

The Hidden Curriculum: Gender Roles in Textbooks

A Literature review

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Summary

Objectives: This literature review aims to explore the portrayal of gender roles within educational textbooks, focusing on how gender identities and behaviors are depicted. The study will analyze textbooks to identify repeated patterns and representations of gender, assessing whether these depictions reinforce traditional gender norms or promote a more inclusive understanding of gender diversity. By examining how genders are represented, this study seeks to discover the hidden messages about gender that textbooks convey to students and educators.

Keywords: gender roles, textbooks, stereotypes, primary education

CONTENT

1	INTRODUCTION	4
2	THEORETICAL BACKGROUND.....	6
2.1	Theoretical Framework	6
2.1.1	Social Learning Theory	6
2.1.2	Critical Pedagogy	7
2.1.3	Intersectionality and The Hidden Curriculum	7
2.1.4	Connecting factors	7
2.2	Key terms related to the study.....	8
2.3	Stereotypical gender roles in different cultures	9
2.3.1	Man’s Role.....	9
2.3.2	Woman's Role	10
2.3.3	Other?.....	11
3	GENDER ROLES IN TEXTBOOKS	13
3.1	Quantitative differences	14
3.2	Qualitative differences	14
3.3	Gender Representations in STEM Education	16
3.4	Intersectionality and Diversity	17
4	CHALLENGING OR REINFORCING STEREOTYPES	19
5	CONCLUSIONS	21
6	LIMITATIONS.....	23
7	REFLECTIONS ON MY FUTURE CAREER	24
8	END NOTE	26
	REFERENCES.....	27

Textbooks are a cornerstone of the education we know. Textbooks teach us new information, help us practice and do revision. We rely on textbooks during most of our formal education and often even later. Textbooks not only shape students' knowledge but also teach and increase their understanding of societal norms and expectations. As vital pedagogical tools, textbooks influence the formation of gender identity and societal roles during critical developmental stages (Apple, 2018; Bandura, 1977). In primary education, where children are in their most formative years, these materials are often our most used teaching tool. Beyond academic learning, textbooks teach young pupils how the world around us is seen through adults and what are the things that are held valuable in our societies, thereby acting as mirrors and windows through which societal norms and values are transmitted to younger generations (Apple, 2018). Therefore, textbooks play a dual role: they are tools for academic learning but also cultural products that reflect and shape societal values, serving as instruments through which dominant ideologies are transmitted and societal norms are reinforced (Apple, 2018).

Gender roles, defined by Payne (2024) in the Encyclopedia Britannica, are “a culturally and socially determined set of expected behaviors, attitudes, and characteristics based on concepts of masculinity and femininity.” They are the societal expectations tied to behaviors and responsibilities based on one's gender. Research suggests that many textbooks continue to reinforce traditional gender roles, portraying boys as leaders and adventurers and girls as caregivers and nurturers (Donellan, 2024). Such representations risk perpetuating outdated stereotypes, limiting children's aspirations and reinforcing gender inequities in our societies, as confirmed by studies showing the long-term impact of gender stereotyping in educational materials on students' self-perception and career choices (Lee, 2014). Hence, as with any book, textbooks hold the information and values that the writer(s) has chosen to involve in it. This raises a question that are our textbooks up to par when it comes to gender norms and equity and raising well-balanced pupils if our textbooks could still hold outdated stereotypes.

This study has been carried out as a descriptive literature review. The descriptive analysis of literature enables the incorporation of diverse perspectives and a broad range of data, as the selection process does not rely on strict screening criteria but instead draws from a wide variety of sources. By conducting a literature review, existing

research can be examined to explore the relationship between gender representations and textbooks. The studies used in this literature review have been selected from Turku University's library Volter and Google Scholar and with the help of artificial intelligence.

This study specifically investigates the depiction of gender roles in textbooks used in education and their potential effects on young learners in the literature. Specifically, it addresses two key questions: **(1) What kinds of gender roles are depicted in textbooks?** **(2) In what ways might these depictions reinforce or challenge gender stereotypes among young students?** By exploring these issues, the present literature review aims to contribute to the broader conversation about equity in education and inform efforts to create more inclusive and balanced learning environments.

The findings of this study have important implications for teachers, other educators and future curriculum developers. As textbooks continue to be central to education globally, understanding their role in shaping gender perceptions is vital for fostering an inclusive society. The study underscores the importance of moving beyond traditional portrayals and ensuring that all students, regardless of gender, are empowered to envision limitless possibilities for their futures.

In this chapter I am discussing the theoretical framework, key terms and background that guide my thesis. The chapter on key terms highlight the important concepts discussed in my thesis and finally I will discuss the stereotypes and concepts connected to gender and gender roles.

2.1 Theoretical Framework

In this chapter I am discussing the theories that frame my thesis. I am focusing on Social Learning Theory (Bandura, 1977), Critical Pedagogy (Freire & Bergman Ramos, 2014) and Intersectionality (Crenshaw, 1989) as well as the concept of hidden curriculum (Apple, 2018). These theories lead us to examine how gender roles and their perceptions might lead to children evaluating themselves and their opportunities as students but in their future professions.

2.1.1 Social Learning Theory

Social Learning Theory (Bandura, 1977) concludes that individuals gather behaviors, attitudes, and values through observation and imitation of role models in their environment. In the context of primary education, textbooks play a significant role in this observational learning. Children are exposed to representations of gendered behaviors and roles, which they may internalize as societal norms. Repeated portrayals of these traditional gender roles of men as leaders and women as caregivers in educational materials can shape students' expectations about their own roles in the society. With this theory in mind, we should examine the materials given to pupils with an intense look, due to how textbooks may influence students' perceptions and aspirations.

2.1.2 Critical Pedagogy

Critical Pedagogy (Freire & Bergman Ramos, 2014) explores the ways educational practices can preserve or challenge power structures and social hierarchies. Freire, who first introduced these ideas back in 1968, believed that one should not teach but be in discussion with one's pupils and learn with them. Using materials as textbooks when teaching critical pedagogy, as they are cultural products, reflect the ideas and ideologies that are most dominant in their setting. When textbooks reinforce traditional gender roles, they don't serve as critical tools to educate young children about the change in our societies but rather, reinforce inequality among genders. However, textbooks can also have the potential to challenge these norms by including diverse and honest representations of all genders. This theory fits my thesis, since my goals are to identify implicit messages that transfer from textbooks to pupils and emphasize the role of education in creating gender equality.

2.1.3 Intersectionality and The Hidden Curriculum

The concept of Intersectionality (Crenshaw, 1989) highlights how overlapping social identities—like gender, race, and socioeconomic status—cross and shape individuals' experiences and opportunities. In this thesis, I am discussing gender representation which links to intersectionality, as it is crucial to understanding how these portrayals might marginalize individuals who exist in multiple identities or who are still figuring out who they are. For example, the absence of diverse racial and gender identities in textbooks could further alienate students who do not fit traditional categories.

The Hidden Curriculum refers to the implicit lessons students learn through educational materials that extend beyond the explicit content being taught (Apple, 2018). In the context of gender roles, textbooks may subtly or not so subtly reinforce stereotypes through visual imagery, language, and the allocation of roles in stories or examples. Analyzing these messages is essential for discovering how textbooks shape pupils' subconscious understanding of gender norms and expectations.

2.1.4 Connecting factors

The theories and concepts discussed earlier are important frameworks for my thesis as they all support the importance of studying gender roles in textbooks. Social Learning Theory

explains how students might internalize observed behaviors, while Critical Pedagogy critiques the power dynamics perpetuated through these materials. Intersectionality broadens the scope of my analysis, ensuring diverse identities, such as nonbinary people, are considered, and the Hidden Curriculum uncovers implicit biases in content.

As a conclusion, these theoretical perspectives provide a comprehensive foundation for this analysis on how gender roles are represented in textbooks and their potential impact on students' perceptions and aspirations.

2.2 Key terms related to the study

Gender roles refer to the expectations, norms, and behaviors usually associated with individuals based on their gender (Payne, 2024). Gender, either perceived or assigned, is complex, and the roles linked to it can dictate how men, women, boys, girls, or genderless identities, such as agender or nonbinary people, are expected to think, act, and interact in our societies. Gender roles have traditionally been shaped by societal structures, such as religion, economy, and politics, which have defined distinct responsibilities for men and women (Fausto-Sterling, 2020). With increasing awareness of gender equality, traditional roles are being challenged, leading to more fluid and diverse understandings of gender (Fausto-Sterling, 2020; Schilt & Westbrook, 2015).

Textbooks are part of teaching materials used by teachers and their students. Teaching materials include textbooks, workbooks, teacher guides, and other materials that the provider has chosen to include, usually, for example, electronic teaching materials and materials for the pupils. In this thesis, I am focusing on textbooks, either printed or online since textbooks are usually the most used teaching material. Textbooks are instructional resources designed to support teaching and learning in educational settings. They serve as structured tools for delivering curriculum content, providing students with knowledge, concepts, and practice opportunities in various subjects (Apple, 2018).

Primary education refers to the first stage of formal education, typically covering the early years of schooling for children aged 5 to 12, depending on the country. The aim of primary education is to teach children foundational skills in literacy, numeracy and critical thinking as well as foster socio-emotional growth, creativity and life skills. According to the Finnish National Agency for Education (FNAE) (2016), the aim of primary education in Finland is to foster students' development into ethical, responsible members of society while

equipping them with essential knowledge and life skills (FNAE, 2016) Primary education lays the groundwork for lifelong learning and development.

2.3 Stereotypical gender roles in different cultures

Gender roles dates to the hunter gatherer age, where women where in charge of gathering food and men in charge of hunting (Kelly, 2013). The traditional roles have long been a cornerstone of societal organization, shaping the expectations and responsibilities assigned to individuals based on their perceived gender. Connell and Pearse (2014) describe in their book “*Gender: In World Perspective*” how one is not born to certain gender stereotypes, but we develop them from our surroundings and pressure from society. They describe how “Being a man or a woman, then, is not a pre-determined state. It is a becoming...” (p. 5). They insinuate that the roles we have more or less in place today could be vastly different if we had chosen so, but also sets a stage for discussion for challenging stereotypical gender roles.

Thus, the gender roles I am discussing in my thesis can be said to have been shaped by societal structures (Butler, 2002; Connell & Pearse, 2014; West & Zimmerman, 1987) and continue to develop as our society develops further. Stereotypes rely on our history, as the roles that we all play in our society stem from the need to survive and stay alive. This background has assigned men and women distinct responsibilities and roles to maintain an equitable level of life, with religion, economy, and politics further cementing these roles into rigid expectations (Connell & Pearse, 2014). However, these stereotypes are not uniform across cultures, and the increasing recognition of diverse gender identities continues to challenge these binaries. Butler (1990) argues that gender identities are constructed through performative acts, reflecting societal norms rather than inherent identities. Similarly, West and Zimmerman (1987) describe 'doing gender' as the day-to-day practice that reinforces these traditional gender roles.

2.3.1 Man’s Role

Historically, men’s roles have been closely tied to their perceived responsibility as providers and protectors. Across many cultures, men were expected to work outside the home, contributing to the family’s economic stability through activities like agriculture, trade, or industrial labor (Connell & Pearse, 2014). This association with financial provision often placed men in positions of power and decision-making within families

and communities. In patriarchal societies, men were seen as the head of the household, responsible for guiding and protecting their families, while women were more in supportive roles.

Culturally, men have been idealized as strong, assertive, and unemotional. This expectation often discouraged vulnerability, reinforcing the stereotype that masculinity is synonymous with independence and strength (Butler, 2002). In Western societies, for example, the ideal man is often portrayed as competitive and self-reliant, while in many Asian cultures, men are seen as the guardians of family honor and tradition (Connor et al., 2021).

However, these roles are not static. The modern world has witnessed significant shifts in the perception of masculinity. Social movements advocating for gender equality have encouraged men to take on caregiving roles and embrace emotional openness. Today, it is increasingly common to see men actively involved in parenting, as stay-at-home fathers, or in traditionally "feminine" professions, challenging long-standing stereotypes and expanding the boundaries of masculinity (West & Zimmerman, 1987).

2.3.2 Woman's Role

In contrast to men, women's traditional roles have largely revolved around caregiving and domestic responsibilities. Across cultures, women have been viewed as homemakers, with their primary duties centered on child-rearing, cooking, and managing household affairs (Connell & Pearse, 2014; England et al., 2020). This domestic sphere was often considered a woman's natural domain, reinforcing the stereotype that women are inherently nurturing and supportive. Women's identities have also been historically tied to their reproductive roles. In many societies, their primary purpose was seen as bearing and raising children (Connell & Pearse, 2014). These expectations often came with the additional stereotype that women should be modest, obedient, and dependent on male authority (Neyer & Bernardi, 2011; Rosen, 2003). Despite these deeply rooted expectations, women's roles have undergone transformative changes in recent decades. Access to education and opportunities in the workforce has enabled women to challenge traditional gender norms. Women now occupy leadership roles in politics, business, and science, pushing the boundaries of what was once considered acceptable for their gender. Movements advocating for reproductive rights and gender equality have further empowered women to define their identities beyond traditional expectations (Butler, 2002).

2.3.3 Other?

In today's media, there is a lot of discussion about the third gender, or the diverse nature of gender. While it might seem like a new and trendy discussion, there have been numerous cultures throughout history that recognize diverse gender identities. For example, Hijra community in South Asia and Two-spirit individuals in indigenous cultures have represented nonbinary and gender-diverse roles, for a long time (Anthropology Review, 2024). Therefore, even though the binary view of gender has and keeps on dominating many societies, other views are not so uncommon as it might seem (Anthropology Review, 2024).

In the modern world, the recognition of nonbinary, agender and genderqueer identities and individuals has significantly expanded the understanding of gender roles.

Genderless or neutral roles disrupt traditional expectations by showing that societal responsibilities do not need to be defined by gender at all. Instead, they highlight the importance of individuality and the ability to choose roles based on personal abilities and preferences. Like Connell and Pearson (2014) described, set gender is not something we are inherently born with, so the fluidity in our gender experience can be expected.

The vast increase in visibility of diverse gender identities has led to the adoption of more inclusive practices in many societies. It is not very straightforward for every society, but we see more inclusive practices in most modern societies. For example, gender-neutral language and policies are becoming more common in education and workplaces, promoting equity for all individuals regardless of gender identity. In Finnish narrative, this has led to the discussion of terms such as "palomies" meaning "fireman" in Finnish to be changed to the term, "pelastaja" meaning "savior" in Finnish. By challenging the binary framework, these identities encourage society to move away from rigid stereotypes and toward a more inclusive understanding of roles and their division among the inhabitants of that society (Butler, 2002).

The stereotypical gender roles assigned to men, women, and other gender identities are deeply rooted in cultural, historical, and societal contexts. While traditional roles often emphasized distinct responsibilities based on gender, the modern world has seen a growing push to challenge these norms. The evolving roles of men and women, coupled with the recognition of nonbinary and genderless identities, highlight the fluidity of gender and its impact on societal expectations. Understanding these roles in their

cultural and historical contexts is essential for fostering a more inclusive and equitable society.

Textbooks are among the most used educational materials. However, as with any book, they are written by individuals who may consciously or unconsciously incorporate their own perceptions into the material. This is particularly relevant in subjects, such as history or social studies, where topics are often shaped by human perspective. Writers may insert their viewpoints, which are then transmitted to young learners.

The first research question of this study asks about the kinds of gender roles that are depicted in textbooks. This chapter examines how gender is represented in textbooks based on previous research findings.

Textbooks do more than provide structured learning; they shape students' perceptions of societal roles and norms. As part of the hidden curriculum, they often contain implicit lessons about gender expectations (Lee, 2014). Textbooks act as mirrors, reflecting societal norms, and as windows, offering perspectives on roles and identities (McNair & Edwards, 2021). However, studies consistently show that textbooks often reinforce traditional gender norms rather than challenge them (Donellan, 2024).

A study on Austrian religious education textbooks finds that men are typically portrayed as active decision-makers, while women are relegated to passive, supportive roles, reinforcing deeply embedded societal hierarchies (Mayrhofer, 2024). These portrayals are not limited to one field of study or one country. For example, Finnish and Tanzanian textbooks overwhelmingly depict men in leadership and technical roles, while women are assigned caregiving and domestic responsibilities (Lähdemäki & Tuomi, 2023; Mkuchu, 2004). Similarly, Japanese English as a Foreign Language (EFL) textbooks prioritize male characters in dialogues and narratives, subtly establishing male dominance and relegating women to the background (Lee, 2014). These findings suggest that textbooks are not neutral educational resources but rather ideological tools that influence the gender experience and shape students' worldviews from a young age.

In addition to textual content, visual representations in textbooks often reinforce gender stereotypes. Research on Turkish primary school textbooks shows that men are consistently portrayed as physically active and professionally engaged, while women are depicted in passive or supportive roles (Arslan Özer et al., 2019). This imbalance emphasizes the need for a critical examination and revision of textbook content to ensure it aligns with contemporary values of equity and inclusion.

By analyzing these gender representations, it becomes possible to reveal the implicit messages that students absorb and challenge the perpetuation of stereotypes that may restrict personal development and career aspirations.

3.1 Quantitative differences

Quantitative analyses of textbooks consistently reveal significant imbalances in the representation of male, female, and non-gendered characters. Although the portrayal of both genders would be important for developing minds, textbooks often represent a disproportionate focus on men.

Studies of Japanese elementary school science textbooks demonstrate a strong gender imbalance, with male characters significantly outnumbering female characters, particularly in portrayals related to scientific achievement (Donnellan, 2024). Similarly, a Swedish study by Holmqvist and Gjörup (2006) finds that EFL textbooks contain more male than female characters in both text and illustrations. When female characters appear, they are often shown in supporting or secondary roles, diminishing their visibility and importance.

This pattern is not limited to specific subjects. Tanzanian textbooks depict men in 71% of all professional roles, while women are mostly shown in caregiving contexts (Mkuchu, 2004). Similar findings emerge in Spanish primary school textbooks, where men are depicted in 70% of professional roles (Guijarro-Ojeda et al., 2021). European textbooks show comparable trends, although there are some efforts to highlight women in scientific fields.

These inequalities in representation contribute to the reinforcement of gender roles, which students then internalize. The overrepresentation of men, the marginalization of women, and the lack of gender-neutral portrayals suggest that leadership, innovation, and expertise belong primarily to men, while nurturing and supporting roles remain associated with women. Addressing this imbalance requires not only a numerical correction but also a fundamental shift in the way gender roles are portrayed.

3.2 Qualitative differences

Beyond numerical representation, the qualitative aspects of gender roles in textbooks reveal deep-seated biases. Even when women appear in textbooks, their roles often align with traditional stereotypes, portraying them as caregivers, educators, or passive

participants (Guichot-Reina & De la Torre-Sierra, 2023; Mkuchu, 2004; Nurlu, 2021), while in men are portrayed in most active roles, particularly in technology and sports (Piironen, 2004). Men can be frequently seen as leaders, decision-makers, and active contributors to society and especially in STEM-focused materials men are depicted as problem-solvers, scientists, and innovators (Guichot-Reina & De la Torre-Sierra, 2023). While European textbooks show progress in highlighting more female characters, male characters continue to be overrepresented in leadership and active roles (Jehle et al., 2024). This pattern is visible across cultures and academic disciplines.

A study by Huang (2024) on English as a Foreign Language (EFL) textbooks shows that dialogue structures and narrative roles subtly reinforce traditional gender norms. Studies of Japanese EFL textbooks find that male characters typically initiate conversations, dominate discussions, and make decisions, while female characters assume passive or supportive roles (Lee, 2014). Similar findings were discussed in study made by Holmqvist and Gjörup (2006), who discuss how the dialogues that are allocated to different genders might affect how different pupils end up using the language. Men might use the language more in assertive role and females in supportive roles (Holmqvist & Gjörup, 2006). This linguistic structure reinforces the idea that men are leaders and decision-makers, while women exist to support them. This language bias plays a great role in reinforcing gender stereotypes.

Male characters often appear as assertive problem-solvers, while female characters are depicted as empathetic and supportive. Similar patterns emerge in Turkish textbooks, where women are consistently placed in domestic contexts, emphasizing their caregiving role (Arslan Özer et al., 2019; Nurlu, 2021). Male characters, in contrast, are depicted in outdoor settings or engaged in professional activities, reinforcing the association between masculinity and public, active roles (Nurlu, 2021).

Visual elements further emphasize these stereotypes. Tanzanian textbooks often show men as physically active, involved in farming, leadership, or exploration, while women are portrayed in static, nurturing roles (Mkuchu, 2004). EFL textbooks used in Sweden had women portrayed as florists, nurses and hairdressers as men were pictured in professions such as pilots, police officers and spies (Holmqvist & Gjörup, 2006).

Besides these rather stereotypical depictions, the lack of nongender or characters who don't specifically embody only masculine or feminine characters are limited. In Turkish textbooks, the presence of androgynous characters—those who embody both masculine and feminine traits—remains rare, limiting the potential for challenging traditional

gender roles (Arslan Özer et al., 2019). Similarly, the absence of LGBTQ characters in textbooks is clear, which could reflect a bias and discrimination towards these minority groups (Huang, 2024). To create a more equitable learning environment, textbooks should depict diverse and balanced representations of all genders.

3.3 Gender Representations in STEM Education

STEM fields are often depicted as male-dominated in textbooks, reinforcing the idea that men are naturally suited for careers in science, technology, engineering, and mathematics. Studies represent that mathematics textbooks worldwide lack representation of queer and non-binary characters and studies from Spain and Cyprus show that mathematics textbooks subtly discourage girls from pursuing STEM careers by portraying women in traditional or secondary roles (Guichot-Reina & De la Torre-Sierra, 2023; Kersey & Voigt, 2021; Xenofontos, 2024).

Spanish mathematics textbooks depict women as struggling with problem-solving tasks, potentially undermining their confidence in their mathematical abilities (Guichot-Reina & De la Torre-Sierra, 2023). Similarly, in Cyprus, male characters dominate STEM-related narratives, while female characters appear mainly in passive or domestic roles, reinforcing the idea that STEM is a male domain (Xenofontos, 2024). In Cypriot textbooks men were depicted in professions such as microbiologist, chemist, and computer programmer and had several references to famous men in the STEM fields, but only a single reference to one woman, Françoise Hervé, who is a scientist (Xenofontos, 2024).

Beyond Europe, Tanzanian textbooks reinforce these divisions by portraying men as technology experts and women as caregivers (Mkuchu, 2004). Finnish textbooks follow a similar pattern, associating women more often with arts and caregiving professions than with science and technology (Piironen, 2004). Even when women are included in STEM-related narratives, their contributions are often overshadowed by male characters (Donnellan, 2024).

These portrayals have long-term consequences, as they affect students' career choices and aspirations. It is important to see real-life role-models whom they can identify themselves with (Xenofontos, 2024). When young girls and gender nonbinary people see the lack of role models in STEM fields, they may be less likely to envision themselves in those careers. The implicit messaging in textbooks—through imagery, language, and context—shapes students' self-perceptions and their understanding of

what is possible for them. Women remain underrepresented in STEM fields, particularly as university study places in STEM disciplines continue to be predominantly male (European Institute for Gender Equality, 2018).

Some countries have made efforts to address these issues by integrating more female role models into STEM textbooks. However, these efforts remain inconsistent. While newer editions of Spanish and Swedish textbooks attempt to portray more women in science, these depictions are often secondary or tokenistic (Jehle et al., 2024). The lack of role models in STEM textbooks link to other subjects as well, since portrayals of STEM professions are present also in language education textbooks. Swedish EFL textbooks depicted women in professions such as anthropologist and general practitioner, but the majority of STEM professions fell to men (Holmqvist & Gjörup, 2006). A more deliberate and consistent effort is needed to ensure that young students, regardless of gender, see themselves as equally capable of success in STEM fields.

3.4 Intersectionality and Diversity

Discussions on gender identity, nonbinary identities, and intersectionality have increased significantly in recent years. While global perspectives on gender evolve, textbook content continues to reflect traditional gender representations. Nonbinary and LGBTQ+ identities remain largely absent in most textbooks, limiting inclusive representation (Huang, 2024; Xenofontos, 2024). The absence of minority identities is not just an oversight but an issue with both educational and social implications. For instance, studies have shown that mathematics textbooks worldwide lack representation of queer and non-binary characters, which can adversely affect the self-efficacy, participation, and performance of pupils who identify as such (Kersey & Voigt, 2021). Moreover; the increase in transphobic bullying in schools in Cyprus, highlights the urgent need for inclusivity in all aspects of education (Apostolidou, 2020).

Educational content not only mirrors but also reinforces societal ideologies, often perpetuating heteronormative and narrowly accepted gender behaviors (Guichot-Reina & De la Torre-Sierra, 2023; Ott, 2015; Parise, 2021). The lack of diverse representations in textbooks, especially in foundational subjects such as mathematics, significantly contributes to the marginalization of nonbinary and LGBTQ+ students within the school system (Russell et al., 2010). This exclusion is mirrored in European and Asian educational materials, where even in countries with high gender equality rankings or acknowledgment of gender diversity, representations in textbooks often

appear tokenistic and not fully integrated into everyday narratives (Huang, 2024; Jehle et al., 2024).

Finnish and Tanzanian textbooks reflect similar trends. While some Finnish textbooks feature gender-neutral imagery, these examples remain rare and do not significantly challenge traditional gender expectations (Lähdemäki & Tuomi, 2023; Mkuchu, 2004). The continued absence of nonbinary and diverse gender representations reinforces the binary framework and limits students' understanding of gender as a spectrum rather than a rigid classification.

The lack of representation of nonbinary and gender-diverse individuals in textbooks reflects broader societal attitudes. While public discourse on gender inclusivity is expanding, educational materials remain slow to adapt. When gender diversity is mentioned in textbooks, it is often framed as a specialized topic rather than a normalized part of society (Huang, 2024; Jehle et al., 2024). To foster a more inclusive learning environment, textbooks should fully integrate diverse gender identities into their content rather than presenting them as exceptions.

Gender stereotypes in textbooks either reinforce traditional gender norms or challenge them by presenting more inclusive representations. These stereotypes influence how students perceive gender roles, shaping their career aspirations, self-image, and understanding of societal structures. The second research question in this study asks in what ways these depictions might reinforce or challenge gender stereotypes among young students. This chapter examines how gender roles in textbooks either maintain or break down traditional norms.

One of the primary ways textbooks reinforce gender stereotypes is through visual representation. Studies show that men are frequently depicted in professional settings, such as offices, laboratories, and government positions, while women are more often shown in caregiving roles or domestic settings (Donnellan, 2024; Holmqvist & Gjörup, 2006; Jehle et al., 2024). This division sends an implicit message that men are natural leaders and innovators, while women are expected to fulfill supportive or secondary roles. However, countries with stronger gender equality initiatives, such as the Netherlands and Sweden, have begun incorporating more women into leadership roles and traditionally male-dominated fields in textbooks (Jehle et al., 2024) and Finnish textbooks have increasingly featured women in professional and public positions, offering a contrast to earlier materials that largely confined them to domestic roles (Piironen, 2004).

Efforts to challenge gender stereotypes in textbooks have increased, particularly in countries that emphasize gender equity in education. While many textbooks continue to reinforce traditional gender norms, some have begun to incorporate more diverse gender representations, marking a step toward more inclusive educational materials.

Improvements are seen in Spanish, Taiwanese, and Dutch textbooks, where publishers have started integrating more diverse gender representations (Huang, 2024; Jehle et al., 2024). While some Spanish primary school textbooks have started depicting women as scientists and innovators, these portrayals are not yet widespread or consistent (Guijarro-Ojeda et al., 2021). Taiwanese EFL textbooks have started integrating discussions on gender identity and LGBTQ+ representation, though these efforts remain limited (Huang, 2024). Expanding these discussions could help normalize diverse identities and promote inclusivity in educational settings. Similarly, Turkish

mathematics textbooks have historically depicted men in problem-solving roles, but newer editions have attempted to include more women as mathematicians (Arslan Özer et al., 2019). Some textbooks attempt to break away from binary gender portrayals by introducing androgynous characters—individuals who embody both traditionally masculine and feminine traits. Research on Turkish textbooks suggest that incorporating androgynous roles could help shift students’ perceptions of gender, challenging rigid gender norms (Arslan Özer et al., 2019).

Even with ongoing progress, gender equality in textbooks is not nearly finished. Textbooks still contain deeply embedded stereotypes. Research by Holmqvist and Gjörup (2006) and Donnellan (2024) confirms that women remain underrepresented in leadership roles across multiple subjects. Addressing these biases requires intentional efforts in curriculum development and textbook revision, ensuring that gender representation reflects the diversity of real-world experiences. Although progress is slow, some European and Taiwanese textbooks have begun including nonbinary and LGBTQ+ identities, reflecting a shift toward greater inclusivity. However, these portrayals often remain tokenistic rather than fully integrated into textbook narratives (Huang, 2024). Further efforts are needed to ensure that educational materials represent gender diversity in a way that is both authentic and normalized.

The aim of this study was to discover what kind of gender roles are present in Educational Textbooks and if the portrayals would be reinforcing or challenging the stereotypical view of genders. Gender roles in textbooks are visibly stereotypical and it could be interpreted so that girls and women have lesser role in our society. Despite some progress in certain areas, most of the studies used in this review discovered that textbooks send mixed messages about gender roles. They were at times simultaneously challenging and reinforcing those stereotypes. For instance, Turkish textbooks occasionally depict girls engaging in outdoor or professional activities, but these portrayals were often overshadowed by traditional depictions of women in domestic settings (Nurlu, 2021). Similarly, while Japanese textbooks include women in scientific contexts, they frequently pair these images with themes of caregiving or domesticity, undermining the progressive potential of such images (Donnellan, 2024). Simply increasing the number of female characters or depicting them in nontraditional roles is not enough; these changes must be consistent and intentional to have a meaningful impact.

It seems that textbooks may include harmful stereotypes, but it is positive to see that some progress has been made, particularly in more democratic educational systems. Many materials, however, continue to reflect outdated norms. One of the purposes of this study was to discover what roles there are represented and if one role is visibly missing or overlooked. Findings from the reviewed studies showed that we are still in very early stages of gender neutrality, as there was very limited amount of gender-neutral portrayals in textbooks. The concept of the "hidden curriculum" plays a crucial role in the findings. Through subtle cues, such as the order of appearance, role allocation, and character traits or the total overlooking of certain genders or gender identities, textbooks communicate implicit messages about gender norms. These messages often align with societal expectations, making them harder to identify and challenge (Mkuchu, 2004). Addressing these issues requires not only revising textbook content but also empowering educators to critically engage with these materials. Since teachers rarely are the ones making or even choosing the textbooks used, one key thing to improve would be educating our educators. Educators play a crucial role in transferring the messages to pupils conveyed by textbooks. Teachers who are aware of these biases in educational materials can actively challenge stereotypes by

supplementing textbook content with inclusive narratives and encouraging critical discussions about gender roles. Using Critical Pedagogy in their teaching could be very beneficial and for instance, educators in countries such as Cyprus and Spain have begun using supplemental materials to address the gaps in representation found in national textbooks (Guichot-Reina & De la Torre-Sierra, 2023; Xenofontos, 2024)

By fostering critical thinking and promoting gender equity in their teaching practices, educators can counteract the reinforcing effects of biased materials, ensuring that students are exposed to more balanced and inclusive representations. As Bandura's (1977) Social Learning Theory proposes, we should have representations and portrayals as diverse as our student body, so that everyone can have role models that they relate to. But on the other hand, activities that contrast traditional and nontraditional gender roles can foster critical thinking and broaden students' perspectives (McNair & Edwards, 2021).

It would be very important to continue this topic further and see what progress has been made. Textbook authors and policymakers play an important role in setting the tone for the future citizens. Teachers should be educated to spot those biases and teach in a critical manner, so that we can promote equality in our educational systems. By creating textbooks that consistently challenge stereotypes and promote diverse narratives and having educators who are aware of these possible biases, educational systems can contribute to a more inclusive and equitable society.

In this thesis the literature I have used were written only in Finnish and in English as those are the languages, I feel most comfortable reading academic literature. This however is a limitation to my review, since I was unable to use a broader amount of research to support my current findings. Some of the studies referenced in this thesis are master's theses, which, while valuable for my research for the themes they delve into and giving the research as much of cultural representation as possible. But they usually lack the extensive peer-review process typical of published journal articles. Some of the textbooks presented here are not targeted for primary education level or some don't specify what level they were targeted on. In future studies, it would be beneficial to study more in-depth on what representations are made only in primary level textbooks to get a complete view of the current state of today's primary education materials.

While doing my research and writing my thesis my interest of this topic has increased exponentially. The topic itself is interesting but what is even more interesting is the continuing journey on how these topics are discussed and analyzed. This topic seems relevant since the concepts of gender and how we want children to experience their own identity is ever developing and the change in our societies is constant.

Throughout my thesis work, I have come to understand the critical role that textbooks play in either strengthening outdated stereotypes or fostering an environment of equality and inclusiveness. The responsibility of educational materials to present a fair and balanced perspective has never been clearer to me. I am very motivated to contribute to an educational system where all children, regardless of their gender identity, can see themselves represented positively and accurately, which I think is crucial for their personal and social development.

In my future research I wish to continue with this topic and examine more Finnish educational materials. I believe that my best chance in being as unbiased teacher as possible is when I fully understand the materials I use and what portrayals are represented in there. In the future, I also wish that my career could lead to me advocating for and developing educational policies that require a rigorous evaluation of textbooks and other learning materials. Our society is becoming more diverse, and the diverse student body should be considered in representations in our teaching materials. All materials should be age appropriate, culturally accurate and respectful to all students, whether they belong to a minority or not. By ensuring that these resources promote diversity and challenge societal norms rather than reinforce stereotypes, we can make a significant impact on how children perceive themselves and others. This requires a multi-faceted approach, involving collaboration with educators, policymakers, textbook publishers, and scholars to reform the way educational content is created and delivered.

In conclusion, the insights gained from my thesis research have not only contributed to my academic growth but have also provided a clear direction for my career path. I am committed to using the knowledge and skills I have acquired to promote an educational environment that respects and celebrates diversity, supports gender equality, and prepares all students to succeed in a diverse world. I want to fight for my pupils and fight with my peers so that our pupils will have as unbiased materials, as unbiased

teachers and as safe as possible educational journey. My goal is to ensure that future generations have better, more inclusive educational tools that support their development into well-rounded, respectful, and thoughtful individuals, whether they are girls, boys or transgender or anything in between. I wish that our future generations don't have to fight for their right to be who they are and who they wish to become.

In this paper I have used artificial intelligence in multiple stages of my research. Firstly, I have used artificial intelligence in looking for materials, as it has made this part of my research much more efficient. Artificial intelligence has allowed me to read through more material, as it has pre-read the articles selected to see if they target the topic of my research. In the writing stage, I have used Grammarly, which used artificial intelligence in proofreading my text and my grammar. I am not a native English speaker, so I have found it important to have someone check for grammatical errors. Artificial intelligence has not formed any of the ideas presented in the text, but it has helped me in formatting sentences that convey the message I want to present. Lastly, I have used AI to check the accuracy of my reference list and check that it is up to par.

While I used artificial intelligence tools like ChatGPT and Grammarly in this study in previously mentioned ways, the critical evaluation and interpretation of the research findings were conducted solely by me. AI tools served as aids in mechanical and organizational processes but did not influence the analytical framework, theoretical considerations, or conclusions presented in this thesis. The ideas, critical analysis, and interpretations reflect my academic judgment and expertise.

REFERENCES

- Apostolidou, Z. (2019). Homophobic and transphobic bullying within the school community in Cyprus: a thematic analysis of school professionals', parents' and children's experiences. *Sex Education, 20*(1), 46–58.
<https://doi.org/10.1080/14681811.2019.1612347>
- Apple, M. (2004). *Ideology and curriculum*. Routledge.
- Bandura, A. (1977). *Social learning theory*. Englewood Cliffs, N.J. : Prentice Hall.
- Butler, J. (2002). *Gender trouble: Feminism and the subversion of identity* (10th ed.). Routledge.
- Cassar, C. (n.d.). *Non-Binary Gender Identities in Different Cultures*. Anthropology Review. Retrieved October 10, 2024, from <https://anthropologyreview.org/anthropology-archaeology-news/non-binary-gender-identities-in-different-cultures/>
- Connell, R. W., & Pearse, R. (2014). *Gender: In World Perspective*. Polity.
- Connor, S., Edvardsson, K., Fisher, C., & Spelten, E. (2021). Perceptions and interpretation of contemporary masculinities in Western culture: A systematic review. *American Journal of Men's Health, 15*(6), 1–17.
<https://doi.org/10.1177/15579883211061009>
- Crenshaw, K. (1989). Demarginalizing the intersection of race and sex: A Black feminist critique of antidiscrimination doctrine, feminist theory, and antiracist politics. *University of Chicago Legal Forum, 1989*(1), 139–167.
- Donnellan, T. (2024). How textbook images frame the gender roles of women in science and elsewhere: A content analysis of elementary school science textbooks. *Journal of Educational Materials Research, 12*(3), 67–89.
<https://doi.org/10.1080/09500693.2024.2343436>
- England, P., Levine, A., & Mishel, E. (2020). Progress toward gender equality in the United States has slowed or stalled. *Proceedings of the National Academy of Sciences, 117*(13), 6990–6997. <https://doi.org/10.1073/pnas.1918891117>
- European Institute for Gender Equality. (2018). *Study in the EU: Set apart by gender*. <https://doi.org/10.2839/665903>

Fausto-Sterling, A. (2019). Gender/sex, sexual orientation, and identity are in the body: How did they get there? *The Journal of Sex Research*, 56(4/5), 529–555. <https://www.jstor.org/stable/26772865>

Finnish National Agency for Education. (2016). *National core curriculum for basic education 2014*.

Freire, P., & Bergman Ramos, M. (2014). *Pedagogy of the oppressed*. Bloomsbury Academic & Professional.

Guichot-Reina, V., & De la Torre-Sierra, A. M. (2023). The representation of gender stereotypes in Spanish mathematics textbooks for elementary education. *Sexuality & Culture*, 27(4), 1481–1503. <https://doi.org/10.1007/s12119-023-10075-1>

Guijarro-Ojeda, A., Espejo, R., & Martínez-Gallego, D. (2021). Exploring gender representations in Spanish primary school textbooks: Toward equity in STEM education. *Sustainability*, 13(220), 1–20. <https://doi.org/10.3390/su13020220>

Holmqvist, P., & Gjörup, L. (2007). *The representation of gender and gender roles in English textbooks* [Bachelors thesis, Malmö högskola Lärarutbildningen]. <https://muep.mau.se/handle/2043/3426>

Jehle, D., Erstad, O., & Veum, A. (2024). The hidden lessons in textbooks: Gender representation and stereotypes in European primary education materials. *European Journal of Education*, 59(1), 25–42. <https://doi.org/10.1111/ejed.12567>

Kelly, R. L. (2013). *The Lifeways of Hunter-Gatherers: The Foraging Spectrum*. <http://ci.nii.ac.jp/ncid/BB14581616>

Kersey, E., & Voigt, M. (2021). Finding community and overcoming barriers: Experiences of queer and transgender postsecondary students in mathematics and other STEM fields. *Mathematics Education Research Journal*, 33(4), 733–756. <https://doi.org/10.1007/s13394-020-00356-5>

Lähdemäki, L., J., & Tuomi, T., K. (2023). *Sukupuolittuneet hahmot aapisissa: laadullinen sisällönanalyysi sukupuolistereotyyppien ilmenemisestä suomalaisten aapisten kuvituksissa* [Masters Thesis, University Of Turku]. <https://urn.fi/URN:NBN:fi-fe2023060151830>

Lee, J. (2014). Hidden curriculum and gender in Japanese EFL textbooks: A critical discourse analysis. *Linguistics and Education*, 29(4), 39–51. <https://doi.org/10.1016/j.linged.2014.07.002>

Mayrhofer, F. (2024). Gender constructions in Austrian RE textbooks: A comparative linguistic textbook analysis. *British Journal of Religious Education*. Advance online publication. <https://doi.org/10.1080/01416200.2024.2355219>

McNair, J. C., & Edwards, P. A. (2021). The lasting legacy of Rudine Sims Bishop: Mirrors, windows, sliding glass doors, and more. *The Reading Teacher*, 75(1), 101–112. <https://doi.org/10.1002/trtr.1986>

Mkuchu, S. G. V. (2009). *Gender roles in textbooks as a function of hidden curriculum in Tanzania primary schools*. <https://uir.unisa.ac.za/bitstream/10500/1894/1/thesis.pdf>

Neyer, G., & Bernardi, L. (2011). Feminist perspectives on motherhood and reproduction. *Historical Social Research*, 36(2), 162–176.

Nurlu, Ö. (2021). Analysis of gender fairness of primary school mathematics textbooks in Turkey. *International Journal of Psychology and Educational Studies*, 8(4), 78–95. <https://doi.org/10.52380/ijpes.2021.8.4.543>

Ott, C. (2015). Innocent maths? Gender representations in German maths books or how to extract tacit and explicit knowledge on gender from word problems. In S. M. Mills & A. S. Mustapha (Eds.), *Gender representation in learning materials: International perspectives* (pp. 52–63). Routledge.

Ozer, D. A., Karatas, Z., & Ergun, O. R. (2019). Analysis of gender roles in primary school (1st to 4th grade) Turkish textbooks. *Eurasian Journal of Educational Research*, 19(79), 1–20. <https://doi.org/10.14689/ejer.2019.79.1>

Parise, M. M. (2021). Gender, sex, and heteronormativity in high school statistics textbooks. *Mathematics Education Research Journal*, 33(4), 757–785. <https://doi.org/10.1007/s13394-021-00390-x>

Payne, A. (2024). Gender role. *Encyclopedia Britannica*. <https://www.britannica.com/topic/gender-role>

Piironen, A.-R. (2004). 'Minna, the model' and other stories: Gender roles in an English textbook series for Finnish lower secondary schools (Master's thesis, University of Jyväskylä). JYX Digital Repository. <http://urn.fi/URN:NBN:fi:jyu-2005132>

Rosen, R. L. (2003). *Reproductive health, reproductive rights: Reformers and the politics of maternal welfare, 1917–1940*. The Ohio State University Press. <https://muse.jhu.edu/book/33044>

Russell, S. T., Kosciw, J., Horn, S., & Saewyc, E. (2010). Safe schools policy for LGBTQ students. *Social Policy Report*, 24(4), 1–25. <https://doi.org/10.1002/j.2379-3988.2010.tb00065.x>

Schilt, K., & Westbrook, L. (2009). Doing gender, doing heteronormativity: “Gender normals,” transgender people, and the social maintenance of heterosexuality. *Gender & Society*, 23(4), 440–464. <https://doi.org/10.1177/0891243209340034>

West, C., & Zimmerman, D. H. (1987). Doing gender. *Gender & Society*, 1(2), 125–151. <https://doi.org/10.1177/0891243287001002002>