view of the frequencies of responses across each of the 32 items was calculated for male and female teachers, as well as means and standard deviation for each item, grouped by the four domains (Table 45).

Scores of 1 or 2 on these items indicate a less egalitarian view, scores of 3 indicated a neutral view, and scores of 4 or 5 indicated a more egalitarian view. The results showed that, on 24 of 32 items ( $75.0 \%$ ), the mean value for female teachers exceeded 3.0, indicating more egalitarian beliefs; results for 8 items ( $25.0 \%$ ) indicated more traditional beliefs. However, the results for male teachers on 22 of 32 items (68.8\%) were below 3.0, indicating some level of traditional beliefs overall; 10 items

Table 45
Means (M) and Standard Deviations (SD) of Teacher Responses on Each Item, Female Versus Male Teachers, Grouped by Domain

| Domain and survey statement topics | Female |  | Male |  |
| :---: | :---: | :---: | :---: | :---: |
|  | M | $S D$ | M | $S D$ |
| Educational Role Beliefs (ERB) |  |  |  |  |
| Girls as readers | 3.00 | 1.06 | 2.85 | 1.13 |
| Use of male and female examples | 3.67 | 1.00 | 3.45 | 1.09 |
| Boys as classroom leaders | 3.18 | 1.13 | 2.69 | 1.29 |
| Girls and university attendance | 4.25 | 1.16 | 3.56 | 1.27 |
| Boys and discipline | 2.18 | 1.07 | 2.24 | 1.31 |
| Boys and academic excellence | 3.57 | 1.08 | 2.96 | 1.29 |
| Boys and hard physical tasks | 3.15 | 1.11 | 2.69 | 1.10 |
| Boys and mathematics | 3.04 | 1.12 | 3.13 | 1.02 |
| Boys and logical thinking | 3.06 | 1.03 | 2.84 | 1.09 |
| Girls and computers | 3.92 | 1.11 | 3.81 | 0.98 |
| Married women and degrees | 3.93 | 1.04 | 3.33 | 1.11 |
| Averages of domain M/SD | 3.36 | 1.21 | 3.05 | 1.24 |
| Domestic Role Beliefs (DRB) |  |  |  |  |
| Boys and housework | 3.27 | 1.02 | 2.61 | 1.13 |
| Final say of fathers | 2.77 | 1.18 | 2.34 | 1.28 |
| Men's suitability in bringing up children | 3.04 | 1.12 | 2.91 | 1.26 |
| Women and equality | 3.23 | 1.05 | 3.14 | 1.25 |
| Responsibilities in bringing up children | 3.97 | 1.05 | 3.64 | 1.19 |
| Woman's place in the home | 3.79 | 1.19 | 2.87 | 1.35 |
| Boys playing with dolls | 3.19 | 1.15 | 2.94 | 1.25 |
| Girls participating in sports | 3.39 | 1.18 | 2.68 | 1.25 |
| Domain averages | 3.33 | 1.17 | 2.89 | 1.30 |
| Professional Role Beliefs (PRB) |  |  |  |  |
| Men and jobs and promotions | 3.58 | 1.25 | 2.81 | 1.36 |
| Men and positions of leadership | 3.14 | 1.32 | 2.24 | 1.24 |
| Wife's earnings | 3.55 | 1.04 | 2.92 | 1.16 |
| Women as company managers | 3.72 | 1.14 | 3.16 | 1.16 |
| Men working for a woman boss | 2.90 | 1.12 | 2.97 | 1.18 |
| Women as engineers | 2.95 | 0.98 | 2.35 | 1.11 |
| Men as police officers | 2.19 | 1.19 | 1.93 | 1.28 |
| Women in the military | 3.05 | 1.19 | 2.72 | 1.23 |
| Women in politics | 3.59 | 1.02 | 3.08 | 1.22 |
| Domain averages | 3.19 | 1.23 | 2.69 | 1.28 |

Table 45 (continued)

|  | Female |  | Male |  |
| :--- | :---: | :---: | :---: | :---: |
| Domain and survey statement topics | $M$ | $S D$ | $M^{2}$ | $S D$ |
| Adult Social Role Beliefs (ARB) |  |  |  |  |
| $\quad$ Men as decision makers | 3.07 | 1.18 | 2.18 | 1.20 |
| $\quad$ Women in social activities | 3.92 | 1.00 | 3.30 | 1.18 |
| $\quad$ Women smoking | 2.63 | 1.34 | 2.27 | 1.36 |
| $\quad$ Women and divorce | 3.02 | 1.33 | 2.26 | 1.29 |
| Domain averages | 3.26 | 1.23 | 2.50 | 1.34 |
| Overall averages |  |  |  | 1.29 |

(31.3\%) indicated some level of egalitarian beliefs. The averages across all 32 items indicated slightly egalitarian beliefs by female teachers $(M=3.26, S D=1.23)$ and slightly traditional beliefs by male teachers ( $M=2.84, S D=1.29$ ). However, it should be noted that the side of the scale on which the mean value falls ( $>3.0$ for more egalitarian beliefs and $<3.0$ for more traditional beliefs) is less important than the distance between scores for the two groups are on that scale.

For example, although it is somewhat interesting to note that both males and females had slightly traditional beliefs about Item 5 (boys and discipline), it is much more informative to note that this item was the most similar (i.e., had the smallest mean difference $\left(\left|M_{\text {female }}-M_{\text {male }}\right|=0.06\right)$ between female teachers $(M=2.18)$ and male teachers $(M=2.24)$. As another example, Item 4 (girls and university attendance) exhibited the strongest egalitarian beliefs by both female $(M=4.25)$ and male ( $M=$ 3.56) teachers for the domain but was most dissimilar (i.e., had the largest mean difference $\left(\left|M_{\text {female }}-M_{\text {male }}\right|=0.69\right)$ for the group.

In the ERB domain, the item with the lowest mean value (most traditional) for female teachers ( $M=2.18$ ) was Item 5 (boys and discipline). The item with the lowest mean value (most traditional) for male teachers $(M=2.24)$ was also Item 5 (boys and discipline). The item that produced the highest mean value (most egalitarian) for female teachers $(M=4.25)$ was Item 4 (girls and university attendance). The highest mean value (most egalitarian) for male teachers $(M=3.81)$ was Item 10 (girls and computers).

In the DRB domain, the item with the lowest mean value (most traditional) for female teachers ( $M=2.77$ ) and for male teachers ( $M=2.34$ ) was Item 13 (final say by fathers). The item with the highest mean value (most egalitarian) for female teachers ( $M$ $=3.97)$ and for male teachers $(M=3.64)$ was Item 16 (responsibility of both in bringing up children).

In the PRB domain, the lowest and highest mean values were the same for females and males. The item with the lowest mean value (most traditional) for female teachers $(M=2.19)$ and for male teachers $(M=1.93)$ was Item 26 (men as police officers). The item with the highest mean value (most egalitarian) for female teachers ( $M$ $=3.72)$ and for male teachers $(M=3.16)$ was Item 23 (women as company managers).

The ARB domain was the smallest dataset, with only four items. The item with the lowest mean value (most traditional) for female teachers ( $M=2.44$ ) was Item 32 (women and divorce) and the lowest mean value for male teachers $(M=2.18)$ was for Item 29 (men as decision makers). The highest mean value (most egalitarian) for female ( $M=3.92$ ) and male $(M=3.81)$ teachers was for Item 30 (women in social activities).

## Public School Teachers' and Private School Teachers' Beliefs About Gender Role Stereotypes

The second goal of this research study was to determine whether there were significant differences between public school teachers' and private school teachers' beliefs about gender role stereotypes. There was a significant difference ( $p<.01$ ) between private school teachers' and public school teachers' gender role beliefs in all four domains. The effect size was medium for all domains: DRB ( $d=.46$ ), ERB ( $d=$ $.42)$, ARB $(d=.33)$, and PRB $(d=.27)$. Private school teachers' beliefs fell on the egalitarian side of the scale in three of the four domains, with the strongest egalitarian gender role beliefs exhibited in ERB $(M=3.31)$ and a very slightly traditional role beliefs exhibited in ARB $(M=2.92)$. Public school teachers' beliefs were on the egalitarian side for two domains, ERB $(M=3.14)$ and $\operatorname{DRB}(M=3.02)$, and on the traditional side for the other two domains, PRB $(M=2.88)$ and ARB $(M=2.66)$.

The smallest mean difference between private school teachers' and public school teachers' gender role beliefs was found in the PRB domain $\left(\left|M_{\text {female }}-M_{\text {male }}\right|=0.16\right)$, which demonstrated slightly traditional beliefs by public school teachers $(M=2.88)$ and slightly egalitarian beliefs by private school teachers $(M=3.04)$. The largest mean difference was seen in the ARB domain $\left(\left|M_{\text {female }}-M_{\text {male }}\right|=0.26\right)$, with both private school teachers ( $M=2.92$ ) and public school teachers $(M=2.66)$ expressing slightly traditional beliefs. It should be noted that the domain differences were very slight overall ( 0.16 to 0.26 ) in comparison to the domain differences noted previously for the independent variables representing teachers' gender ( 0.31 to 0.51 ) indicating smaller
differences, and thus less valuable distinctions, between public and private school teachers than between male and female teachers.

In order to determine whether differences between the private school and public school teachers were more marked in some items than in others, a detailed view of the frequency of responses across each of the 32 items was calculated for both private and public school teachers, with means and standard deviation for each statement, grouped by the four domains. Results are shown in Table 46.

The results showed that, on the majority of items overall (20 of $32,62.5 \%$ ), the mean value for private school teachers exceeded 3.0, indicating more egalitarian beliefs. Traditional beliefs were indicated for 11 ( $34.4 \%$ ) items and a neutral view was indicated for $1(3.1 \%)$ item. The results for public school teachers indicated more traditional beliefs in 16 items (50.0\%), more egalitarian beliefs in 13 items ( $40.6 \%$ ), and neutral beliefs in 3 items (9.4\%).

The averages across all 32 items indicated slightly egalitarian beliefs by private school teachers $(M=3.17, S D=0.50)$ and slightly traditional beliefs by public school teachers $(M=2.98, S D=0.45)$. Once again, the side of the scale on which the mean value falls (>3.0 for more egalitarian beliefs and <3.0 for more traditional beliefs) is less important than the distance between the values for the two groups on that scale.

In the ERB domain, the item with the lowest mean value (most traditional) for both private school teachers $(M=2.15)$ and public school teachers $(M=2.26)$ was Item 5 (boys and discipline). The item with the highest mean value (most egalitarian) for private school teachers ( $M=4.21$ ) was Item 4 (girls and university attendance). The

Table 46
Means (M) and Standard Deviations (SD) of Teacher Responses on Each Item, Private Versus Public School Teachers, Grouped by Domain

| Domain and survey statement topics | Private |  | Public |  |
| :---: | :---: | :---: | :---: | :---: |
|  | M | $S D$ | $M$ | $S D$ |
| Educational Role Beliefs (ERB) |  |  |  |  |
| Girls as readers | 2.91 | 1.08 | 2.94 | 1.11 |
| Use of male and female examples | 3.70 | 0.99 | 3.46 | 1.05 |
| Boys as classroom leaders | 3.07 | 1.19 | 2.85 | 1.27 |
| Girls and university attendance | 4.21 | 1.13 | 3.72 | 1.31 |
| Boys and discipline | 2.15 | 1.13 | 2.26 | 1.22 |
| Boys and academic excellence | 3.42 | 1.22 | 3.17 | 1.23 |
| Boys and hard physical tasks | 3.03 | 1.11 | 2.86 | 1.13 |
| Boys and mathematics | 3.20 | 1.03 | 3.00 | 1.10 |
| Boys and logical thinking | 3.05 | 1.09 | 2.88 | 1.03 |
| Girls and computers | 3.96 | 1.04 | 3.80 | 1.02 |
| Married women and degrees | 3.76 | 1.08 | 3.56 | 1.16 |
| Domain averages | 3.14 | 1.23 | 3.31 | 1.23 |
| Domestic Role Beliefs (DRB) |  |  |  |  |
| Boys and housework | 3.00 | 1.12 | 2.91 | 1.13 |
| Final say of fathers | 2.76 | 1.28 | 2.42 | 1.22 |
| Men's suitability in bringing up children | 3.18 | 1.17 | 2.84 | 1.19 |
| Women and equality | 3.15 | 1.13 | 3.21 | 1.17 |
| Responsibilities in bringing up children | 4.00 | 1.03 | 3.67 | 1.20 |
| Woman's place in the home | 3.55 | 1.33 | 3.20 | 1.34 |
| Boys playing with dolls | 3.18 | 1.16 | 3.00 | 1.22 |
| Girls participating in sports | 3.28 | 1.20 | 2.88 | 1.27 |
| Domain averages | 3.26 | 1.23 | 3.02 | 1.26 |
| Professional Role Beliefs (PRB) |  |  |  |  |
| Men and jobs and promotions | 3.37 | 1.37 | 3.10 | 1.35 |
| Men and positions of leadership | 2.89 | 1.36 | 2.58 | 1.35 |
| Wife's earnings | 3.38 | 1.13 | 3.15 | 1.14 |
| Women as company managers | 3.61 | 1.15 | 3.34 | 1.19 |
| Men working for a woman boss | 2.85 | 1.15 | 3.00 | 1.17 |
| Women as engineers | 2.81 | 1.02 | 2.56 | 1.11 |
| Men as police officers | 2.13 | 1.32 | 2.02 | 1.23 |
| Women in the military | 2.86 | 1.29 | 2.91 | 1.19 |
| Women in politics | 3.49 | 1.15 | 3.25 | 1.14 |
| Domain averages | 3.04 | 1.29 | 2.88 | 1.26 |

Table 46 (continued)

|  | Private |  | Public |  |
| :--- | :---: | :---: | :---: | :---: |
| Domain and survey statement topics | $M$ | $S D$ | $M$ | $S D$ |
| Adult Social Role Beliefs (ARB) |  |  |  |  |
| $\quad$ Men as decision makers | 2.90 | 1.30 | 2.46 | 1.23 |
| $\quad$ Women in social activities | 2.70 | 1.18 | 3.57 | 1.08 |
| $\quad$ Women smoking | 2.51 | 1.37 | 2.37 | 1.35 |
| $\quad$ Women and divorce | 2.92 | 1.35 | 2.25 | 1.26 |
| Domain averages | 3.17 | 1.28 | 2.96 | 1.35 |
| Overall averages |  |  | 1.28 |  |

highest mean value (most egalitarian) for public school teachers for this domain ( $M=$ 3.80) was for Item 10 (girls and computers).

In the DRB domain, the item with the lowest mean value (most traditional) for private school teachers $(M=2.76)$ and for public school teachers $(M=2.42)$ was Item 13 (final say by fathers). The item with the highest mean value (most egalitarian) for private school teachers $(M=4.00)$ and public school teachers $(M=3.67)$ was Item 16 (responsibility of both in bringing up children).

In the PRB domain, the lowest and highest mean values were the same for both private and public school teachers. The item with the lowest mean value (most traditional) for private school teachers $(M=2.13)$ and public school teachers $(M=2.02)$ was Item 26 (men as police officers). The item with the highest mean value (most egalitarian) for private school teachers $(M=3.61)$ and for public school teachers ( $M=$ 3.34) was Item 23 (women as company managers).

In the ARB domain, the lowest mean value (most traditional) for both private school teachers $(M=2.51)$ and public school teachers $(M=2.25)$ was Item 32 (women and divorce). The highest mean value (most egalitarian) for both private school teachers $(M=3.70)$ and public school teachers $(M=3.57)$ was Item 30 (women in social activities). As there were only four items in the ARB domain dataset, these differences cannot be considered significant.

## Primary School Teachers' and Secondary School Teachers' Beliefs About Gender

## Role Stereotypes

The third goal of this research study was to determine whether there were significant differences between primary school teachers' and secondary school teachers' beliefs about gender role stereotypes. There was a significant difference ( $p<.01$ ) between primary school teachers' and secondary school teachers' gender role beliefs in all four domains. The effect size was medium for all domains: PRB ( $d=.26$ ), ERB ( $d=$ .30), DRB $(d=.35)$, and ARB $(d=.44)$. Primary school teachers' beliefs fell on the egalitarian side of the scale in all four domains, with the strongest gender role beliefs exhibited in ERB $(M=3.30)$. Secondary school teachers' beliefs were on the egalitarian side for two domains, ERB and DRB, with the strongest in ERB $(M=3.18)$, and beliefs were on the traditional side for the other two domains, PRB and ARB, with the strongest traditional beliefs $(M=2.68)$ exhibited in the ARB domain.

The smallest mean difference between primary and secondary school teachers was in the ERB domain $\left(\left|M_{\text {female }}-M_{\text {male }}\right|=0.13\right)$, which demonstrated slightly egalitarian beliefs for both primary $(M=3.30)$ and secondary $(M=3.18)$ teachers. The largest
mean difference was in the ARB domain $\left(\left|M_{\text {female }}-M_{\text {male }}\right|=0.33\right)$, which demonstrated slightly egalitarian beliefs for primary school teachers $(M=3.01)$ and slightly traditional beliefs ( $M=2.68$ ) for secondary school teachers.

To determine whether the differences between primary school teachers' and secondary school teachers' beliefs were more marked in some items than in others, a detailed view of the frequency of responses across each of the 32 items was calculated for both primary and secondary school teachers, with means and standard deviation for each statement, grouped by the four domains. Results are shown in Table 47.

The results showed that on the majority of items overall (20 of 32, $62.5 \%$ ), the mean value for primary school teachers exceeded 3.0, indicating more egalitarian beliefs; traditional beliefs were indicated on 11 (34.4\%) items, and a neutral view was indicated on 1 item (3.1\%). The results for secondary school teachers indicated more traditional beliefs on 17 items (53.1\%) and more egalitarian beliefs on 15 items (46.9\%).

The averages across all 32 items indicated slightly egalitarian beliefs by both primary school teachers $(M=3.19, S D=0.51)$ and secondary school teachers $(M=$ 3.01, $S D=0.46$ ).

In the ERB domain, the item with the lowest mean value (most traditional) for both primary $(M=2.13)$ and secondary $(M=2.23)$ school teachers was Item 5 (boys and discipline). The item with the highest mean value (most egalitarian) for primary school teachers $(M=3.10)$ was Item4 (girls and university attendance) and the highest mean value for secondary teachers $(M=3.85)$ was for Item 10 (girls and computers).

Table 47
Means (M) and Standard Deviations (SD) of Teacher Responses on Each Item, Primary Versus Secondary School Teachers, Grouped by Domain

| Domain and survey statement topics | Primary |  | Secondary |  |
| :---: | :---: | :---: | :---: | :---: |
|  | M | $S D$ | M | SD |
| Educational Role Beliefs (ERB) |  |  |  |  |
| Girls as readers | 3.00 | 1.00 | 2.90 | 1.13 |
| Use of male and female examples | 3.68 | 1.01 | 3.52 | 1.06 |
| Boys as classroom leaders | 3.07 | 1.17 | 2.90 | 1.25 |
| Girls and university attendance | 4.27 | 1.02 | 3.81 | 1.31 |
| Boys and discipline | 2.13 | 1.12 | 2.24 | 1.22 |
| Boys and academic excellence | 3.50 | 1.14 | 3.20 | 1.25 |
| Boys and hard physical tasks | 2.93 | 1.07 | 2.93 | 1.15 |
| Boys and mathematics | 3.08 | 0.98 | 3.08 | 1.10 |
| Boys and logical thinking | 2.91 | 1.00 | 2.97 | 1.08 |
| Girls and computers | 3.91 | 1.04 | 3.85 | 1.06 |
| Married women and degrees | 3.86 | 1.05 | 3.57 | 1.12 |
| Domain averages | 3.18 | 1.20 | 3.18 | 0.41 |
| Domestic Role Beliefs (DRB) |  |  |  |  |
| Boys and housework | 3.16 | 1.01 | 2.88 | 1.16 |
| Final say of fathers | 2.68 | 1.26 | 2.52 | 1.24 |
| Men's suitability in bringing up children | 3.02 | 1.15 | 2.96 | 1.20 |
| Women and equality | 3.19 | 1.01 | 3.19 | 1.20 |
| Responsibilities in bringing up children | 3.92 | 1.05 | 3.78 | 1.15 |
| Woman's place in the home | 3.62 | 1.14 | 3.25 | 1.40 |
| Boys playing with dolls | 3.20 | 1.14 | 3.03 | 1.23 |
| Girls participating in sports | 3.31 | 1.20 | 2.96 | 1.27 |
| Domain averages | 3.30 | 1.20 | 3.18 | 0.41 |
| Professional Role Beliefs (PRB) |  |  |  |  |
| Men and jobs and promotions | 3.55 | 1.32 | 3.09 | 1.35 |
| Men and positions of leadership | 3.05 | 1.37 | 2.59 | 1.33 |
| Wife's earnings | 3.36 | 1.11 | 3.21 | 1.15 |
| Women as company managers | 3.59 | 1.19 | 3.40 | 1.18 |
| Men working for a woman boss | 2.90 | 1.13 | 2.95 | 1.16 |
| Women as engineers | 2.87 | 0.95 | 2.59 | 1.12 |
| Men as police officers | 2.00 | 1.19 | 2.09 | 1.26 |
| Women in the military | 2.75 | 1.19 | 2.94 | 1.22 |
| Women in politics | 3.47 | 1.06 | 3.30 | 1.17 |
| Domain averages | 3.06 | 1.27 | 2.68 | 0.70 |

Table 47 (continued)

|  | Primary |  | Secondary |  |
| :--- | :---: | :---: | :---: | :---: |
| Domain and survey statement topics | $M$ |  | $S D$ | $M$ |$] S D$

In the DRB domain, the lowest and highest mean values were the same for primary and secondary school teachers. The item with the lowest mean value (most traditional) for primary school teachers $(M=2.68)$ and for secondary school teachers ( $M=2.53$ ) was Item 13 (final say by fathers). The item with the highest mean value (most egalitarian) for primary school teachers $(M=3.92)$ and for secondary teachers ( $M=3.78$ ) was Item 16 (responsibility of both in bringing up children).

In the PRB domain, the lowest and highest mean values were the same for both sets of teachers. The item with the lowest mean value (most traditional) for primary school teachers $(M=2.00)$ and for secondary school teachers $(M=2.08)$ was Item 26 (men as police officers). The item with the highest mean value (most egalitarian) for primary school teachers $(M=3.59)$ and for secondary school teachers $(M=3.40)$ was Item 23 (women as company managers).

In the ARB domain, the lowest and highest mean values were the same for both sets of teachers. The item with the lowest mean value (most traditional) for primary
school teachers $(M=2.55)$ and for secondary school teachers $(M=2.29)$ was Item 32 (women and divorce). The item with the highest mean value (most egalitarian) for primary school teachers $(M=3.76)$ and for secondary school teachers $(M=3.58)$ was Item 30 (women in social activities).

## General Findings Across All Three Groups

It is clear that the organization of findings into three groupings of independent variables influenced the report of data, but there were also similarities in the findings that call for a review of the analysis of the groups as a whole across the four domains. In the ERB domain, for example, three items stand out as being most important, regardless of which grouping is examined.

Item 5 (boys and discipline) exhibited the most traditional beliefs across all groups. This finding is consistent with previous studies that indicated that teachers offer more negative feedback to boys by punishing them more than girls, even when their behavior is comparable (DeZolt \& Hull, 2001; Frawley, 2005); such actions infer beliefs that are highly traditional. Item 4 (girls and university attendance) and Item 10 (girls and computers) together were responsible for the most egalitarian beliefs across the groups. Findings about the egalitarian beliefs regarding Item 4 (girls and university attendance) were consistent with previous research in that several studies indicated growing participation by girls in higher education and improved access to higher education by females in Jordan (Allaf, 2010; Jansen, 2006). Findings regarding Item 10 (girls and computers) were also considered by previous research. Abu-Shanab and Al-Jamal (2015) noted that Jordan has a literacy rate ( $96 \%$ ) and "enjoys a high penetration of computers
and technology, and an equally high computer literacy" (p. 100). However, in response to items about difficulties in using computers and the Internet, $22.0 \%$ of women, compared to $14.5 \%$ of men, reported this activity to be problematic. Further, in what the researchers called "quite an eye-opener," they reported that $43.9 \%$ of educated men were "vehemently opposed to women using computers with the Internet" (p. 103), a decidedly different finding than that indicated in the present study.

In the DRB domain two items stood out as important. The first was Item 13 (final say by fathers), which reflected the most traditional stereotype across all groups. This finding supports previous findings of the view of gender in the Arab world. Joseph (2005) stated that, in the Arab world, the gender system is shaped by and works through the systems of patriarchy, affecting much of the social order. Therefore, patriarchy privileges males, and females are generally taught to defer to fathers, uncles, male cousins, and brothers. Aswad (2005) indicated that, in the Arab culture, a patriarchal society with gender roles that are very clearly defined, parental influence on education choices is pronounced. Item 16 (responsibility of both in bringing up children) was recognized across all groups as the most egalitarian stereotype. Findings in research by Zellman, Perlman, and Karam (2014) indicated that, although "many fathers cede child rearing decisions to their wives" (p. 201), there was an expectation that the father's role increases as children grow older. The Zellman et al. research does not contradict the present study's findings, but neither does it support it fully, especially given that the primary school teachers' beliefs were slightly more egalitarian $(M=3.92)$ than the secondary school teachers' beliefs $(M=3.78)$.

In the PRB domain there seemed to be general agreement across all groups about the most traditional and most egalitarian beliefs. Item 26 (men as police officers) reflected the most traditional beliefs across groups. Traffic policewomen were integrated into the Jordanian traffic department in 2002; of the original 12 female recruits, "only five survived the demanding job and the ensuing social criticism" (Samain, 2010, p. 1). Although later news reports of some 3,000 female officers in Jordan (Faraj, 2012), the current study indicated that a police officer's occupation is still viewed as a male's domain and that traditional beliefs about this occupation prevail. The item from this domain that indicated the most egalitarian beliefs across the groups was Item 23 (women as company managers). This finding is consistent with previous research conducted in Kuwait that reported a positive attitude toward women managers (Askar \& Ahmad, 2003), as well as a study by Mostafa (2005) in which male participants reported less positive attitudes toward women managers than did female participants (male $M=3.16$ vs. female $M=3.72$ in the current study). Taken together, these findings suggest that beliefs about this item are somewhat egalitarian overall, but also that women's beliefs about the suitability of women as company managers are stronger than men's beliefs.

The ARB domain findings are discussed here as well, but it should be noted that the group contained only four items for consideration, suggesting that findings in this domain may not have the strength of findings for the other domains. Three of the four items are of interest here, beginning with the most egalitarian beliefs across all three groups exhibited for Item 30 (women in social activities). Moghadam (2003) stated that the vital elements of social change that are usually observed relate to economic structure.

The emergence of the nuclear family led to more autonomy than previously seen in the extended family. Traditional roles of Arab women began to merge with the new opportunities available to them in the cities. While, the rise in women's educational attainment and better work opportunities led to economic independence. (p. 242)

The second item of interest is Item 32 (women and divorce), which reflected the most traditional beliefs across all groups, with the exception of male teachers. For male teachers, the item that exhibited slightly more traditional beliefs than Item 32 (women and divorce) was Item 29 (men as decision makers). Although in Jordan the divorce rate has shown a significant increase between 2000 and 2005 (Hashemite Kingdom of Jordan, Department of Statistics, 2006), Azzeh (2011) "showed that there are nearly 60,000 marriages registered in the Kingdom each year in average, compared with 13,000 divorces" (p. 1). Azzeh noted that "it was uncommon to hear about a divorce case in the recent past, but divorces have become common nowadays" (p. 1). Although divorce has become more common in Jordan, it is still considered worse for women than for men.

## Discussion

## Female and Male Teachers' Beliefs About Gender Role Stereotypes

The fact that male teacher's beliefs were more traditional could be related to the patriarchal nature of Arab countries. Zuhur (2003) stated, "The Arab states embody various patriarchal structures and Arab society clings to a patriarchal system in which women's positions within (and duties toward) the family precede their rights as individuals" (p. 19). Historically, these patriarchal relationships date back to the creation
of tribes governed by tribal leaders who exercised strong control over their members. In modern Jordan, the elder male continues to have a higher status and hold most of the decision-making power in the family (Kazarian, 2005). Generally, the father maintains ultimate authority and expects total respect and obedience in his role of male benefactor. According to Barakat (1993), this familial system is based on the patriarchal system that dominates all Arab social and political institutions.

The World Bank (2005) reported that the "traditional paradigm" of Jordanian gender anticipates that females will marry and contribute to the family as homemakers, wives, and mothers. This paradigm assumes that the male will be in charge of the household and that he will provide for his family financially. Women, as wives and mothers, are perceived as susceptible and in need of protection that a husband should provide. Men are considered to be responsible to protect their families, and this responsibility serves to justify they exercise of authority in both public and private spheres. Due to this traditional paradigm, a woman's husband or other male figures (e.g., brother or father) mediate her interactions with, and representations in, society. While existing to some extent all over the world, this paradigm is particularly prominent in Jordan because it has become institutionalized and pervades the legal framework. Joseph (2005) explained that, with the exception of Tunisia, family and religion are legally intertwined in countries and societies in this region of the world. Most Arab countries defer personal status laws (also called family law) to religious institutions. Laws concerning marriage, divorce, inheritance, and child custody are under the aegis of legally recognized religious institutions (p. 198).

All clerics in the Arab world are male, and their hierarchy is patriarchal. Hence, the traditional beliefs held by the male teachers were not surprising. This implies the deeply rooted belief of gender role stereotypes and that men appear to be clinging to the traditional role set more than females. One interpretation of this finding is that men fear that they have much to lose if and when the roles change.

On the other hand, female teachers' views on gender stereotypes were more egalitarian in nature than those expressed by male teachers. One possible explanation is that economic moderation in Jordan has resulted in a certain degree of emancipation among females, while males are more likely to retain a patriarchal worldview and adopt beliefs that support their masculinity and dominance in a traditional society, females might be less likely to have faith in a such a belief and lean toward a democratic worldview (Eisner \& Ghuneim, 2013). Advancement has been made in education by providing opportunities for girls at the primary, secondary, and higher levels of education (Jansen, 2006). As a result, Jordan has some of the literacy rates and female enrollment in school in the Arab world (Al-Mahadin, 2004), which has created opportunities and provided females a chance to become part of the workforce and productive members of society. Moreover, many females now enter the workforce upon graduation from university, and female participation in the Jordanian labor force increased from $10.7 \%$ in 1990 to $18.2 \%$ in 2011 (Jordanian Department of Statistics, 2011).

Another important contributor to the finding that female teachers' views on gender stereotypes were more egalitarian in nature is that Jordan currently leads the
region in literacy rates. Jordan is well on its way to achieving gender equity, one of the Millennium Development Goals that Jordan set for 2015. Jordan has aspired to reach eight publicly shared goals by 2015. Jordan has made steady progress in raising primary education rates, eliminating gender disparities in education, according to the latest statistics from a United Nations International Children's Emergency Fund (UNICEF) report in 2010. Primary net enrollment rates were $97 \%$ (for both males and females), while secondary net enrollments were $80 \%$ for males and $83 \%$ for females (UNICEF, 2010). These statistics indicate a progression in women's ways of thinking about gender roles. Jansen (2006) stated that "education alone does not always empower girls and women to overcome the tendency to exclude them from the labour market, and continues to play a large role in the reproduction of gender relationships and patriarchal structures" (p. 486). Nevertheless, Jansen wrote that education provides Jordanian females with "an opportunity to conform to gender expectations while, at the same time, finding their own freedom and recognition therein" (p. 480). Females outnumber males at the primary, secondary, and tertiary levels in Jordan, which is a different pattern from what is occurring in other MENA countries (UNESCO, 2007). Based on these rates, it appears that Jordan is doing considerably well in terms of female enrollment in educational settings.

Another possible explanation for the finding that female teachers had a tendency toward gender egalitarian responses is that women tend to have vested interests: They have much to gain through the concepts and practice of gender equality. These survey results indicate an inclination among female Jordanian teachers toward developing more
favorable attitudes toward gender issues. This trend may reflect increasing awareness among Jordanian teachers that they must not only understand but also develop more positive beliefs toward gender issues so they can improve their country in terms of economy, crosscultural communication, and international relations (Abdo \& Breen, 2010).

## Public School Teachers' and Private School Teachers' Beliefs About Gender Role Stereotypes

One reason for difference between beliefs of private school teachers and beliefs of public school teachers is the presence of differences between public and private schools in Jordan. According to one USAID report (USAID Jordan, 2012), although access to education in Jordan is rather high, challenges in the public schools remain. For instance, students in public school systems are learning in overcrowded conditions where average classroom size is 46 students. In addition, the sex-segregated feature of the Jordanian public schooling system could explain a higher tendency toward traditional beliefs.

In addition to the textbooks mandated by the government, private schools have supplementary textbooks that may vary from one school to another. More often than not, the content in these supplementary textbooks is more culturally diverse and exposes students to new ideas and concepts, which in turn allows private school students to be exposed to a variety of books with more cultural diversity and democratic content language, indicating a possible reason why private school teachers tend to be more egalitarian in their responses than their public school teacher counterparts.

Another noteworthy difference lies in the socioeconomic statuses of the learners. Since public education is provided free for learners and given the high cost of private education in relation to citizens' income, most citizens who can afford the cost of private education prefer to send their children to private schools (Asassfeh, Al-Shaboul, Shbool, \& Khwaileh, 2012). The socioeconomic composition of schools is important, with highstatus students attending schools that present more egalitarian views on gender roles in family and social life (Erarslan \& Rankin, 2013). Erarslan and Rankin (2013) noted that "a large body of research reports a positive association between socioeconomic status and egalitarian gender attitudes" (p. 459). This fact indicates the possibility that teachers in such schools espouse egalitarian views.

Another possible reason for the observed difference might be the liberal nature of private schools in comparison to public schools in relation to gender segregation in the classroom. In contrast to private schools, public schools in Jordan are gender segregated, which suggests possible differences in teachers' beliefs with regard to gender roles and reflect a more liberal educational climate and teaching style than in the public schools, which might indicate a reason teachers in private school setting are more comfortable exhibiting more egalitarian beliefs. It is possible that teachers' traditional or egalitarian beliefs regarding gender role stereotypes are made according to the environment (gender segregated or gender integrated) in which the teachers work.

Overall, specific features of school quality between public and private school systems, such as school atmosphere, learning methods, and resources, could be linked to the differences in gender role beliefs between these two groups.

## Primary School Teachers' and Secondary School Teachers' Beliefs About Gender

## Role Stereotypes

A comparison of primary school teachers' beliefs and secondary school teachers' beliefs is primarily a study of teachers of younger students versus teachers of older students. The findings of this study are consistent with those reported by Schwendenman (2012), who found that "teachers naturally deal with gender roles more at the middle and upper grades than they do at the lower grades" (p. 129). In Jordan, the public school system has separate facilities for boys and girls; such systems are mainly ideological, where institutions incorporate traditional gender ideology. Where traditional attitudes are widely shared, schools are expected to reflect social norms, such as the caregiver role of women (Erarslan \& Rankin, 2013).

There are indications in other research that teacher-student gender dynamics in primary school might be different from those in higher levels of education. In particular, the "gender differences in children's self-perceptions about ability and . . . their awareness of commonly held beliefs about gender stereotypes starts emerging between the ages of 7 and 12" (Antecol, Eren, \& Ozbeklik, 2015, p. 65). These findings would support this current study's findings that higher levels of education exhibit more traditional beliefs and lower levels are more egalitarian.

## Summary

Overall, the results of this study show that, while great progress has been made toward gender egalitarianism beliefs in certain domains, this progress has not automatically led to more equitable positions for women as citizens, workers, or family
members. The findings indicate the need for studies of the gendered nature of knowledge and the role of education in shaping gender identities and gender hierarchies. For future research, a similar analysis could be carried out using a sample expanded to include a large range of teachers from other countries to measure and compare their beliefs regarding gender role stereotypes.

There is a need for future research to make comparisons with countries that surround Jordan. It would be meaningful to make direct comparison between Jordan and other countries to identify commonalties and implications regarding teachers' gender role perceptions. That type of study would assist in understanding beliefs about gender roles held by teachers from other backgrounds. Interviews could be conducted to gain insight into gender issues and gender role beliefs. Further studies are required regarding the social structures that prevent women from using education to its maximum potential.

## Conclusions

This study makes a significant contribution to gender studies literature by contributing to understanding of how societal gender role stereotypes are held by teachers who are involved in the education of next generations in MENA countries. Educators, administrators, policy makers, and school and college program designers can use the findings to learn more about Jordanian teachers' beliefs about gender roles.

While care must be taken not to generalize from this study to all teachers in Jordan, the insights that the teachers shared may be applicable in other contexts. The findings can be used to design courses in gender role socialization for inclusion in the curricula of teacher education schools and colleges. The findings point to the necessity
to redesign and restructure curricula in teacher education to include a course on gender equality and address gender role issues in other teacher education courses. This research highlights that male and female teachers exhibited differences in beliefs in a range of domains. In their survey responses, female teachers tended to show more egalitarian beliefs and male teachers tended to show more traditional beliefs. The study indicates a need for teachers to pause, reflect, and act on these important issues, particularly to challenge assumptions about gender that they bring to their classrooms, and to examine the messages, policies, and practices that are operating in their classes.

Teachers are at the heart of education and the instructional process; they are the foundation of knowledge dissemination. Teachers who are receptive and knowledgeable with regard to gender role stereotypes will assist male and female students to develop their highest potential in a range of domains and disciplines without being constrained by socially predesigned roles.

The JMOE is chiefly responsible for oversight and implementation of policies and strategies in education. That agency must play a more active role in providing teacher professional development seminars, training sessions, and workshops designed to help educators and officials increase awareness of gender biases. Jordanian educators should be trained to enhance their awareness of the potential harms in gender-biased beliefs. The formation of gender-equal and fair educational environments requires teachers who hold balanced gender beliefs and who are aware of gender issues.

## Limitations, Implications, and Future Research

This study makes significant contributions to the literature on gender role beliefs in educational settings in a region (MENA) that shows scarcity of research on these issues. Nevertheless, the sample may not be representative of all teachers in Jordan or indicate the state of affairs in the other countries in the MENA region. Due to this limitation, results should be carefully interpreted and only within the context of the sample.

Future research could widen the scope of the study through a more representative national sample. It is important to note the possibility of bias in participants' responses, since survey data are mainly self reported and the desirability effect must be considered.

The findings of this study can be used by policy designers, school administrators and school teachers. If teachers are to become truly egalitarian, more must be learned about teachers' beliefs about gender and gender role stereotyping and there must be more focus on teacher education curriculum. Although merely possessing egalitarian beliefs with regard to gender role stereotypes does not guarantee that issues of inequality in society as a whole, and in the education system in particular, will change, gender issues should be explored in all teacher education areas. Such courses should include teacher self-awareness seminars and discussions to provide insight into personal beliefs and worldviews. Leadership skills should be facilitated in teacher education courses so that teachers can act as positive role models. "Changing the attitudes of both men and women in society is a slow process" (Slater, 1996), but it is vital that resources be
invested in equal socialization to release future generations from traditional gender roles so that they become global citizens of the world.

## CHAPTER IV

## CONCLUSION

The purpose of this dissertation was twofold. The first objective was to investigate the extent of gender stereotyping in Jordanian English language textbooks used in Grades 6, 7, and 8. The second objective was to investigate Jordanian teachers' beliefs about gender roles stereotypes in the areas of educational role beliefs, domestic role beliefs, professional role beliefs, and adult social role beliefs in relation to three variables: gender, school type, and grade level. Previous studies have reported differences between male and female teachers' gender role attitudes in classrooms.

Findings of the first study revealed gender stereotyping in the three textbooks that were examined (Action Pack 6, 7 and 8). The results for the first study indicate that, although some aspects have improved, such as low use of masculine generic pronouns, the majority of the illustrations and text examples were male dominated. The three sets of textbooks were significantly similar (a) in biased ratio of male-to-female characters, and (b) in representation of males in dominant and directing roles and females in limited and stereotypical passive roles.

Findings of the second study indicate that, in general, female teachers gave significantly more egalitarian responses than did male teachers. This result is consistent with previous research that reported that women tended to hold more gender egalitarian attitudes than men (Esen, 2013; Massey \& Christensen, 1990; Tatar \& Emmanuel, 2001). Overall, the results of this study showed that, while great progress has been made toward gender egalitarianism beliefs in certain domains, this progress has not
automatically led to an enhanced position for women as workers, citizens, or family members. This calls for further studies of the role of education in society, on the gendered nature of knowledge, and on the role of education in shaping and reproducing gender identities and gender hierarchies.

## Implications

Teachers should be aware of the type of gender representations in textbooks. In Jordan, although teachers are not able to change the content of the textbooks, they should be aware that certain usages of language exclude or demean women, even if they do so unconsciously, and that students are influenced when gender roles are placed in negative or positive contexts. This research supports other research suggesting that more seminars and workshops should be offered in schools to enlighten teachers and to help them to be more aware of gender stereotyping. More female participants in authoring and editing the books is called for, as well as increases in the number of females who supervise book creation.

This study also brings to light the need for textbooks to be updated. The textbooks in this study included many outdated examples. In such a rapidly changing world, textbooks should reflect changes and keep students up to date with constant social changes. Teachers' suggestions should be considered in the process of designing and producing textbooks. As stated by Sunderland (2000b, p. 169), teacher educators can include questions associated with treatment of progressive and gender-biased texts in sessions on material selection, evaluation, design, and use. There is a need to promote a "multivoiced consciousness" to develop intercultural competence (Kramsch \& von

Hoene, 2001). Curricular materials that legitimize students' daily realities and approach education and gender awareness from intercultural and critical perspectives are sure to be more effective. Materials that engage students with cross-cultural differences in gender ideologies allow students to analyze how dominant discourses of gender function to subordinate people (Pavlenko \& Piller, 2008). There is a need to examine changes in gender ideologies and relationships in particular communities, as well as ways in which these changes affect gender role construction and stereotyping.

Increased awareness by families and parents of the type of gender representation that their children experience is another area indicated for improvement. Materials and lessons that encourage students to learn to understand and recognize gender stereotyping and how language usage can reinforce or eliminate gender stereotypes are also strategies for improvements in these areas. Daily examples of women's achievements in Jordanian society that could teach students, making them aware of gender stereotypes, are currently underrepresented in books and media. This study makes a significant contribution to gender studies literature by contributing to understanding of how societal gender role stereotypes are held by teachers involved in the education of future generations, especially as related to educational settings in MENA countries. Educators, administrators, policy makers, and school and college program designers can use these findings it to learn more about Jordanian teachers' beliefs about gender roles.

## Limitations and Direction for Future Research

In the first study, results were delimited to Action Pack English textbooks for Grades 6, 7, and 8. Expanding this research horizontally, to include other grade levels,
and laterally, to include textbooks of different subjects, would help to determine how other textbook content compares to the current findings. Due to the limitation of this study, the findings should be carefully interpreted and applied only within the context of the sample. Research in which textbooks writers are interviewed would be beneficial.

Regarding the findings of the second study, while care must be taken not to generalize the findings to all teachers in Jordan, the insights that the teachers shared about their understanding may be applicable in other contexts. The findings can be used to design courses in gender role socialization to be incorporated in the curriculum of teacher education schools and colleges. The findings indicate the necessity for redesigning and restructuring curricula in teacher education to include at least one course on gender equality and to address gender role issues in other teacher education courses. This research has highlighted that male and female teachers exhibited differences in their beliefs within the distinct domains. Female teachers showed more egalitarian beliefs, whereas male teachers demonstrated more traditional beliefs on many survey statements. The study indicates a need for teachers to pause, reflect, and act on these important issues, particularly to challenge assumptions about gender that they bring to the classroom, and to examine the messages, policies, and practices operating in their classes.

Teachers are at the heart of education and the instructional process; they are the foundation of knowledge dissemination. Teachers who are receptive and knowledgeable with regard to gender role stereotypes will in turn assist both male and female students to
develop their highest potential in various domains and disciplines without being constrained by socially predesigned roles.

The JMOE is chiefly responsible for oversight and implementation of policies and strategies in education. This agency must play a more active role in providing teacher professional development seminars, training sessions, and workshops designed to help educators and officials to increase awareness of gender biases. Jordanian educators need to be trained to enhance their awareness of the potential harm in genderbiased beliefs. The formation of gender-equal and fair educational environment requires teachers who hold balanced gender beliefs and who are aware of gender issues.

This study is valuable because, to date, no studies have explored teachers' gender role beliefs in the MEAN region, particularly in Jordan. A possible direction for future research might be investigation of the beliefs of teachers in other cities in Jordan and in other countries in the MENA region. It would be enlightening to compare findings in the current study with those in countries that surround Jordan to identify commonalties and dissimilarities, as well as implications for teachers' gender role beliefs.

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## APPENDIX A

## TEXTBOOK CHAPTERS

Action Pack 6 Seventh Grade English Language Textbook

| Chapter | Title | Semester <br> Taught | Length of <br> Chapter |
| :--- | :--- | :--- | :--- |
| Unit 1 | What does the computer do? | First semester | 4 pages |
| Unit 2 | Sending letters and emails | First semester | 5 pages |
| Unit 3 | What could you do when you were...? | First semester | 5 pages |
| Unit 4 | Revision : Dairy page | First semester | 7 pages |
| Unit 5 | How far is it? | First semester | 6 pages |
| Unit 6 | A day in Salt | First semester | 5 pages |
| Unit 7 | What's it made of? | First semester | 6 pages |
| Unit 8 | Revision: Diary page | First semester | 6 pages |
| Unit 9 | What are we doing next weekend? | First semester | 7 pages |
| Unit 10 | Sorry, I'm busy | First semester | 5 pages |
| Unit 11 | Has anybody got any questions? | Second semester | 6 pages |
| Unit 12 | Revision: Diary page | Second semester | 7 pages |
| Unit 13 | I've hurt myself | Second semester | 6 pages |
| Unit 14 | I've never swum in the sea | Second semester | 8 pages |
| Unit 15 | Have you read your new book yet? | Second semester | 6 pages |
| Unit 16 | Revision: Diary page | Second semester | 5 pages |
| Unit 17 | What have you been doing today? | Second semester | 6 pages |
| Unit 18 | I'm so surprised, thank you! | Second semester | 7 pages |
| Unit 19 | I agree | Second semester | 6 pages |
| Unit 20 | Revision: Dairy page | Second semester | 6 pages |


| Module | Title | Semester <br> Taught | Length of Module | Lessons of Module |
| :---: | :---: | :---: | :---: | :---: |
| One | What do you do? | First Semester | 12 pages | Identifying job routines |
| Two | Fighting Global Warming | First Semester | 13 pages | Predicting the future of global warming |
| Three | Visiting Places | First Semester | 12 pages | Identifying what can be bought in a market |
| Four | Wonders of the ancient world | Second Semester | 13 pages | Discussing the wonders of the ancient world |
| Five | Elementary, my dear Watson! | Second Semester | 14 pages | Describing issues related to detectives |
| Six | I'm having fun! | Second Semester | 15 pages | Identifying issues related to tourism |

Action Pack 8 Eighth Grade English Language Textbook

| Module | Title | Semester <br> Taught | Length of Module | Lessons of Module |
| :---: | :---: | :---: | :---: | :---: |
| One | Starting Out | First Semester | 13 pages | Identifying learning styles, Narrating a personal experience |
| Two | Different cultures, different lifestyles | First Semester | 12 pages | Describing a culture's lifestyle, <br> Stating facts |
| Three | What's a hero? | First Semester | 15 pages | Describing heroes and heroines, Giving reasons |
| Four | We will travel to stars | Second Semester | 13 pages | Expressing opinions, Making predictions |
| Five | You can do it! | Second Semester | 14 pages | Giving opinions, Expressing agreement and disagreement |
| Six | They have endured centuries! | Second Semester | 16 pages | Describing historic places and civilizations, Inquiring about historical sites |

## APPENDIX B

## SURVEY RESPONSES

## A-1. Private school responses

| School | Grade Range | Teachers | Responses | Response Rate | Type |
| :--- | :---: | :---: | :---: | :---: | :---: |
| School 1 | Primary | 16 | 14 | $87.5 \%$ | Private |
| School 2 | Prim—Sec | 30 | 17 | $56.7 \%$ | Private |
| School 3 | Primary | 20 | 6 | $30.0 \%$ | Private |
| School 4 | Prim—Sec | 40 | 40 | $100.0 \%$ | Private |
| School 5 | Prim—Sec | 30 | 25 | $83.3 \%$ | Private |
| School 6 | Secondary | 30 | 12 | $40.0 \%$ | Private |
| School 7 | Secondary | 20 | 10 | $50.0 \%$ | Private |
| School 8 | Pre-Prim—Sec | 100 | 70 | $70.0 \%$ | Private |
| School 9 | Prim—Sec | 30 | 11 | $36.7 \%$ | Private |
| Total |  | $\mathbf{3 1 6}$ | $\mathbf{2 0 5}$ | $\mathbf{6 4 . 9 \%}$ | $\mathbf{9}$ |

## A-2. Male public school responses

| School | Grade Range | Teachers | Responses | Response Rate | Type |
| :--- | :---: | :---: | :---: | :---: | :---: |
| School 10 | Secondary | 35 | 20 | $57.1 \%$ | Male public |
| School 11 | Secondary | 30 | 20 | $66.7 \%$ | Male public |
| School 12 | Prim—Sec | 50 | 40 | $80.0 \%$ | Male public |
| School 13 | Prim—Sec | 30 | 17 | $56.7 \%$ | Male public |
| School 14 | Prim—Sec | 35 | 20 | $57.1 \%$ | Male public |
| School 15 | Secondary | 30 | 17 | $56.7 \%$ | Male public |
| School 16 | Secondary | 35 | 24 | $68.6 \%$ | Male public |
| School 17 | Primary | 25 | 17 | $68.0 \%$ | Male public |
| Total |  | $\mathbf{2 7 0}$ | $\mathbf{1 7 5}$ | $\mathbf{6 4 . 8 \%}$ | $\mathbf{8}$ |

A-3. Female public school responses

| School | Grade Range | Teachers | Responses | Response Rate | Type |
| :--- | :---: | :---: | :---: | :---: | :---: |
| School 18 | Prim—Sec | 35 | 25 | $71.4 \%$ | Female public |
| School 19 | Secondary | 30 | 12 | $40.0 \%$ | Female public |
| School 20 | Prim—Sec | 25 | 10 | $40.0 \%$ | Female public |
| School 21 | Secondary | 30 | 12 | $40.0 \%$ | Female public |
| School 22 | Primary | 17 | 11 | $64.7 \%$ | Female public |
| School 23 | Prim—Sec | 30 | 20 | $66.7 \%$ | Female public |
| School 24 | Prim—Sec | 25 | 14 | $56.0 \%$ | Female public |
| Total |  | $\mathbf{1 9 2}$ | $\mathbf{1 0 4}$ | $\mathbf{5 4 . 2 \%}$ | $\mathbf{7}$ |

## APPENDIX C

## SURVEY

In brackets at the end of each statement is an indication of which end of the scale (before reverse scoring) represented the more egalitarian view. For example, question 1 indicates that the more egalitarian view was a score of 1 -strongly disagrees, while question 2 indicates that the more egalitarian view was represented by a score of 5strongly agrees. The means and standard deviation values, on the other hand, have all been adjusted so that a mean of 1 represents a more traditional view while a mean of 5 represents a more egalitarian view.

1. Girls are better at reading than boys. [1]
2. Teachers should use both male and female examples in all classroom discussions.
3. Boys are better classroom leaders than girls. [1]
4. It is just as important for girls to go to University or College as it is for boys. [5]
5. Boys need more discipline than girls. [1]
6. It is more important for boys to excel academically than girls. [1]
7. Boys should do all the hard physical tasks in the classroom or on outings. [1]
8. Mathematics is easier for boys. [1]
9. Boys are naturally better than girls at logical thinking. [1]
10. Girls are just as suited to using computers as boys. [5]
11. It is appropriate for married women to pursue upper level academic degrees. [5]
12. Boys should be expected to do as much housework as girls. [5]
13. The father should have the final say in family matters. [1]
14. Men are not naturally suited to bringing up children. [1]
15. Women should be just as concerned with equality as about being good wives and mothers. [5]
16. Both parents should be equally responsible for bringing up children. [5]
17. A woman's place is in the home. [1]
18. It is inappropriate for boys to play with dolls. [1]
19. Girls should be allowed to participate in any type of sports. [5]
20. Men should have better opportunities for jobs and promotions than women. [1]
21. Men are more suited to positions of leadership than women. [1]
22. It is acceptable for a wife to earn more than her husband. [5]
23. Women make just as good company managers as men. [5]
24. Most men would find no difficulty in working for a woman boss. [5]
25. There should be more women working as engineers. [5]
26. Men are more suited to being police officers than women. [1]
27. Women should be allowed to serve in the military. [5]
28. It is important for women to be involved in politics. [5]
29. Men are better decision-makers than women. [1]
30. It is important for women to engage in social activities outside the home. [5]
31. It is worse for a woman to smoke than for a man. [1]
32. It is worse for a woman to be divorced than for a man. [1]
