

Gender Visibility in Health and Physical Education Textbooks

Received : 1 Oct, 2022

Revised : 13 Dec, 2022

Accepted : 14 Feb, 2023

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Abstract

This research aimed at investigating the representations of genders through the pictorial illustrations in health and physical education textbooks. Based on the purposive sampling technique, the textbooks for grade 1 and 2 used at one public elementary school located in a northeastern part of Thailand were the primary source of data. To collect the data, all pictorial illustrations were examined in line with a systematic categorization process that involved classifying and defining themes. Then, the results were presented in tables using descriptive statistics to show the occurrence frequency of both genders, and the ways such representations presented in the textbooks were further discussed in a qualitative manner under cultural and gender perspectives. The results showed that female characters in the first textbook appeared 229 times (53%) compared with male characters, who were represented by 199 images (47%). Similarly, the second textbook included 162 illustrations (57.4%) of female characters and 120 illustrations (42.6%) of male characters. Based on a thorough qualitative analysis, it became clear that the illustrations of the female characters primarily showed traditional female roles and activities, including cooking, and setting a dining table. However, males were mostly shown in more intelligent, competitive, and challenging activities, for example, reading books, playing with Rubik's cubes, and playing football. Moreover, in occupational roles, more males were engaged in highly-paid, intelligent, and challenging careers such as doctors, dentists, and policemen.

Keywords: Gender Visibility, Pictorial Illustrations, Textbook analysis

1. Introduction

A textbook's pictorial illustration is one of the components that helps young pupils with limited literacy skills understand the vivid meanings of learning contents along with increasing their engagement and curiosity in the materials and learning activities. As proposed by Diamond (2008) and Peeck (1993), a pictorial illustration, rather than textual words, tends to be more successful in conveying information to young pupils. Not only does a textbook provide numerous benefits in terms of academic values, but it also

unintentionally inculcates social and cultural values in students. Sharna (2018) supported that textbooks, especially in social studies, languages, and health and physical education, play a crucial role in providing knowledge of work skills, cultural norms, and values to students. Therefore, it cannot be denied that textbooks may be used as a tool to support students in developing a variety of cultural values as well as academic and life skills.

To shed light on the influence of cultures, gender appears to be one of the essential components of culture since it influences how people view themselves and promotes the idea of proper roles to perform in society. For instance, social roles define how men and women should behave in society, including how they should carry out their duties at home, at work, and in other settings. In other words, according to Hofstede et al. (2010), Mcleod (2008), and UNESCO (2018), people perceive masculine traits to be more dominating, brave, strong, and independent, whereas they view feminine characteristics to be more emotional, collaborative, nurturing, and compassionate. Additionally, men were also responsible for managing a home, maintaining a vehicle, and being the breadwinner of a family.

In addition to the important roles of gender and its influence on individuals, there is an effort to examine gender issues in the context of education, particularly via the study of textbooks. To elucidate, it may be traced back to the 1970s, when early research on gender issues in textbooks, particularly in the English subject area, attracted the interest of academics around the world. Moreover, similar results from the past to the present have been published showing fewer women are presented in textbooks and are related to traditional jobs including housework, nursing, and caring employment (Aguilar, 2020; Bahman & Rahimi, 2010; Hall, 2014; Nofal & Qawar, 2015). Not only is an English textbook a popular area of a gender study, but more studies have also been done to examine gender issues in various types of textbooks such as mathematics and social studies. Tsai (2020), for example, investigated gender issues in mathematics textbooks and revealed that women were less visible than men and that men were more commonly portrayed in outstanding social roles compared to women. Similarly, Şahin and Acikalin (2021) found that women are still underrepresented in comparison to men in social science textbooks.

To focus specifically on gender study in health and physical education textbooks around the world, Klomsten et al. (2005) and Táboas-Pais and Rey-Cao (2012) similarly showed that men clearly outnumbered women in terms of representation, and were confined in stereotypical roles, such as those that suggested certain sports or hobbies were better suited for one gender rather than the other. For example, females tended to choose feminine activities including dancing and gymnastics, while boys tended to participate in more masculine sports such as soccer, ice hockey, and boxing. Based on the evidence provided, it can be implied that bias against women in textbooks might be one of the causes promoting the exclusion of women as social agents and sustaining male supremacy. Also, the prevalent gender bias in such textbooks may impede girls' life motivation and academic achievement. In fact, the abilities humans are born with must not be bestowed based on sex and gender differences (Sachedva, 2018).

Several studies of gender in textbooks were also conducted in a Thai educational setting as in the work by Kijphonphol et al. (2019) which verified a similar trend of men outnumbering women and professions for women being less diversified. Additionally, Assawasirisilp (2019) maintained that textbooks, particularly those used in senior secondary education, clearly emphasized the differences in views about male and female occupations and showed stereotypical pictures of males in the positions of leaders, intellectuals, and renowned individuals. Due to the impact that gender issues have on students as mentioned above, a few recent gender studies in school-based health and physical education, and the lack of evidence-based research to promote gender equality in Thai educational contexts, as claimed by Szerdahelyi and Robène (2019) and Tansanguanwong (2015), it is crucial to place more emphasis on the study of gender issues in the health and physical education textbooks used in the Thai educational environment.

Thus, the researchers of this study decided to investigate gender issues in the health and physical education textbooks used in Thai educational settings because of the importance of preparing children for a lifetime of physical exercise, giving young people the chance to acquire morals, foster self-esteem, and promote proper gender perceptions and roles. Students may feel misled, confused, irritated, and alienated because of inappropriate pictures and descriptions in textbooks since the sexism in pictures and texts has a great influence on students' behavior and attitudes, and plays a crucial part in the acquisition of sex roles (Na Pattalung, 2008; UNESCO, 2020). Thus, the two main research questions of this study are "What is the occurrence frequency of both genders in the selected textbooks?" and "How are genders presented through pictorial illustrations in the textbooks?" The findings may help encourage students to become more conscious of their physical characteristics and gender views, and help academics, instructors, students, and particularly educators, to learn more about how to develop gender-sensitive materials, classroom management, and curricula design.

2. Literature Review

2.1. Textbooks and Gender

Textbooks serve as a solid and trustworthy source of academic knowledge, with a range of learning alternatives such as modules, handbooks, student workbooks, quizzes, videos, and instruction manuals (Graves, 2000). Furthermore, because of their accessibility and affordability, textbooks are recognized as one of the most valuable tools for teachers and students (Kaur, 2018). In addition to their benefits for facilitating learning, textbooks may be seen as a tool for fostering cultures, particularly the idea of gender among students (Sani, 2022). Furthermore, it is evident that the diverse roles played by the two genders in society have an impact on pupils' beliefs, behaviors, and attitudes (Dean, 2007).

Apart from the positive impacts of textbooks on academic and cultural transmission, Kaur (2018) mentioned that one of the primary sources for the spread of prejudice in society was, however, the school textbook itself. For example, it was

discovered that Hindi and English textbooks contained several hidden messages that implied male superiority. Moreover, several established works by Dalimunthe and Susilo (2021), Darni and Abida (2017), Khanunthong et al. (2021), Klomsten et al. (2005), Suhartono and Kristina (2018), Táboas-Pais and Rey-Cao (2012), and Xiong et al. (2017) similarly confirmed that gender issues could be found in different types of textbooks under various dimensions such as language used by authors as in the texts and pictorial illustrations.

As previously stated, gender studies may be undertaken to analyze both written texts and images. Regarding the context of young learners' textbooks, images or pictures seem to be more effective in transferring knowledge than do the written texts due to the limited literacy skills of young learners. Thus, it is necessary to examine pictorial illustrations with the aim of revealing the "visibility" of genders, since it is one of the most essential criteria for assessing gender balance, claimed Amini and Birjandi (2012), whose work focuses on exploring gender visibility in EFL materials used in Iranian high schools and whose results showed the imbalance of gender visibility. For instance, women are typically depicted as moms who oversee home duties, while males are seen engaging in more interesting and intellectual activities including playing football, reading newspapers, fixing cars, and being the breadwinner of the family.

2.2. Gender Stereotyping

According to Oakley (2015), gender is linked to the biological sex of men and women, which is subsequently referred to as the division and social assessment of masculinity and femininity. This was the first attempt to separate the concepts of sex and gender. According to Aprilianti et al. (2021), "gender" refers to the distinctions between men and women based on social and cultural views. People's perceptions of gender therefore developed beyond its biological components, and the gender roles of men and women vary in terms of knowledge, decision-making processes, and work responsibilities (Norem et al., 1990). Moreover, Hofstede et al. (2010) supported that one of the key factors describing masculine and feminine behaviors of people is through different occupations they performed.

Furthermore, domestic roles are defined as gender roles in domestic duties that are essential to human life and well-being. In addition, according to Ejderyan and Tuor (2008), girls and boys naturally maintain and absorb domestic responsibilities from a very young age through the role models they pick up from their social and home environments. Males' domestic roles also covered a variety of responsibilities, including making financial decisions, supervising children's education, and fixing the house. Women's domestic responsibilities, on the other hand, included raising and caring for their children, cooking, and gardening.

Based on such definitions of gender and some examples of its roles in society, the term "gender stereotyping" should be further discussed here. To its definitions, gender stereotyping refers to perceptions, fixed and oversimplified images and ideas regarding the roles and functions between the two genders (i.e., the traits or qualities that are or should be held, the duties that should be performed). Additionally, there are both positive

and negative sides of the gender stereotype. In terms of positive traits, males are competent, confident, and assertive whereas women are friendly, kind, and caring. However, when it comes to the situation when individuals make judgements based on negative stereotyping, it seems to be problematic. For instance, men are stereotyped as being impatient, aggressive, and lacking in empathy, while women are seen as being overly emotional, irrational, and incompetent (Casad & Wexler, 2017; Kiaušienė et al., 2011; Tsai, 2020).

Stereotypes between the sexes eventually develop because of the contrasting perceptions of gender roles. Martin and Dinella (2002) assert that gender stereotypes change over time depending on a society. The gender roles that are prevalent in a society have an impact on the expectations toward both genders. Additionally, gender stereotypes were expressed in a variety of ways, including through emotions, physical characteristics, hobbies, and careers. Consider the situation of the conventional female social roles, which was restricted to the idea of housewives taking care of family members and children (Eagly & Diekmann, 2000). Males, on the other hand, were seen as the family's breadwinner or leader, typically in charge of outside tasks including house maintenance, and they also had the physical power to serve as the home's protector. Due to the imbalance, both genders' chances to grow as members of society were affected. According to Pm and Parameswari (2019), as STEM (science, technology, engineering, and math) was performed mostly by men and was seen as a high-status career that females were not encouraged to pursue, women tended to have less opportunities to engage in the field. Gender stereotypes therefore served as the foundation for this social perception and orientation.

Moreover, the various biological and physical variations may influence the differences in views of the two genders as well as the inequity between them in a variety of dimensions. Fewer women were presented in English secondary school textbooks, according to Ena (2013), who investigated the visual presentation of the e-textbooks used in Indonesia. Males were typically portrayed in significant roles (62.4% compared to 37.2% of female representations). The imbalance in the number of male and female characters, 1,098 (77%) against 321 (23%), made it clear that gender stereotypes were predominant. Moreover, other studies looked at elementary school textbooks and found that there were similar tendencies of gender inequality, with 60% of the stories being told by men and 76% of all characters being men (Jabeen & Ilyas, 2012; Jabeen et al., 2014). Thus, based on those previous studies, it could be said that gender inequality might be a problematic issue in most textbooks.

From the background and evidence mentioned above, this research concentrates on Thai education contexts and the textbooks used, for example, The Health and Physical Education Grade 1 and The Health and Physical Education Grade 2, in accordance with the 2008 basic core curriculum. Furthermore, health education and physical education is considered the field that fosters health learning, development of self-perceptions, and life skills including the development of students' bodies via physical exercises, which may have had an impact on how gender is perceived among pupils.

2.3. Gender and Early Child Development

According to Aprilianti et al. (2021), gender roles have significantly influenced how young children at the age of 3 years (a pre-school period) perceive their gender through various means of communication, activities, and in-group socialization (e.g., same-sex friends). Children of different ages showed diverse behaviors, such as a definite preference for toys that corresponded to their gender. This situation appeared to have several causes, one of which was the educators' encouragement of the students to participate in activities based on their gender differences. In a similar vein, Martin and Dinella (2002) claimed that children as young as 1 to 3 years old begin to develop specific gender perceptions and acquire a foundational understanding of the activities and things associated with each gender throughout this time. Likewise, during the preschool years, children's conceptions of their sexual actions and prospective professions develop quickly, and finally reach a very high level in kindergarten.

As a result of these findings, an effort is being made to promote gender equality in early education. According to Vendrell et al. (2014), the European project "Gender Loops" applied gender mainstreaming strategies for teachers at educational institutions (e.g., schools, colleges, and universities), as well as early childhood education institutions. The aforementioned project reported that partners from Germany, Lithuania, Norway, Spain, and Turkey worked together to develop a curriculum for training toward the vital role of gender equity in early childhood education.

In addition to early childhood education, it seems that gender stereotypes in schools are being shaped through health and physical education courses at the elementary level through various sports and personality attributes. Boys are likely to be interested in the entertaining aspects of sports, yet girls often show more technical learning abilities through skills and gaming strategies. In addition, male students showed higher levels of desire for task completion as well as global physical, endurance, strength, appearance, and body fat indexes (Mesa & Ries, 2013). Therefore, early childhood education is necessary to assist growth and encourage early learning with continuity from birth to the age of three. Furthermore, educators did not underestimate the value of socialization in the context of early childhood education.

2.4. Gender Issues in Thai Social and Educational Contexts

Due to the fact that males continue to be promoted to higher social positions while the number of female leaders is still low, gender equality has recently been the focus of social movement in Thai culture. Despite women's higher levels of education, they do not seem to be the majority in the country's management at the highest levels (Hansatit, 2014). In addition, there are some examples of gender discrimination in Thai culture, including unfair pay, gender-based violence, sexual abuse, exploitation, forced labor, and even human trafficking (Chulalongkorn University, 2018).

Numerous works about gender issues in Thai educational contexts were based on English textbooks. Khanunthong et al. (2021) showed that males were more frequently represented than females in social roles. With regard to both linguistic (e.g., words,

phrases) and non-linguistic units (e.g., pictures), several studies similarly implied an inferior status for women compared with male counterparts in many areas, for instance, men were more frequently represented in positions of leaders, intellectuals, and famous individuals, whereas women were stereotyped with household responsibilities (Assawasirisilp, 2019; Bhattarachaiyakorn & Boonthong, 2017; Kijponphol et al., 2019).

In the same vein, Na Pattalung (2008) also confirmed that the language used in ESL textbooks by Thai authors sometimes supported a patriarchal system in society as seen from several facets including sexist language, double-binds, and hegemonic masculinity. The study revealed that textbooks portray men as more powerful, successful, and having control over women. For instance, when it comes to the usage of specific terms such as generic pronouns (e.g., he, his, and his) and occupational words as in chairman and businessman, male-related words are generally used as the norm to refer to both genders. Additionally, it was also highlighted that several instances in EFL textbooks reinforce the idea of hegemonic masculinity (i.e., men having the right to use physical force to dominate others and be successful in stereotypically masculine occupations such as highly-paid jobs). Moreover, it appears that men are the family's breadwinner, which could imply that women are excluded from participating in the economic life of the family. This idea reflects the deeply-held perception of patriarchal societies where men have greater authority to govern women since they are permitted to occupy certain high-profile professions while their female counterparts are solely limited to domestic work.

With respect to gender issues in Thai schools, according to Tansanguanwong (2015), it was found that several school policies and curricula have undoubtedly contributed to the growth of gender bias and discrimination. The societal values associated with maleness and femaleness were conveyed and may be observed through teachers' attitudes and beliefs, which are further reinforced by textbooks, schools, and family behaviors. These attitudes and beliefs are neither conscious nor purposeful. Moreover, Thai teachers require girls to behave "properly", to agree, and to be "good" as this is what Thai society expects of Thai women, whereas boys can occasionally be naughty and aggressive.

Despite the unpleasant reality of gender inequalities in Thai society and education, there has recently been an increase in optimism that the Thai government would tackle this problem. To elaborate, the Gender Equality Act of 2015, which was the first case of its type in Thai legal history, aims to protect all Thai citizens from gender-based discrimination. This could be seen as a positive sign of the increased awareness of gender equality in Thai society. Thailand is also eager to confront gender issues in a plethora of ways such as promoting knowledge and information to change parental, student, and teacher attitudes toward gender roles through the restructuring of curriculum design and educational media (UN Women, n.d.).

3. Research Methodology

3.1. Data Collection and Analysis

The Health and Physical Education Primary Grade 1 and The Health and Physical Education Primary Grade 2 have been used for some time as teaching materials in both public and private schools in Thailand after receiving approval from the Ministry of Education under the country's basic education core curriculum. After a preliminary investigation of the textbooks used in the northeastern region of Thailand, it was found that some public elementary schools employed the health and physical education textbooks developed by Aksorn Charoen Tat Co., Ltd. as the primary material to teach their pupils from grades 1 to 6. This study used purposive and convenience sampling techniques, so finally the study was restricted to the textbooks used in Grades 1 and 2 in one public elementary school in a northeastern province of Thailand and the main reasons for choosing these two levels were due to the fact that at these grades (i.e., first and second grades) children start studying systematically with the aid of textbooks and it is, therefore, a crucial stage for the development of distinct gender perceptions and a fundamental comprehension of activities and things associated with their genders. Although Aprilianti et al. (2021) together with Martin and Dinella (2002) claimed that the critical age range to develop such gender perceptions was from 1-3 years old (i.e., pre-school level), it appeared that students in this age range have little opportunity to engage with textbooks due to their lack of reading ability. Thus, the two textbooks used in Grades 1 and 2 serve as the primary data source for this study. More importantly, the frequency of occurrence of gender representation through pictorial illustrations in these selected textbooks only represent gender issues based solely on a single publisher, rather than drawing generalizations from other Thai health and physical education textbooks written by different authors and publishers.

Aside from these data sources, the analysis of all pictorial illustrations fell under the area of representational functions, which shows the main narrative acts conveying the same story (Levin et al., 1987). For content analysis, the researchers performed a systematic classification procedure of categorizing and identifying themes or patterns of the pictorial illustrations, and the process consisted of three main stages: 1) coding the meaning of each pictorial illustration, 2) grouping the codes that share identical or similar meanings, and 3) theming. In the first stage, each textbook chapter was carefully examined to determine which acts were carried out by both genders in each picture. The actions seen in each pictorial illustration were categorized in accordance with the broad definitions of such narrative acts (e.g., ironing, doing the laundry, and cooking), and they were recorded on an observation sheet. During the coding phase, the list of activities from the observation sheet were grouped according to common properties and similar code meanings, which ultimately resulted in four categories in the theming stage which were: 1) domestic roles, 2) outdoor activities, 3) leisure activities, and 4) occupational roles. Then, tables containing the total representations of both genders were presented under descriptive statistics indicating the frequency and percentage of occurrence. The researchers then qualitatively discussed the characteristics of each thematic unit to explore how both genders are portrayed in the textbooks.

4. Findings

To answer the first research question “What is the frequency of occurrence of both genders in the selected textbooks?”, the data are presented in Table 1.

4.1. Representation of Genders in Pictorial Illustrations

Table 1

Frequency of occurrence between two genders

Data Sources	Frequency & Percentage		
	Males	Females	Total (each)
Textbook: Grade 1	199 (47%)	229 (53%)	428
Textbook: Grade 2	120 (42.6%)	162 (57.4%)	282
Total (two textbooks)	319 (45%)	391 (55%)	710 (100%)

The two selected textbooks include 710 pictures of both genders in total, with 428 of those images appearing in the first textbook and 282 in the second. Additionally, fewer males were depicted in both textbooks, with 319 (45%) for males and 391 (55%) for female counterparts. In the first-grade textbook, there were 299 (53%) female representations compared to 199 (47%) male representations. Similarly, the Grade 2 textbook had 120 (42.6%) male characters and 162 (57.4%) female characters in its pictorial illustrations. Unlike several previous related studies by Táboas-Pais and Rey-Cao (2012) and Kломsten et al. (2005), the findings unexpectedly showed a different trend since women clearly outnumbered men in terms of gender visibility through pictorial illustrations. The possible reasons behind this will be further discussed in the next section.

4.2. Analysis of Gender Issues in Pictorial Illustrations





To answer the second research question “How are genders presented through the pictorial illustrations in the textbooks”, the collected data was critically discussed in qualitative and descriptive ways to reveal the phenomena of gender visibility through pictorial illustrations in the textbooks. From this investigation, there were four main thematic units of gender representations namely: 1) domestic roles, 2) leisure activities, 3) outdoor activities, and 4) occupational roles. Furthermore, there were examples that reflected gender issues in each thematic unit.

4.2.1. Domestic roles

Domestic roles refer to the tasks performed by both genders inside a household to ensure that the basic needs of the family members are met such as cooking, cleaning, and taking care of children or elders and other family members.

Figure 1

Examples of pictorial illustrations regarding domestic roles

Textbook Grade 1		Textbook Grade 2	
<i>Male</i>	<i>Female</i>	<i>Male</i>	<i>Female</i>
			





The data shown in Figure 1 reveal that females were more closely connected to domestic roles than their male counterparts. Examples of female domestic roles portrayed in both selected textbooks included various chores (e.g., sweeping the floor, dusting a showcase, setting up a dinner table, doing the laundry, ironing, and cooking). Moreover, females were also presented in the role of caring for others such as taking care of babies, helping children with their homework, and playing with babies. As for their male counterparts, there were fewer domestic roles presented in both textbooks. However, some of the males performed similar household duties to females such as cleaning windows, helping children with their homework, taking care of babies, and laying the dinner table. Furthermore, only the role of making house repairs was performed by males. In summary, it can be said that, despite efforts to involve men in some domestic roles or household responsibilities, these were limited, and women were still excluded from jobs such as fixing a house that were more difficult and potentially dangerous.

4.2.2. Leisure activities

Leisure activities were the recreational activities performed inside the house such as hobbies and other entertaining activities.

Figure 2

Examples of pictorial illustrations regarding leisure activities

Textbook Grade 1		Textbook Grade 2	
<i>Male</i>	<i>Female</i>	<i>Male</i>	<i>Female</i>
			





From a holistic view, both genders engaged in a variety of leisure activities in the two textbooks. However, detailed analysis revealed that both genders were depicted in distinct ways. To be explicit, in the same leisure activity known as “playing with toys”, men were shown playing with robots, cars, and Rubik’s cubes, which reflected a sense of intelligence development, while women were restricted to playing with dolls, demonstrating a greater sense of nurturing. However, it was surprising to see that males’ leisure activities were likely to involve the arts, as evidenced by the images of boys drawing and dancing, which contrasted with previous research by Klomsten et al. (2005) that suggested that dancing was a feminine activity.

4.2.3. Outdoor activities

Outdoor activities are the activities performed outside the house such as doing exercises and socializing with friends and other people.

Figure 3

Examples of pictorial illustrations regarding outdoor activities

Textbook Grade 1		Textbook Grade 2	
<i>Male</i>	<i>Female</i>	<i>Male</i>	<i>Female</i>
			

In both textbooks, it was found that more males than females were likely to engage in outdoor activities. Male outdoor activities included playing football, jogging, cycling, and playing in the playground. However, females were limited to performing light physical activities (e.g., skipping) and were shown to be more relaxing, compared to the males’ activities, which tended to involve moderate and heavy physical activities such as playing football, playing cat-and-mouse, and playing on a swing.





This section shows that traditional thoughts about gender roles still influenced what roles women are expected to perform. These results appear similar to those of several previous such as studies by Klomsten et al. (2005) and Táboas-Pais and Rey-Cao (2012) that suggested certain sports were more appropriate for one gender than the other, with girls being associated with feminine activities such as dancing and gymnastics and boys participating in more masculine sports such as soccer.

4.2.4. Occupational roles

Occupational roles refer to the professions performed by the two genders in society.

Figure 4

Examples of pictorial illustrations regarding occupational roles

Textbook Grade 1		Textbook Grade 2	
Male	Female	Male	Female
			

The data revealed that males were presented in a variety of occupational roles in the two textbooks, whilst females were only given one job as a teacher. Male occupational roles included an officer, a dentist, a teacher, a policeman, and a firefighter. Similarly, when examining the occupational roles performed by men, it was found that they pursue professions of a more challenging, risky, and dangerous nature such as a firefighter and policeman. Moreover, some male professions implied that they were more intellectual in nature and well-paid compared to those of women. For example, a male dentist was shown in both textbooks, which tends to suggest that men are perceived as having a career which requires a high level of intelligence and represents a higher status. Overall, women’s jobs were deemed to be confined to a specific field and were less diversified than those of men. This finding is consistent with the research by Kijponphol et al. (2019), which demonstrated that males outnumbered women and that female occupations tended to be less diverse than those of men.

5. Discussion and Conclusion

Interestingly, this study showed that women were more frequently portrayed than men, in contrast to previous studies by Aguilar (2020), Bahman and Rahimi (2010), Ena (2013), Hall (2014), Nofal and Qawar (2015), Şahin and Acikalin (2021), and Tsai (2020), which assert that textbooks regularly feature more boys than girls at all levels, including linguistic, visual, and social levels. It should be noted that a possible reason for this might be the significant influence of Thailand's basic core curriculum on textbook development. In other words, a higher number of female representations might be due to the fact that the selected textbooks were prepared in accordance with Thailand's basic core curriculum which aims to promote learning standards for health and physical education merged with a focus on proper social beliefs and their self-adjustment to changes in a variety of ways, including physical, mental, emotional, and especially gender aspects. Additionally, it is strictly stated that after the completion of health and physical education in Grades 1 and 2, students should be able to distinguish the different traits of males and females, to define their proper actions depending on their gender, and to perceive pride in being male or female (The Ministry of Education Thailand, 2008).

Furthermore, when observing the learning area "The Life and Family", which attempts to enhance students' life skills, it consequently helps to explain why the authors chose to include more illustrations and texts about domestic responsibilities since doing so was one of the most successful strategies to encourage children to build their life skills (Drummond et al., 2018). In addition, young children are typically required to show their parents gratitude in Thai society, and the proper way to do this is by assisting them with household chores. However, as Na Pattalung (2008) acknowledges, there are firmly held patriarchal beliefs that Thai authors may still hold which may be the reason why more women were still stereotypically associated with domestic roles and activities in the home more so than men, which ultimately led to a greater percentage of females representations overall.

In spite of the increased number of female characters presented in these textbooks, there is still a dilemma that highlights the superficial nature of this effort to advance gender awareness and suggests that it may not actually result in a true gender equality in Thai society. According to the findings, there were still more males than females shown as having a higher status, engaging in different types of activities, and having a highly-paid or skilled profession. Men were still portrayed as being more aggressive, competitive, rough, and engaged in challenging activities such as playing football, repairing homes, and working as police officers and firefighters. This is supported by Shteivi (2003) who states that males tend to fill the majority of the dominating public roles. Furthermore, when the author represented male characters in some activities in these textbooks, they were still connected to knowledge and intelligence such as playing with Rubik's cubes and reading books.

On the contrary, females were still attached to the roles showing a sense of tenderness and nurturing as well as the role of the mother. Moreover, when females were displayed with objects, it was a doll representing babies which implied that females were automatically attached to the more nurturing roles. The results from this study strongly

support the previous research by Assawasirisilp (2019), Bhattarachaiyakorn and Boonthong (2017), Kijponphol et al. (2019), and Na Pattalung (2008) revealing the supposedly superior status of males in several social roles such as leaders, intellectuals, and famous individuals, whereas women were stereotyped in the roles of household jobs and responsibilities as well as the support of patriarchy in Thai society.

Such factors could be due to language, social structure, and Thai social and cultural norms, all of which continue to have significant effects on how people perceive gender and are possibly linked to the circumstance of having an imbalance of gender in a recently developed textbook in Thai educational contexts. Through the lens of a sociolinguistic perspective, the Thai term “kulasatri”, which refers to a virtuous woman who must be skilled at household chores, graceful, pleasant, yet modest in appearance and social manners, and conservative in her sexuality, tends to mold what a woman should be or do and promotes feminine culture among Thai women (Tantiniranat, 2005). Aside from language influence, women, under a patriarchal culture, are frequently restricted to the role of family caretaker (Sumano, 2020). Therefore, despite increasing access for Thai women to economic, social, political, and educational advancement, there are still certain barriers which prevent them assuming major social roles, such as high-level careers. Kosaikanont (2019) also pointed out that some industries still exhibit gender bias. For example, transportation and construction are known to be male-dominated industries, whereas services and finance are more female-dominated. This may be one of the possible reasons why women today do not seem to fully acquire empowerment and equality in many aspects of Thai society (Hansatit, 2014).

Consequently, it is not surprising that this research confirmed the findings from well-established studies which show that males predominate in textbooks. A thorough analysis of the characters represented in textbooks shows the significance of gender sensitivity, which helps to understand to some extent the social construction of masculine and feminine, to identify the pertinent indicators that bring about social perceptions of gender, and to outline the foundation for a contemporary gender system. Moreover, the results of this study suggest that gender balance goes far beyond solely having an equal number of representations. Instead, it refers to the ideology associated with how boys and girls are depicted in textbooks, particularly the pictorial illustrations that make up most of the material for young students.

As mentioned earlier, the establishment of gender equality requires both quantity and quality of the contents to which students are exposed (Stockdale, 2006). With the awareness of gender equality in textbooks guiding the prospect of equitable treatment of boys and girls, it is crucial for textbook developers of all subjects to adopt pictorial illustrations of characters in a proper and contemporary manner including daily activities, attributes and personality traits, physical attributes, and psychological qualities (Brugeilles & Cromer, 2009). Moreover, Yasin et al. (2012) suggested that showing a diversity of jobs and activities with equal focus may encourage women to consider all their professional options and prospects in various facets of society.

To address the limitations and provide recommendations, more textbook categories should be included in future research, along with an analysis of all elements

of the texts' contents at various levels such as words, phrases, discourse, dialogues, reading passages, and a thorough analysis via the lens of critical discourse to provide a more complete picture of how genders are depicted in school textbooks and the potential implications they may have on students' views and attitudes.

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