Exploring Pre-Service Teachers' Perspectives: Gender and Gender Representation across Human Protagonists in Picture Books

Tareneh Matloob Haghanikar
University of Northern Iowa, USA
Shan Jiang
Baylor University, USA
Sara Tomek
Baylor University, USA
Lisa M. Hooper
University of Northern Iowa, USA

Abstract: Gender is ever present in education preparation, school materials, curriculum, and school systems. To improve our knowledge about different facets of gender and the extent to which the depiction of gender has changed over time in picture books, there is a need to dig beneath the surface of questions about gender representation in picture books. Given that in-service teachers have proximity to approximately 75 million K-12 students, how in-service teachers think about gender, gender representation, and their own experiences with gender socialization have important implications on how K-12 students think, act, and feel about gender. In this study, we focused on teachers’ responses to a semester-long assignment about the selection and review of picture books. Specifically, we captured teachers’ perceptions on gendered images evidenced in picture books and to what extent there are changes (i.e., economical, emotional, physical, political, and social) in the central character throughout the book. We also explored if perceived changes were different based on the gender of the characters. Teachers reported four types of changes among the characters in the picture book. Emotionally changes in the books’ central characters emerged as the most commonly reported change among our participants.

Keywords: Diversity, gender, gender stereotypes, picture books, teacher training.


Introduction

Similar to parents and caregivers, teachers have the proximity and power to have a lasting influence on the lives of approximately 75 million K-12 students every year (McFarland et al., 2017). The school system and the classroom are important contexts where students grow, learn, explore and preliminarily establish their knowledge and beliefs about others who are similar and different than themselves (e.g., difference based on gender, gender identity, sexual orientation, race, and socioeconomic status; see Bailey, 1994; Cowan & Hoffman, 1986). In fact, Carl (2012) asserted that youth have some perspective about gender by two to three years of age, and although these ways of thinking emerge at an early age (Serbin et al., 2002), teachers can further shape these critical views about sociodemographic factors, including gender.

Additionally, the literature underscores the importance of gender-inclusive classrooms given that gender identity develops early in childhood, some youth may not identify with the gender assigned to them at birth (American Psychological Association [APA], 2015). The APA defines gender as “the attitudes, feelings and behaviors that a given culture associates with a person’s biological sex” (APA, 2012). Given the significant role teachers play in the lives of youth and the power that they have in shaping how youth view, explore, and experience gender in the school context, teachers have an ethical obligation to examine their own views about gender, gender-identity, gender-stereotypes, and gender disparities in educational outcomes. Also, important is teachers’ awareness about how these beliefs may be implicated and ever present in their daily affect, behavior, and thinking (cognitive shortcuts or biases; Bailey, 1994).

Gender is only one—although an important—sociodemographic factors that ought to be considered in teacher preparation. Teachers’ views, practices, classroom management, and behaviors related to gender can do harm to students during their time in school when they are exploring and engaging in gender socialization and later the adults
they become. Given the known limitations and lack of equity often observed in and related to gender and education, pre-service and in-service teachers have a responsibility to examine their lived experiences and how they shape their behavior in the classroom (calling on males more frequently than females), curriculum (selection of books with “stereotypical” female and male characters), and assignments (referring males to STEM or advance placement classes more often than females) in and outside of the school context. In addition to teachers’ interactions with their students, teachers’ views and awareness of their own gender also must be considered throughout their career preparation and trajectory. The failure of educator preparation programs to consider how gender may be implicated in teaching can place K-12 students at risk for experiencing gender-related harm, biases, and stereotypes in the classroom—and in some cases gender-related discrimination by their teachers. Teachers can play an effective and powerful role in helping students have knowledge about real-world gender issues and make-meaning of their own gendered beliefs and experiences in schools, neighborhoods, and communities (Hansen, 2015; Liou & Hermanns, 2017; Martin & Ruble, 2004).

In the proposed work, we focus on gender. Specifically, gender is one of the most prominent social identities that forms how children are perceived by others and also how they develop perception of themselves. Thus, pre- and in-service teachers must be prepared to facilitate—in culturally responsive ways—varied explorations about gender, gender identity, sexual orientation and other identities that may emerge among their students. This preparation often commences in their own family of origin and continues throughout their educator preparation and then ongoing, required professional development.

Given that cultural competence is informed by shared language, we believe it is important to explicate the definitions of the words and constructs that are often used interchangeably with “gender” in varied disciplines, including educational research. Thus, we draw from diverse and overlapping empirical literature, practice literature, reports, white papers and virtual sites (e.g., American Psychological Association [APA], 2012, 2015; National Council of Teachers of English [NCTE], 2018; Davison et al., 2021) to clarify and summarize commonly used definitions relevant to gender-focused work.

Gender is defined as “a complex human psychological and sociocultural concept that can impact sex characteristics” (Davison et al., 2021, p. 4). The World Health Organization (2021) refers to gender as the socially constructed roles, behaviors, activities, and attributes that are considered “appropriate” for females and males. The debates might seem outdated, nonetheless gender scholars continue searching for pervasive gaps and contradictions comparing female-male roles. It is timely to discuss gender roles and advocate explicitly and actively for more equitable roles, gender inclusive classrooms, and teachers who can facilitate equitable classroom practices, pedagogy, and curriculum.

Gender identity is a person’s inner sense of gender different than a person’s observable or outward presentation of gender. The National Council of Teachers of English [NCTE] contends gender identity is “an individual’s feeling about, relationship with, and understanding of gender as it pertains to their sense of self” (NCTE, 2018, para. 4) and it is usually expressed through a combination of outward factors such as one’s demeanor, physical appearance, vocal range, social roles, occupations and other factors, which are typically associated with “femininity” or “masculinity” and may or may not conform to conventional defined behaviors and characteristics.

Gender expression is described as the ways in which an individual outwardly displays or portrays their gender. Gender expression is idiosyncratic and can be contingent upon the context in which individuals are embedded. Sex assigned at birth based on individuals’ external anatomy and that is recorded on a birth certificate. Transgender and cisgender can be defined as when a person gender identity does not and does match their sex assigned at birth, respectively. Finally, different than gender, sexual orientation, typically reflects individuals’ preference and attraction toward others.

In all these definitions, gender is distinguished from biological sex, which can be the same or different from sex assigned to individuals at birth. It has been a common trend to use the terms gender and sex interchangeably, although they are distinct (Carl, 2012; GenIUSS Group, 2014; Westbrook & Saperstein, 2015). In examining various attempts to explain these two terms, some sources define gender as a social construct—the physical and or social condition of being female or male, compared to sex as the state of being either female or male (American Psychological Association, 2012; Davison et al., 2021; Simpson et al., 2000). While most conventional social systems categorize gender as either feminine or masculine, the modern structure of society perceives gender as a spectrum rather than a binary. To move beyond the gender binary, it is essential to continue the discussions that “there’s no reason why boys shouldn’t play football, climb trees and get dirty, no more than there’s any reason why boys shouldn’t play with dolls if they want to and take an active interest in cookery” (Dixon, 1977, p. 35). In summary, teachers must have knowledge about, comfort with, and clarity to facilitate conversations about gender and other related concepts with their students.

**Literature Review**

*Gender Trends and Stereotypes in Picture Books*

To understand how stereotypes about gender have been portrayed in picture books, it is important to draw upon a large body of literature on the nature of stereotypes throughout different decades and examine if female
misrepresentation or underrepresentation in children's picture books has been a widespread trend. Gender is one of the most prominent social identities that forms how children are perceived by others, and also how they develop perception of themselves. Researchers acknowledge that gender is one of the very first social identities children learn about (Jackson & Gee, 2005; Rogers & Metzloff, 2017). Prior studies agree on the role of stories and picture books in children's emerging gender identity (Crisp & Hiller, 2011; Jackson & Gee, 2005; Weitzman et al., 1972). In particular, “picture books provide prolonged and repeated exposure to parenting techniques and related gender roles” (Anderson & Hamilton, 2005, p. 145). Research on the effects of read-aloud, storytelling, and early reader picture books have shown that literature can and does shape readers’ beliefs about themselves and the world (Bettelheim, 1976; Jackson & Gee, 2005; Trelease, 2013; Weitzman et al., 1972). For instance, supporting or subverting stereotypical gender roles “contribute negatively to children's development, limit their career aspirations, frame their attitudes about their future roles as parents, and even influence their personality characteristics” (Hamilton et al., 2006, p. 757). Also, research on gender representation in children's literature have demonstrated that the prevalence of domestic and traditional female roles negatively impacts the gender identity development of young readers (DeLoache et al., 1987; Gooden & Gooden, 2001; Hamilton et al., 2006).

The review of the literature base shows that comprehensive studies of gender stereotypes in picture books emerged after the 1970s and this area of investigation still continues today (Kostas, 2021; Watkins, 2021). It is critical to replicate and extend previous studies in examining representations of gender in children's picture books to scrutinize how different genders are being personified in stories and how fictional characters’ gendered behaviors reflect images of girls and boys in their everyday lives and how these behaviors have held constant or have changed over time (e.g., 1972 to 2021). One of the seminal studies in this area was conducted by Weitzman et al. in 1972. In their study of Caldecott medal, Newbery medal, and the Little Golden Books winning picture books, Weitzman et al. found that female characters were underrepresented in the titles, central roles, as well as in the illustrations. In contrast, male characters were active, leading the way and rescuing other characters, compared to female characters who were passive, following the lead and serving others. Weitzman et al. highlighted that adult male characters in these picture books engaged in a wide variety of occupations while adult female characters were solely wives and mothers. Weitzman et al. indicated that gender stereotypes could be weakened by having stories featuring “boys being rewarded for being emotional and supportive, and girls being rewarded for being intelligent and adventurous” (Weitzman et al., 1972, p. 1147).

Weitzman et al. (1972) critiqued the frequently used images of, and themes derived from female characters in books: “little girls are often pictured as pretty dolls who are not meant to do anything but be admired and bring pleasure. Their constant smile teaches women that are meant to please, to make others smile, and be happy” (Weitzman et al., 1972, p. 1137). Remarkably, these recurring gendered stereotypes and dearth of females in picture books is consistent with socio-cultural ideals of motherhood after the second World War, which dictated several ideals: (a) a perfect mother “must be all-­patient” (Fraustino, 2007, p. 254) and self-sacrificing; (b) she should devote her life, energy and affection to her domestic life, (c) she should be able “to solve every household problem imaginable, using good techniques of modern psychology” (Vandenber-Daves, 2003, p. 137); and (d) she should be “fully satisfied, fulfilled, completed, and composed in motherhood” (O’Reilly, 2004, p. 14). Also, as Greenstone (2008) asserted, recent psychological as well as socio-cultural expectations have “transformed motherhood into an all-­encompassing job, one in which mothers’ lives, and even their identities, are subsumed in the pursuit of the perfect childhood” (p. 29). Weitzman et al. (1972) maintained that female characters who break the gendered conventions and appear in positions traditionally held by males are perceived as nontraditional, tomboys, uncanny, aggressive, and masculine.

Since Weitzman et al.'s hallmark study in 1972, gender bias in picture books has been studied from different perspectives (Casey et al., 2020; Peterson & Lach, 1990). These studies over the past 50 decades (1980s, 1990s, 2000s, 2010s, and 2020s) have uncovered similar issues of gender misrepresentation in picture books. For example, Barnett (1986) conducted content analysis on over 1,500 picture books and determined that illustrations of male characters in the books outnumbered illustrations of female characters significantly. Later, Tepper and Cassidy (1999) examined the emotional language and different states of emotion among female and male characters in picture books. They selected 196 books based on a survey of children’s reading. The survey asked 47 parents to identify what books their preschool children read or were read to over a one-week period. Tepper and Cassidy’s (1999) research had two important findings. First, although other similar studies have found that picture books are improving in terms of their representation of female characters, results of Tepper and Cassidy’s study highlighted the importance of the books children are actually reading, and they illustrated that children are being exposed to the same underrepresentation that first identified in 1970s. Second, Tepper and Cassidy (1999) found that females and males use equal emotion-focused language in their conversation and there are no significant differences in the frequency of emotion-focused words spoken by female and male characters. In other words, "while children will see more males than females in titles, pictures and central role, they will not see rigid gender-based restrictions of emotional language” (p. 279).

Similar studies of this nature with the same focus have examined inequalities of gender representation toward a binary of female or male (Crisp & Hiller, 2011; Mattix & Sobolak, 2014). In 2006, Hamilton et al.'s investigation related to “sexism in top selling books from 2001 and a 7-year sample of Caldecott award-winning books, for a total of 200 books” (p. 757). In their study, they demonstrated that male characters still significantly outnumbered female characters in
book titles, as protagonists, and also in illustrations. Also, according to their findings, while no female characters are portrayed in “assertive” or “aggressive” characterizations, they are more likely to be depicted indoors doing domestic works than male characters. "Such representations work to shape readers’ understandings of the ‘naturalness’ of specific behaviors being attributed to sexed bodies, and implicitly link the adherence to such ideas with a cohesive, productive, and forward-moving society" (Hateley, 2011, p. 88).

While myopic, single stories of conventional gender roles is persistent in children's picture books, authors and illustrators continue to create counter stories about subversive female characters who reject their traditional roles. Further gender studies are needed to identify progresses or deficiencies in representation and continue to remind authors, illustrators, teachers, and readers of the necessity of gender diversity in picture books.

**Critical Gender Schema Theory**

Because of its interdisciplinary nature, gender has been viewed from numerous perspectives and analyzed across many different research contexts. Bem (1981) offered gender schema theory as a social-cognitive model in the field of psychology, although after four decades, Bem’s theory has also contributed to the scholarship outside of psychology. According to gender schema theory, children develop categories or schemas about being feminine or masculine from a young age, as early as four to five years old. Gender schema refers to a mental structure that children use to categorize, organize, and process old or form new information about gender. This mental process might be consistent or inconsistent with old gender schemas and therefore creates schema-consistent as well as schema-inconsistent information.

Gender roles may change from one culture to another and also over time. While building gender schema, children may develop and internalize “bias memory to a point [...to] misremember or distort information to make it fit to their existing schema” (Frawley, 2008, p. 291). For example, children’s prior learning about stereotyped gender representation in children’s books affects the way they recall the story later, “because their gender schema interferes with accurate recall of that information” (Frawley, 2008, p. 301). As a result, they show “a tendency to unknowingly distort story information that is not typical for either gender and that schemata” (Frawley, 2008, p. 293). Furthermore, according to a study by Caldera et al. (1998), children tend to play with gender appropriate toys or same-gender toys even when cross-gender toys are available because parents tend to praise them for gender-normative behavior. Like in other disciplines, within the field of children’s literature, it is likely for children to internalize gender stereotypes when there is an emphasis on gender stereotyped texts and illustrations.

To unpack and question the ways in which frequently subordinate characters such as female characters are oppressed by dominant groups such as males, it is essential to add critical lens to gender schema theory. This approach situates the discussion within a broader context: examining the question of how power is implicitly or explicitly represented in picture books. Central to investigations about gender is an examination of power as an everyday phenomenon and an exploration of how the power relations of different genders are implied and explicated in stories for children. To identify the power state of protagonists in picture books, Kelley (2008) suggests five power descriptors. In her textual comparison of how power is exercised in the Grimm and Grimm’s (1812) *Rumpelstiltskin* and Stanley’s (1997) *Rumpelstiltskin’s Daughter*, Kelley (2008) indicates that characters’ advantages or disadvantages can be viewed “emotionally, physically, economically, socially, and politically” (p. 34; see Figure 1).

![Figure 1. Kelley (2008) Continuum of Characters’ Advantages or Disadvantages](image)

**Methodology**

The study was guided by three research questions with a focus on gender differences: (a) What type of perceived changes do pre-service teachers identify in the main character throughout the story?; (b) Are the described changes reported by the pre-service teachers differentiated by the gender of the main character?; (c) Are the described changes reported by the pre-service teachers differentiated by the year of the publication of the book? We used a mixed method approach for the study. The qualitative content analysis used in this research focused on undergraduate students’ perceptions of the changes evidenced by the protagonist throughout the book, with significance tests performed on the identified proportions of responses based on our research questions.
Multicultural Education Course and Assignment Description

Consonant with the national effort to prepare teachers with the knowledge, skills, awareness, and attitudes relevant for the growing diverse student population (Sutcher et al., 2016), in many American universities, pre-service students are required to take a course about children's literature for diversity and social justice. The focus of this course is on values, uses, and controversies related to children's books and young adult literature by and about American minority groups, ranging from different ethnic and racial groups to people of different religions, genders, physical and mental abilities, or sexual orientations. Major learning outcomes of this course are to become familiar with and be able to discuss landmark documents in the field of multicultural children's literature, to be able to critically evaluate multicultural children's literature, and to apply knowledge of selection and evaluation criteria in the exploration of a variety of genres and themes in multicultural children's literature.

The multicultural children's literature course provides undergraduate training teachers an opportunity to critically evaluate non-mainstream literature and prepares them to develop critical skills for reading, analyzing, evaluating, and teaching diverse literature. Throughout this course, students had the opportunity to learn about essential sources for teaching about diversity, inclusion, and social justice.

Study Participants

All students enrolled in the multicultural class were required to complete the assignment regarding gender representation in picture books. The classes were composed of 132 preservice teachers (N. 24, section 1, Fall 2018; N. 25, section 2, Fall 2018; N. 22, section 1, Spring 2019; N. 8, section 2, Spring 2019; N. 26, section 1, Fall 2019; N. 26, section 2, Fall 2019) enrolled in the course about children's literature for diversity and social justice. The course was for 16 weeks and covered 10 culturally relevant topics. The topic of gender was covered for two sessions and involved five parts: (a) one class discussion about the representation of power in picture books, (b) one class discussion about Kelley's (2008) article on Power Relationships in Rumpelstiltskin: A Textual Comparison of a Traditional and a Reconstructed Fairy Tale, (c) watching a short video of The Ugly Truth of Children's Books by Rebel Girls, (d) browsing the university local library to find five fictional picture books with option one: a female human being as the main character, or option two: a male human being as the main character, and (e) reading their selected books and responding to the assignment questions (see Appendix 1). This assignment lasted about 2 hours and was done as an individual assignment out of class. Students were mainly female students from White middle-class families within the age range of 20-25. They did not have prior diversity training before taking this course. Students completed the assignment individually.

Each participant was asked to respond to the survey for a total of five books, all containing the same protagonist's gender (i.e., all male or all female protagonist). A total of 660 survey responses were received across the three semesters, with 8.9% (n = 59) of responses removed due to missing responses on one or more of the items of interest. An additional 0.4% (n = 25) responses were removed due to incorrect choices of books, which were not aligned with the assignment guidelines (e.g., main character was not human). In all, the resulting data sample was composed of 576 total responses from 132 undergraduate pre-service teachers.

Study Procedure

As part of a required course assignment, students were instructed to select five picture books with human protagonist(s) originally published in the United States, written in English, and that were available at the university's main library. Participants were asked to select five children's books with the same protagonist(s) gender, either all female or all male, and to complete a researcher-designed open-ended survey for each of the books.

Study Survey

The researcher-designed survey composed of several questions asked students to describe the changes evidenced in the main character. The current study focuses on one question of the survey. Specifically, we analyzed the students' responses to the following survey question: How does the character change through the story? We delimited our analyses to valid responses 576 (87.3%), defined as (a) non-empty cells, (b) cells with responses which were from books aligned with assignment guidelines.

Study Books

The sample of books that were analyzed by the pre-service teachers included three genres: realistic contemporary fiction, historical fiction, and fantasy fiction. Of the 576 valid survey responses, 460 (79.9%) were from books with female protagonist(s) and 116 (20.1%) were from books with male protagonist(s). In total, responses were from 422 independent books, 320 books with female protagonist(s) and 102 books with male protagonist(s), indicating 26.7% (n = 154) of the responses were from overlapping books. 86 books with female protagonist(s) were picked more than once, and 12 books with male protagonist(s) were picked more than once. The top selected books with a female
protagonist(s) were *Grace for President* \((k = 7)\) and *The Princess Knight* \((k = 6)\), and the top selected books with a male protagonist(s) was *Where the Wild Things Are* \((k = 3)\) and *Bully* \((k = 3)\).

**Coding**

An initial protocol containing seven constructs of change (behavioral, economical, mood, perspective, physical, status, and relational change), as well as a “no change” category option, developed by the first author was used in the first round of coding. Text Search technique was performed in NVivo (released in February 2021; QSR International Pty Ltd., 2021) for each of the seven constructs respectively. The results were randomly spot-checked using approximately 10% responses for each construct by two authors. Three constructs (economical, status, and relational change) resulted in miscoding (> 70%). A careful review of the data among the study authors found that these constructs did not exist among the participants’ responses. Thus, the coding protocol was revised to include the constructs of behavioral, mood, perspective, physical and removed the three categories that were not relevant in the current sample. The remaining four constructs (behavioral, mood, perspective, physical) along with a “no change” category option, were subjected to manual-coding by two authors, with a third author serving as the auditor’s role. Figure 2 illustrates the coding process.

![Figure 2. Coding Process to Identify No Change and the Four Types of Change Constructs](image-url)

**Note.** The process of manual-coding was presented. Responses were first coded into either the ‘No change’ category or ‘Change’ category. Response in the ‘Change’ category were further coded if they were aligned with the four change constructs. Responses in the ‘Change’ category could be coded into one or more change constructs, or not coded to any of the change construct.

While the ‘no change’ category was mutually exclusive, the four change constructs were not mutually exclusive. Of note, responses were coded based on the reported change by the pre-service teacher, rather than coding the actual change that occurred within the book. Responses were first coded as either ‘no change’ or ‘change’. The interrater reliability was high (> 90%) and inconsistent responses were subjected to an audit by a third author, who served as the tiebreaker for those inconsistent responses.

Responses that placed under ‘change’ category were then subjected to coding in accordance with the four change constructs. Multiple change constructs could be selected for each response in order to allow for reported changes to be multidimensional. For example, participants could report that the main character changed their behavior and mood throughout the story. Additionally, a few responses were not placed in any of the four change constructs, which indicated they contained other types of change. The interrater reliability ranged between acceptable to high – 78.3% for behavioral change, 86.2% for mood change, 80.1% for perspective change, and 95.9% for physical change. A third author served as an auditor for items of disagreement between the two primary coders, with final coding categories presented in the results a product of the auditor’s decision on the final coding serving as the tiebreaker.
Findings

Perception of No Change

A total of 185 (32.1%) of the 576 valid survey responses were coded under 'no change perception'. For the female protagonist(s) books, 146 (31.7%) of the responses were coded as 'no change'. For the male protagonist(s) book, 39 (33.6%) of the responses were coded as 'no change'. There were not significant differences between the genders in their proportion of responses that were coded as 'no change', $\chi^2(1) = 0.03, p = .86$. Publication year was categorized into one of the three categories, before 2001 ($n = 120$), 2001-2010 ($n = 296$), and after 2010 ($n = 160$). No significant differences were found in the percentages of responses that reported 'no change' across the three publication year groupings, $\chi^2(2) = 0.17, p = .92$, 30%, 32%, and 33%, respectively. In addition, no significant gender effect was detected for any publication category, $\chi^2_{before\ 2001}(1) = 0.00, p = .93, \chi^2_{2001-2010}(1) = 0.00, p = .97$, or $\chi^2_{after\ 2010}(1) = 0.17, p = .68$, indicating that pre-service teachers perceived similar frequency of no change for both female and male protagonists for books in any publication category.

Perception of Change

Among those 391 responses coded into either behavioral, mood, perspective, or physical change categories, 314 (80%) were from books with female protagonist(s) and 77 (20%) were from books with male protagonist(s). Pre-service teachers identified 31.2% ($n = 122$) of the books contained behavioral changes (i.e. related to manner of acting), 47.3% ($n = 185$) of the books contained mood changes (i.e. were related to emotion), 35.5% ($n = 139$) of the books contained perspective changes (i.e. changes related to a way of considering something), and 10.7% ($n = 42$) of the books contained physical changes (i.e. changes related to the body). The number of responses coded under each construct of change was presented in Table 1. Pairwise differences between the percentages were compared using a z-test for proportions. Pre-service teachers reported significantly more mood changes than all other categories, $ps < .001$. There were not significant differences between the percentage of books reported containing behavioral and perspective changes, $p = .197$. Pre-service teachers were least likely to report a perspective change, with percentages significantly lower than all other categories, $ps < .001$.

Table 1. Change Construct Frequencies by Gender and Publication Year

<table>
<thead>
<tr>
<th>Constructs</th>
<th>Total Reference ($N = 576$)</th>
<th>Female ($N = 460$)</th>
<th>Male ($N = 116$)</th>
<th>Before 2001 ($N = 120$)</th>
<th>2001-2010 ($N = 296$)</th>
<th>After 2010 ($N = 160$)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Behavior</td>
<td>122</td>
<td>101</td>
<td>21</td>
<td>29</td>
<td>64</td>
<td>29</td>
</tr>
<tr>
<td>Mood</td>
<td>185</td>
<td>151</td>
<td>34</td>
<td>29</td>
<td>102</td>
<td>54</td>
</tr>
<tr>
<td>Perspective</td>
<td>139</td>
<td>112</td>
<td>27</td>
<td>43</td>
<td>65</td>
<td>31</td>
</tr>
<tr>
<td>Physical</td>
<td>42</td>
<td>33</td>
<td>9</td>
<td>14</td>
<td>20</td>
<td>8</td>
</tr>
<tr>
<td>No Change</td>
<td>185</td>
<td>146</td>
<td>39</td>
<td>36</td>
<td>96</td>
<td>53</td>
</tr>
</tbody>
</table>

Note. Number of items belong to the construct presented in cell. No Change were mutually exclusive. Behavior, mood, perspective, and physical change were not mutually exclusive.

Figure 3. Change Construct Percentages by Gender

Notes. The figure presents pre-service teachers’ perceived constructs of change by books of female protagonists and books of male protagonists. F = books characterized with female protagonists; M = books characterized with male protagonists.
Gender Differences in Change

A set of one-way chi-square tests was performed for each change construct in order to determine if there were gender differences in the reporting of construct changes. The number and percentage of responses identified for each of the four types of changes based on the gender of the main character are presented in Table 1 and Figure 3. No significant gender differences were found, \( \chi^2_{\text{behavior}}(1) = 0.38, p = .54, \chi^2_{\text{mood}}(1) = 0.17, p = .68, \chi^2_{\text{perspective}}(1) = 0.01, p = .94, \chi^2_{\text{physical}}(1) = 0.00, p = .99. \) The frequency of type of change reported was similar between both male and female protagonist(s).

Publication Year Differences in Change

A set of chi-square tests for each change type was conducted in order to determine if there were significant differences across publication year groupings. Table 1 and Figure 4 list the number and present the percentage of references coded for each of the four types of change based on publication year. Significant differences were found for perspective change, \( \chi^2_{\text{perspective}}(2) = 6.74, p = .03, \) indicating that participants perceived that the main character in books published before 2001 contained significantly more perspective change, compared to books published in the first 10 years of the new millennium, \( \chi^2(1) = 4.32, p = .04, \) and books published after 2010, \( \chi^2(1) = 4.88, p = .03. \) Pre-service teachers perceived similar frequency of perspective change among books published between 2001 to 2010 and books published after 2010, \( \chi^2(1) = .16, p = .69. \) The results of other three types of change categories were not significant, \( \chi^2_{\text{behavior}}(2) = 1.03, p = .60, \chi^2_{\text{mood}}(2) = 2.38, p = .30, \chi^2_{\text{physical}}(2) = 4.03, p = .13. \)

Publication Year X Gender Interaction in Change

A set of chi-square tests were performed separately for books with female protagonists and books with male protagonists for each of the change constructs across the publication years in order to determine if a significant interaction effect is present between gender and publication year. The number and percentage of responses identified for types of changes based on publication year category separated by gender was presented in Table 2 and Figure 5.

<table>
<thead>
<tr>
<th>Constructs</th>
<th>Before 2001 (N = 120)</th>
<th>2001-2010 (N = 296)</th>
<th>After 2010 (N = 160)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Female (N = 87)</td>
<td>Male (N = 33)</td>
<td>Female (N = 243)</td>
</tr>
<tr>
<td>Behavior</td>
<td>21 8</td>
<td>55 9</td>
<td>25 4</td>
</tr>
<tr>
<td>Mood</td>
<td>20 9</td>
<td>85 17</td>
<td>46 8</td>
</tr>
<tr>
<td>Perspective</td>
<td>29 14</td>
<td>58 7</td>
<td>25 6</td>
</tr>
<tr>
<td>Physical</td>
<td>13 7</td>
<td>13 7</td>
<td>7 1</td>
</tr>
<tr>
<td>No Change</td>
<td>27 9</td>
<td>78 18</td>
<td>41 12</td>
</tr>
</tbody>
</table>

*Note.* Year refers to the publication year of a book. No Change were mutually exclusive. Behavior, mood, perspective, and physical change were not mutually exclusive.
Figure 5. Change Construct Percentages by Gender Under Publication Year

Notes. The figure illustrates the perceived changes for books of female protagonists and books of male protagonists under three publication year categories. F = books characterized with female protagonists; M = books characterized with male protagonist.

A significant change was detected for physical change of female protagonists among publication year categories, $\chi^2_{\text{physical}}(2) = 7.99, p = .02$. Follow up tests showed that for books of female protagonists, dated published books (before 2001) contained significant more physical change, as compared to books published between 2001 to 2010, $\chi^2(1) = 5.54, p = .02$, and books published after 2010, $\chi^2(1) = 3.69, p = .05$. No significant physical change difference was detected among pre-service teachers’ perception between books published between 2001 to 2010 and books published after 2010 of female protagonists, $\chi^2(1) = 0.00, p = .99$. The tests for female protagonists between other three types of change and publication year were not significant, $\chi^2_{\text{behavior}}(2) = 0.56, p = .75, \chi^2_{\text{mood}}(2) = 2.53, p = .28, \chi^2_{\text{perspective}}(2) = 3.35, p = .19$.

A significant perspective change was found in books with male protagonist(s), $\chi^2_{\text{perspective}}(2) = 5.80, p = .049$. Books published before 2001 contained significant more perspective change compared to books published between 2001 to 2010, $\chi^2(1) = 4.40, p = .04$. No significant perspective change difference was found between books published between 2001 to 2010 and books published after 2010, $\chi^2(1) = 0.15, p = .70$, or between books published before 2001 and books published after 2010, $\chi^2(1) = 1.27, p = .26$. Comparisons between other three types of change and publication year of male protagonists were not significant, $\chi^2_{\text{behavior}}(2) = 0.92, p = .63, \chi^2_{\text{mood}}(2) = 0.20, p = .91, \chi^2_{\text{physical}}(2) = 3.45, p = .18$.

Discussion

A common gender stereotype is that females are more emotional than males. However, our findings obviate that general belief as pre-service teachers identified the frequency of emotion change similarly between female and male fictional characters. This is in agreement with Tepper and Cassidy’s (1999) study that females were not associated with more emotional words than males in their examined picture books. Future studies need to situate the discussion within a broader context: examining the question of whether different gender’s emotional changes associated with their emotional expressions or silenced emotions. If this question left unaddressed, the stereotypical pattern of gender-emotion continues to appear in picture books.

According to pre-service teachers, the emotional change was the most perceived change occurred to books’ central characters. This finding guided us to the other important idea that books about different characters, being exposed to their vulnerabilities and emotional change have become more popular in recent years. It is possible that contemporary authors and illustrators are becoming more mindful of the importance of characters’ emotional associations as well as the young readers’ emotional learning. As Nikolajeva (2014) indicates, “picture books are an excellent first step toward emotional intelligence” (p. 726). This idea was consistent with an emerging pattern found by other scholars of gender and children’s literature. For example, as Söderberg & Nyhlén (2014) discuss, in Swedish picture books, a complex emotion such as grief is expressed in more varied ways, and as a matter that concerns both men and women, boys and girls.

Also, we learned that according to pre-service teachers, modern picture books with female characters were less concerned with protagonists’ body change. There are previous studies on unattainable and unrealistic body image and body posture advertised as beauty role models on TV programs, sports, social media, as well as in picture books (Ashley, 2013; Dale et al., 2016; Moreno, 2012; Spitz, 1996). According to Dittrmar et al. (2006) girls’ body criticism and dissatisfaction start to emerge at possibly from 5 years onward. In order to help young readers to develop
understanding of their gender identity, it is important to be aware of the negative exposure effects and expose young boys and girls to a more diverse range of realistic body images.

Furthermore, our findings indicated that no change happened to about 25% of female main characters. This finding raised a new question that whether the female protagonists selected in these responses were flat or round characters. Characters are literary constructions that appear in the story as actors, performers, and agents, revealed through characterization – the way the character is described, their actions, traits, discourse, state, feelings, and thoughts. In 1927, E. M. Forster, one of the early literary critics, classified characters as flat or round. Flat characters “are constructed round a single idea or quality: when there is more than one factor in them, we get the beginning of the curve towards the round” type of character (Forster, 2002, p. 48). Flat characters are easily identified and remembered; their circumstances may change, but they retain the same traits as they had at the beginning of the story; they are one-dimensional and therefore they lack a multi-faceted personality or character development. As a result, flat characters tend to conform to stereotypes. “Another facet of the inequity in literature is that many characters are not shown as multi-dimensional human beings with strengths as well as weaknesses” (NCTE, 1995, para. 2). The theoretical and empirical literature shows that children’s beliefs about gender and race are shaped at an early age (Theimer et al., 2001). Also, critical gender schema theory suggests that the stereotypical messages conveyed through representation of flat female characters in books might cause children to internalize gender stereotypes.

Another prevalent discussion is to think not only about misrepresenting gender roles in children's literature but also about the absence of gender (e.g., lack of female representation). Stereotyping by omission is another common way in which gender stereotypes might be perpetuated and maintained in picture books. For example, excluding female characters from critical roles in a story might create the impression that women are absent because they are inferior or incapable of accomplishing that role. If picture books continue to portray and praise male character’s strength and bravery, and omit these dimensions when portraying female characters, readers tend to assume that women are not as important as male characters or that females do not engage in male-related behaviors. While the importance of an equal portrayal of different genders in children's literature cannot be more emphasized, the goal is not to maximize the number of one specific gender’s representations. To improve our knowledge about different facets of gender and the extent to which the depiction of gender has changed over time in picture books, there is a need to dig beneath the surface of questions about gender misrepresentation in picture books and focus on absences too. It is possible that gender scholarship will benefit from studying questions such as “Who are the lead characters in the story? and “How did the lead character handle a challenging situation?”

**Conclusion**

Tracing characters’ status of change in the story world is critical in building reader literary meaning-making. Discovering whether characters are developed or changed throughout the textual and visual narration helps pre-service teachers and therefore their future students to gain insights into the characters and provides teachers with practical ways to extend their own as well as children’s engagement with stories. This research explored: (a) What type of perceived changes did pre-service teachers identify in the main character throughout the story?; (b) Were the described changes reported by the pre-service teachers differentiated by the gender of the main character?; (c) Were the described changes reported by the pre-service teachers differentiated by the year of the publication of the book? The overall process of this study proved to be a rewarding exercise. We learned that according to pre-service teachers four types of change constructs were identified in participants’ responses. The emotion change was the most perceived change occurred to books’ central characters. Although we do not know the pattern of protagonist changes and its association with their gender, our data, in conjunction with previous gender studies, reinforce the importance of continued attention to gender representation in picture books.

**Recommendations**

The results of this study will pave the way for future research focusing on characters’ affective patterns throughout the stories such as characters’ critical times, detecting their emotional state, analyzing whether these male and female characters become happier or sadder throughout the story as well as their affectual shifts. Another area worthy of further investigation is to study more about the correlation between gender and flat or round type of characters. Furthermore, in this study, we focused on binary categorizations of gender and sex—not gender on a spectrum. It would be beneficial to inquire about non-binary representation of gender in picture books, examining who is absent or present in stories for children.

Another area worthy of further investigation is to investigate more about the correlation between gender and flat or round type of characters. Flat characters do not undergo any change, they are one-dimensional and therefore they lack a multi-faceted personality or character development. As a result, flat characters tend to conform to stereotypes. It is likely for readers who read these stories to internalize gender stereotypes because of the emphasis on association of one gender identity with flat personality.
Limitations

In doing any multicultural research, it is hardly possible to include and examine all different aspects of diversity in one study. For the purposes of this research, the notion of multicultural will be limited to include only gender differences and to not analyze other forms of diversity. Although we focused on binary categorizations of gender and sex—not gender on a spectrum, we recognize the criticality of intersectional perspectives, the need for updated definitions and practices, literature on gender, sex, and sexual orientation, and that teachers and students have multiple identities that separately and taken together impact their daily experiences. We also recognize that cultural and linguistic competence is equally relevant for multiple forms of identity and related inequality and inequities based on those identities (e.g., age, ethnicity, language, race, religion, sexual orientation, geography) including gender and gender-equity.

Authorship contribution statement

All four authors confirm a substantial contribution to the concept, design, interpretation of data, writing, and revising the paper. All authors reviewed the results and approved the final version of the manuscript.

References


Ashley, S. (2013). *Body image depictions in Caldecott award winning picture books: A content analysis.* Carolina Digital Repository. [https://doi.org/10.17615/26sy-k003](https://doi.org/10.17615/26sy-k003)


Davison, K., Queen, R., Lau, F., & Antonio, M. (2021). Culturally competent gender, sex, and sexual orientation information practices and electronic health records: Rapid review. *JMIR Medical Informatics,* 9(2), e25467. [https://doi.org/10.2196/25467](https://doi.org/10.2196/25467)


Appendix

Gender Study

Watch the video by Rebel Girls (The Ugly Truth of Children’s Books)

https://www.youtube.com/watch?v=Z1Jbd4-fPOE

Choose either OPTION A or OPTION B

OPTION A

1- Each of you (individually), browse the shelves and find at least five fictional picture books with a female human being as the main character (exclude male human beings, animals, imaginary creatures, machines, etc. as the main character). DO NOT choose biographies or traditional literature.

2- Read your five books, trace the main character’s actions through the story and complete the questions for each book. You may need to read the books more than once.

3- Submit the completed word document to the prompt on the eLearning.

QUESTIONS (Please repeat this set of questions for all five books)

Title: 
Author: 
Illustrator: 
Date of publication: 

Is there any male character in the book? 
Is the male character a prince? (Only if there is any male character in the story) 
Is the main character a princess? 
Is the main character represented on the front and or back cover? 
If yes, what is your impression of the main character? Do you see the presence or absence of power? 
Is the main character a child, teenage, or an adult? 
How do you describe the physical appearance of the main character? 
How do you describe the behavior of the main character? 

Reading the text and looking at the illustrations in the story, is the main character represented in a powerful way? Support your claim with at least three examples from the book. 
Is there any example of the main character represented in a powerless way? Support your claim with an example. 
Who finds a solution for the main character’s conflict? If she is in danger who saves her? 
How does the character change throughout the story? (if there is any change) 
(for example, emotional change, physical change, economical change, mood change, etc.) 
Does the character’s change impact herself, the family, the community, etc.?
OPTION B

1- Each of you (individually), browse the shelves and find at least **five** fictional picture books with a male human being as the main character (exclude female human beings, animals, imaginary creatures, machines, etc. as the main character). DO NOT choose biographies or traditional literature.

2- Skim through the story of your five books, trace the main character's actions through the story and complete the questions for each book.

3- Submit the completed word document to the prompt on the eLearning.

QUESTIONS (Please repeat this set of questions for all five books)

Title:
Author:
Illustrator:
Date of publication:

Is there any female character in the book?

Is the female character a princess? (Only if there is any female character in the story)

Is the main character a prince?

Is the main character a villain or a monster? Is he dangerous, angry, or scary?

Is the main character represented on the front and or back cover?

If yes, what is your impression of the character? Do you see the presence or absence of power?

Is the main character a child, teenage, or an adult?

How do you describe the physical appearance of the main character?

How do you describe the behavior of the main character?

Reading the text and looking at the illustrations in the story, is the main character represented in a powerful way? Support your claim with at least two examples from the book.

Is there any example of the main character represented in a powerless way? Support your claim with an example.

What does the male character do with his power? Is he caring and supportive or aggressive and oblivious?

How does the character change through the story? (if there is any change) (for example, emotional change, physical change, economical change, mood change, etc.)

Does the character's change impact himself, the family, the community, etc.?