Analysis of Gender Stereotypes in Illustrations of the 2nd Edition of Junior High School English Textbooks "Go For It"

Yutong Ouyang[✉]

Joint Institute of the Universities of Ningbo and Angers, Ningbo University, Ningbo 315211, China
196003625@nbu.edu.cn

Abstract. In China, gender issues are receiving more and more attention in education. Although gender stereotypes or gender bias have been addressed in recent studies regarding other aspects in school, such as peer interaction, teacher's role, and school's role, the attention distributed to illustrations in the textbooks still remains insufficient. This study intends to identify the gender bias presented in the textbooks that are used in 7th grade in China's junior high school. This work provides new insights concerning the reflections of gender bias found in illustrations of the examined textbooks. Among the total 168 illustrations that have been analyzed by adopting a narrative system of visual images, 4 categories of the situations of illustrations have been examined, taking different traits and behaviors of each gender into consideration. Results show that gender bias in the forms of stereotypical images, male firstness and female marginalization are still prevalent in the textbooks studied.

Keywords: Gender stereotype · Textbook bias · Illustrations · Visual analysis · Junior high school

1 Introduction

Gender issues are receiving more and more attention in education. People have come to realize that gender issues presented in education can largely affect students' performances [1]. While other aspects regarding gender issues in education (e.g., peer interaction, school's role, and teachers' role) are being elaborated [2], the content of the textbooks seems to get less attention in China. As a material that students need to refer to every day, textbooks have a subtle impact on teenager's gender cognition [3].

In textbooks, illustrations in textbooks represent a very important element that helps to fulfil educational objectives in the teaching-learning process. They aid learning and assist the learners understand better what they read [4]. This paper aims to reveal the gender bias lying in textbooks entitled "Go for it" for China's junior high schools, focusing on their visual representation (illustrations). Statistical and content analysis methods are used to interpret the scenes and contents of illustrations. It would help provide a more global view towards the gender stereotypes or gender bias presented

in the textbook since different situations presented in illustrations have been taken into account.

Several points concerning gender roles/gender bias that need to pay attention to are presented through literature review. Recent studies shows that when it comes to gender stereotypes or gender bias, it is widely believed that there are certain attributes that differentiate men and women. They may be role behaviors (e.g. taking care of kids or being a leader), occupational status (e.g. truck driver and homemaker), physical characteristics (e.g. body height and hair length) or common attributes and types of activities associated with men and women [5]. The existence of gender stereotypes in schools will largely affect students' mental health, cognitive behavior, and communication behavior especially in junior high school where students' gender flexibility and awareness tend to be higher [6]. Therefore, gender roles and stereotypes represented in textbooks would inevitably influence the cognition towards gender among students: students are likely to absorb the ideas in textbooks, which may affect their self-cognition, relationship with different genders and even their performance in different subjects [7]. According to former studies that analyze gender bias in illustrations, it is widely acknowledged that male characters tend to be in a more dominating position, while female characters are more likely to be in a restricted situation [8]. At the same time, gender disparities in the forms of female invisibility, male firstness and stereotypical images are still prevalent in the textbooks examined [9].

Nevertheless, the former analyses of textbooks are mainly in the text part, and the analyses of illustrations are often carried out from the perspective of behavior in pictures. There lacks a way to analyze the narrative of the characters by taking the scene of the picture as a whole, to analyze the gender issues in the narrative system of the situations depicted in illustrations, rather than simply starting from the perspective of behavioristics.

2 Methods

This research has chosen the new version of junior high school English textbooks (Go For It) of the People's Education Press as research object. This set of textbooks is based on the old version of the textbooks "English (New Goals)". The figures and illustrations in the new version have undergone major changes, becoming simpler and clearer [10]. At the same time, the edit of textbooks contains different value inclinations and attitudes [11]. This article will be mainly focused on the illustrations, since illustrations accomplish the appropriate and successful transfer to the audiences (in this case that would be students), and it as well influenced the efficiency that students are informed and educated [12]. In each section of the textbooks, illustration would be analyzed from the perspective of gender roles.

This paper took the 2 textbooks for the 7th grade, the 2nd edition of June, 2013 as materials. The reasons for choosing the first two textbooks are: firstly, illustrations concentrate on the first 2 books, while the rest of the textbooks will have more textural content than illustrations due to the belief that illustrations can help people from a relatively young age to comprehend better and build a stronger interest in learning [13], afterwards, the books would be mainly focused on the textural part; secondly, the scenes

contained in the illustrations are comprehensive: they already contain the common scenes (e.g. school life, family life, and social life) mentioned in subsequent textbooks.

There are 418 illustrations in total in these 2 textbooks. Apart from those of animals, objects or profile pictures, 168 of illustrations have been analyzed. According to the study of Mohamed, et al. [14], the research has divided all the illustrations into 4 categories according to the narrative system of Kress and van Leeuwen's narrative system [15] based on actions and reactions, namely:

1) social (such as playing with a ball or flying a kite),
2) institutional (e.g., reading or writing),
3) political (e.g., giving a speech),
4) personal (e.g., washing dishes, eating or cooking).

Circumstance of setting is also considered, which refers to the location of the participants and is extended to include the features of indoor and outdoor. Circumstance of means refer to an object that provides the means for carrying out the action such as a ball or a bicycle. With these 4 categories, this paper started classifying different genres of the illustrations and adding up the number of each kind of pictures [14].

By using the content analysis method to screen out the illustrations in the textbook, this study intends to grasp the main characteristics of the research object through qualitative analysis. First, illustrations are all divided into 4 types according to the abovementioned criteria; secondly, the author counted the number of occurrences of each type and analyzed the proportion of males and female characters in different types of illustrations, the difference in circumstances of setting and circumstances of means; finally, the possible manifestations of gender bias in the known results became available to use.

3   Results

Each category in the narrative system of the situations in the illustration of all units of the book as well as the number of each category is presented in Table 1.

In all those situations when it concerns interlocution or interaction where there are more than 2 people, in 71% of those illustrations, it is mainly men who take up most of

Table 1. Statistics of illustrations in different categories in the narrative system

Categories In The Narrative System	Total Number
Social (interpersonal social contact, e.g.: having conversations, playing with a ball or going to a party)	75
Institutional (things students do frequently, e.g.: reading or writing	52
Political (things conducted in public with political purposes, e.g.: giving a speech)	9
Personal (thing conducted in private sections, e.g.: eating or cooking)	32
Sum total	169

the space (e.g.: 10 people in a picture and 6 or more of them are male). The situations where there are equal numbers of men and women or the number of women surpass that of men appear relatively less frequently (24 out of 97). Situations when there are more women than men are rarer in contrast. Only in one social situation that the present people are all women, which is the shopping situation (4 out of 97).

3.1 Social

61% of the illustrations in social situations takes place indoor, always in a classroom, in a store, in the corridor outside of the classroom or a house; 39% of them are outdoor situations like in the mountains (camping or hiking), playground, front yard and city park. In the indoor situations, male characters tend to be more active with activities like starting conversations or asking questions, while female characters are more passive, most of the case answering the questions that the male asks or sitting still.

In outdoor activities, basketball and football are used as main accessories around male characters (10 out of 75). Table tennis bat is held by an Asian child once; the only time a woman holds a ball is when an interviewed volleyball player explains to the interviewer the importance of keeping healthy eating habits instead of eating too much junk food or eating too little. While circumstances of girls in this setting are mainly holding a doll or flowers (3), dancing (2) or playing musical instruments (2).

3.2 Institutional

In institutional settings, in all of the single feature illustrations of one person doing homework or research, the character is male. In addition, in the process of discussion regarding academic topics, when the character in the illustration asks "what is your favorite subject", the answer of the male character is sports, science or math in all cases (3 out of 3); whilst the only two female characters' answers are respectively art and science.

3.3 Political

In the political scene, all the characters presented are all male characters. Whether as an announcer or a speaker.

3.4 Personal

In personal situations, things are quite different from those of other situations, 87% of the illustrations has at least one female figure. Their roles are mostly composite roles such as mother, wife, and grandma, and their main activities are do chores, prepare food, and always with an apron.

4   Discussion

It can be seen from the social part that the illustrations in the textbook are intended to correct gender stereotypes by adding counter stereotyping figure (the volleyball player), but that is still not enough; because the chosen character is not close enough to school life that all the girl students could relate to. Women's accessories are generally plants or dolls, and they are more likely to be found in indoor occasions, which reinforce the stereotype that women tend to be more gentle and more silent.

One of the problems of the institutional is that there are too few female roles presented, and the second is that female roles are often not linked to STEM subjects [3], thus emphasizing the gender bias that female students are not prominent enough in STEM subjects. However, a female character who likes science here is a good start.

In the political part, not only do the serious lack of female roles have an undertone of the fact that women still face many difficulties in political participation [16], it is also not conducive to help young female students see their own roles in the future political field [17]. Since Politics remains an overwhelmingly male profession, more political figures of women have to be included so that it would make young women more likely to express an intention to engage in political activity as adults [18].

It is widely acknowledged that in textbooks, students are the ones who are active and social. The usual presence of female characters in shopping and most personal scenes illustrates the neglect of female characters. The aim of creating certain figures in textbooks usually lies in creating roles that students can relate to and identify with; this undoubtedly subtly reflects the phenomenon of women being marginalized by social life [19].

It is worth noting that in the family scene of P19 of the first volume of the 7th grade, as the main actor is the young brother--the young male character mainly presents the characteristics of being reckless, while his older sister is answering his questions. In this situation, the attribute given to the elder sister here is to be more organized. But again, in the same scene, it is not hard to notice that the same young female character receives less attention. Moreover, in the picture, the father is sitting on the sofa, with materials and books by his hand, while the mother is standing beside the kitchen door, giving out the impression that she has been busy around the house: it is obvious that this illustration tries to ignore importance of the father in a family, the main action carried out in family life is still by the mother [20].

5   Conclusion

This paper analyzed statistics from four dimensions and analyzes the gender bias in the two textbooks of the 7th grade. The study found that among the four scenes in the textbook illustrations, except for the personal scene, the other scenes are dominated by male characters by appearing to be outnumbering women, occupying more prominent positions, or taking on more important, active roles. Stereotypes highlighted from this include men are more outgoing and more sportive, women are quieter and appreciate silent stuffs. Men are more interested in stem subjects, while women are more art-like subjects. At the same time, men's political participation is higher than that of women, and women occupy an important position in family life.

These findings further concretize textbook gender stereotypes presented in the widely used textbook "Go For It" and examine the affects that may be caused by them. In further selection, modifications and revisions of illustrations in textbooks, closer attention concerning gender stereotyping and bias would be required.

References

1. Pm, A. S., & Parameswari, J. (2019, July). Gender stereotype in education. In *Cognitive, psychological and behavioural perspective in education*. https://doi.org/10.1007/978-1-4020-5916-2_6
2. Emer, S. (2017). Gender and education. *International Studies in Educational Inequality, Theory and Policy* 135–153. https://doi.org/10.1007/978-1-4020-5916-2_6
3. Brown, C. S., & Stone, E. A. (2016, January) Gender stereotypes and discrimination: How sexism impacts development. In *Advances in child development and behavior* (pp. 105–133). https://doi.org/10.1016/bs.acdb.2015.11.001
4. Wambugu, P. W., Ngatia, D. G., & Wanyoike, G. N. (2017). Analysis of illustrations used in secondary schools physics textbooks. *International Journal of Humanities Social Sciences and Education (IJHSSE), 4*(4), 99–103. https://doi.org/10.20431/2349-0381.0404011
5. Eisend, M. Gender roles. *Journal of Advertising, 48*, 72–80. https://doi.org/10.1080/00913367.2019.1566103
6. Alfieri, T., Ruble, D. N., & Higgins, E. T. (1996). Gender stereotypes during adolescence: Developmental changes and the transition to junior high school. *Developmental Psychology, 32*, 1129–1137. https://psycnet.apa.org. https://doi.org/10.1037/0012-1649.32.6.1129
7. Dawar, T., & Anand, S. (2017). Gender bias in textbooks across the world. *International Journal of Applied Home Science, 4*, 224–235.
8. Li, L. (2019). A study on gender roles in English textbooks go for it! For junior high school.
9. Li, J. F. K. (2014). A hidden curriculum in Japanese EFL textbooks: Gender representation. *Linguistics and Education, 27*, 39–53. https://doi.org/10.1016/j.linged.2014.07.002
10. Niu, Q. (2015). A comparative study of illustrations in junior high school English textbook "go for it!" and in "English (new target)". *Journal of Shanxi Normal University (Natural Science Edition) Special Issue for Postgraduate Thesis, 29*. https://doi.org/10.16207/j.cnki.1009-4490.2015.s1.056F
11. Tao. (2017). An analysis of the value orientation of English textbooks: A case study of the junior high school English textbook (Go For It) of the people's education press. *Journal of Tianjin Normal University (Elementary Education Edition), 18*. https://doi.org/10.16826/j.cnki.1009-7228.2017.01.010
12. Male, A. (2007). *Illustration: A theoretical and contextual perspective: A theoretical & contextual perspective*. Bloomsbury Visual Arts.
13. Brookshire, J., Jamye, L. F., Scharff, V., & Moses, L. E. (2002). The influence of illustrations on children's book preferences and comprehension. *Reading Psychology, 23*, 323–339. https://doi.org/10.1080/713775287
14. Subakir, M., Yasina, M., Hamida, B. A., Othmanb, Z., Bakara, K. A., Hashima, F., & Mohtic, A. (2012). A visual analysis of a malaysian english school textbook: Gender matters. In *International Conference on Education and Educational Psychology (ICEEPSY)*. https://doi.org/10.1016/j.sbspro.2012.12.140
15. Kress, G., & Leeuwen, T. V. (2006). *Reading images: The grammar of visual Design* (2nd ed.). Routledge.
16. Gerber, G. L. (1988). Leadership roles and the gender stereotype traits. *Sex Roles, 18*, 649–668. https://doi.org/10.1007/BF00288051

17. Schneider, M. C., & Bos, A. L. (2014). Measuring Stereotypes of Female Politicians. *Political Psychology, 35*(2). https://doi.org/10.1111/pops.12040
18. Campbell, D. E., & Wolbrecht, C. (2006). See jane run: Women politicians as role models for adolescents. *The Journal of Politics, 68*(2), 233–247. https://doi.org/10.1111/j.1468-2508.2006.00402.x
19. Siltanen, J., & Stanworth, M. (1984). The politics of private woman and public man. *Theory and Society, 13*, 91–118. https://doi.org/10.1007/BF00159258
20. Margalit, M. Fathers' and mothers' roles in the family. In *Effective Technology Integration for Disabled Children* (pp. 83–89). https://doi.org/10.1007/978-1-4613-9006-0_7