Gender Discrimination in Chinese Primary School Textbooks: Evidence in English Textbooks

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Abstract. Textbook is an indispensable medium for students to acquire knowledge. The completeness of its content and the clarity of its logic are the reasons why it is used as a teaching aid in schools for so many years and not easy to replace. But behind the visible, intentional formal curriculum, there are hidden curriculums. Hidden curriculums include not only objective factors such as social environment, but also subjective factors such as people's subconscious and inherent impression. Through qualitative and quantitative methods, this research examines whether Chinese textbooks contain hidden curriculums with gender discrimination from some specific perspectives. In this research, data analysis and interviews are both included. The results have shown that gender discrimination exists in China's English textbooks. Instead of appeal directly in the textbook, it appears in the form of hidden curriculum. Also, in the end of this paper, there will be some suggestions to textbooks writing team, and teachers in China.

Keywords: Textbook Analysis; Gender Discrimination; Education Study.

1. Introduction

As an aid to school education, textbooks play an irreplaceable role. Textbook is a medium used to convey knowledge to students. Textbooks are an important tool for promoting a specific curriculum. The content and structure of textbooks are important to promote a specific vision of the curriculum because they are organized according to purpose [1]. Textbooks and school curriculum complement each other and are indispensable. School curriculum is defined as ‘an explicit, conscious, formally planned course with specific objectives’, it includes students’ acquisition of instructional knowledge and skills [2,3]. These knowledges are usually visible and will be write in the form of text or be scheduled. However, learners may be learning more than is explicitly stated in school textbooks and teacher manuals through an unwritten curriculum in the social environment provided by the school [3]. What is expressed in the textbooks is usually the consensus or fact of the society, and these contents must be reviewed by relevant people to ensure that the content is legal and in accordance with ethics and morality, and has the correct guidance for students. But the ‘unwritten, hidden curriculum, or sometimes called a ‘covert’ and ‘latent’ curriculum’ is easy to miss in the review. This kind of curriculum usually knows as ‘the socialization process of schooling’, they play a role in reinforcing learners' dominant beliefs, values, and norms [2,3,7]. Formal curriculum presents what students need to learn very clearly; hidden curriculum contains information that is implicit in the formal curriculum. It will analyze the deeper meaning of the textbook. For example, it may indirectly promote violence or discrimination, deepen people's inherent impression, etc. It is intolerable to misguide students in wrong direction from hidden curriculum. It should not appear in textbooks, especially the sensitive topics such as discrimination. Therefore, whether there is discrimination in books has become a problem worth investigating. As a result, 5 primary school textbooks of China have been choice to identify weather gender discrimination exists in the textbooks, the findings show that there are some gender inequality problems in the textbooks. To make the research more objective, some textbooks from other countries also be used as reference materials, gender discriminations also exist. It can be concluded that textbooks around the world had the same problem. Several studies have shown that the 'knowledge' presented in school textbooks and communicated in the curriculum is fraught with issues of gender, culture and power [4]. The role of knowledge in textbooks is to convey to students who are going to enter the society the abilities and moral and moral qualities they are
expected to possess. Hazir Ullah & Christine Skelton said: School textbooks are therefore considered to be an important contribution to the formation of gender identities, the reinforcement of gender discrimination and dominant structures in society. Gender representation in children's books is important from a number of philosophical perspectives [6]. Combine this phenomenon with the hidden curriculum theory, many justifications show that that gender discrimination in textbooks will have an impact on students' cognition.

According to this hypothesis, the objective of this research is to investigate gender discriminations in school textbooks. It represents that this type of discrimination affects a lot of people. This is a mistake of textbook writers and reviewers; stereotype is clouding their judgment. In Sadia Jabeen, Abdul Qayyum Chaudhary, and Sonia Omar’s research, it tells that their analysis of textbooks shows that roles and activities as women and men are largely removed from textbooks. Many of the stories in English textbooks feature women in the roles of mother, friend, or sister. Their roles include cooking, buying groceries from the market, and helping their male partners work the fields. Girls, on the other hand, appear in more traditional supportive roles, helping their mothers with household chores and playing with dolls, making them more intellectual and less exposed. Indoor activities include reading storybooks, making traditional embroidered clothes, and keeping the house clean [8]. It is definitely a kind of gender discrimination to fill textbooks with such stereotypes.

In today's world of gender equality, this is a loophole in the education system, and one that very few people notice. The purpose of my research is to point out the existing shortcomings of education and fill the research gap. Researchers around the world have done a lot of different research in educational equity, which is critical to achieving absolute equality between men and women. However, very little research has been done on the topic of gender discrimination in textbooks, especially to Chinese textbooks. The first step in changing society's perception of gender issues is to raise children to be gender equal from an early age. Researchers should be suggested to do more research into the impact of gender-biased language on students' gender perceptions, starting with the content of books. At the end of this paper, suggestions will be made to textbooks writing team, and teachers in China based on the research.

2. Finding

2.1 Research Questions

In order to inspect gender discrimination in textbooks more directly, and ensure the authenticity of the data, the method that be used in the research is data analysis, and the data that be used will be first-hand data, collected based on the following research questions:

(1) What is the ratio of gender (male to female) characters in the textbook [5]?
(2) How are the gender aspects presented in the textbook [5]?
(3) What is the percentage of masculine, feminine language used in the evaluation questions in the textbook [5]?
(4) What are the address titles to male and female in the textbook [5]?

Details of the research questions will be described in Methodology part. So as to improve the credibility of the data and get a relatively fair result, a specific textbook has been used to do a case study. The sample that the research use is the primary school English textbook for Grade 5 (Grade 3 for starting point), compiled by People's Education Press (PEP). It is a common book used by more than 20 of China's 34 provincial-level administrative regions. Visible its wide audience, as well as its authority. Another very important reason is that as a language textbook, especially a foreign language for primary school students who are on the enlightenment stage of this language, its main purpose is to let students learn the language. Because of this, most of the content is created by the writing group of the book, rather than the existing complex literature because they are too difficult for beginners. Because there are no objective factors that can affect the content design of the book. Such a book should be the easiest to achieve gender equality. If gender discriminations exist in this book, I suspect there will be in other textbooks as well.
2.2 Methodology

This research used a mixed method (quantitative + qualitative). Researcher collects data from the sample manually, and interviewed several teachers and students, asking them to talk about their ideas on research questions. Data do not tell the whole story, and the main users of the book are students and teachers, that’s the reason why interviews are necessary. Although a hidden curriculum of this kind is difficult to understand if it has received the wrong message without thinking about it deliberately. However, the disadvantages of gender discrimination in textbooks can still be summarized from the respondents' answers. And combine the data and the responses from the interview to make the conclusion. Each question’s data will be analyzed to a figure or a table separately, whether gender discrimination is included will be analyzed according to the data separately and analyze the impact on students based on the existing theories and definitions of keywords involved in each research question. Keywords in questions are listed and explained in detail in the table below. The methods to get data for each question are also written down below.

Table 1. Definition and examples of keywords win the research questions

<table>
<thead>
<tr>
<th>Categories</th>
<th>Definition</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender Characters</td>
<td>Determine whether the character is male or female by name, appearance, etc. Cartoon characters whose gender cannot be determined will be ignored.</td>
<td>Name such as Sam, Tom, Emma, Amy, Liu Tao, Chen Jie, etc. There are some characters whose gender can be directly identified by their names. Appearance such as hair, facial features, clothing, etc. Most characters need a name and appearance to identify their gender.</td>
</tr>
<tr>
<td>Gender Aspects</td>
<td>Jobs for gender selected according to the aspects</td>
<td></td>
</tr>
<tr>
<td>masculine, feminine language</td>
<td>Speaking from a male or female perspective. Judgements depend on cues or explicit statements in a text. If it can't be judged, it will be ignored.</td>
<td>1. Government or military personnel: diplomats, police, firemen, soldiers. 2. Professional technicians: plumbers, electricians, programmers, architects. 3. Business and service personnel: salespeople, entrepreneurs, lawyers, doctors. 4. Agricultural, forestry, animal husbandry, fishing, water industry production personnel. 5. Production and transportation equipment operators and related personnel: assembly line workers, operators, drivers, pilots.</td>
</tr>
<tr>
<td>Address and titles</td>
<td>The name call male or female characters in the texts.</td>
<td>Mr, Miss, Doctor, etc. Sometimes it can be a specific name</td>
</tr>
</tbody>
</table>

Research question 1: What is the ratio of gender (male to female) characters in the textbook?
The number of male and female characters in the book is counted, and the ratio of male to female characters and the proportion of female characters are finally calculated, so as to achieve the purpose of judging whether gender discrimination is included. Cartoon characters whose gender cannot be determined will not be counted. Also, content related to these cartoon characters in the textbook will not be discussed in any of the other research questions.

Research question 2: How is the gender aspects presented in the textbook?
By counting the occupations of male and female characters in the book, we can find out whether there is a certain pattern, in other words, whether there is a stereotype of people in the book. The existence of stereotypes is also a form of gender discrimination/gender bias.
Research question 3: What is the percentage of masculine, feminine language used in the evaluation questions in the textbook?

Sentences in the textbook are all masculine, feminine, or neutral language. Both masculine and feminine language have clear gender characteristics, and by looking at the ratio of them, you can tell whether male and female are on equal status in the book. At the same time, since there are a lot of conversations in this book, we can try to find out whether there is any regularity in these dialogues. For example, the characters of a certain gender always ask questions and the characters of another always answer questions. These are also evidencing of gender discrimination.

Research question 4: What are the address titles to male and female in the textbook?

Throughout the book, the appellation of men and women can reflect whether the status of men and women in the book is the same from their formal nature.

2.3 Data Analysis

<table>
<thead>
<tr>
<th>GENDER CHARACTERS</th>
<th>MASCULINE AND FEMININE LANGUAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image1" alt="Gender Characters" /></td>
<td><img src="image2" alt="Masculine and Feminine Language" /></td>
</tr>
</tbody>
</table>

**Figure 1.** Gender Characters  
**Figure 2.** Masculine and Feminine Language

**Table 2.** Gender Aspects

<table>
<thead>
<tr>
<th>How is the gender aspects presented in the textbook?</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>Athlete, teacher (Mathematics, sport), white-collar worker, chef</td>
<td>Teacher (Language), seller, housewife</td>
<td></td>
</tr>
</tbody>
</table>

**Table 3.** Address and Titles

<table>
<thead>
<tr>
<th>What are the address and titles to male and female in the textbook?</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mr, Grandpa, Father, Specific Name</td>
<td>Miss, Ms, Grandma, Specific Name</td>
<td></td>
</tr>
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</table>

There is a total of 18 characters in the book, of which 10 are male characters, 6 are female characters, 2 are cartoon characters which cannot be counted in this research. The ratio of male to female is 5:3, and female characters account for 38% of the total which has been showed in figure 1. The representation of female characters is relatively small.

Without any objective factors’ restrictions, editors set male characters as athletes, Mathematics or sports teacher, white-collar worker, and chef. They set female characters as language (Chinese and English) teacher, seller, and housewife.

There are 223 sentences that have clear gender orientation in total, 86 were feminine language. Accounting for only 38.6% of the total. It is not hard to find that the ratio of masculine and feminine language is very unequal from figure 2.

Because it is a primary school students’ foreign language book, there will not appear many kinds of address and titles. The most common address is Mr and Ms. Because of their versatility, they are least likely to be limited by plot factors and most likely to be distinguished by primary school students. In existing address and tiles, for male, they usually be called Mr, Grandpa, Father. And for female, they usually be called Miss, Ms, and Grandma. It seems similar, but the frequency of using formal
address to male like Mr is more frequently than to female like Ms. Evidences can be find in table 2 and table 3.

In conclude, there are significant gender discriminations in the textbook. The uneven distribution of characters between men and women and the large difference in the number of sentences spoken by men and women are good indicators. According to hidden curriculum theory, these unwritten things will affect students cognize. Them cognize will be very hard to change in the future. Achieving gender equality is the shared responsibility of the whole society, and in the Millennium Declaration of the United Nations, equality has been included as several ‘fundamental values’ that are ‘essential’ to international relations in the twenty-first century. Gender equality is now well protected in terms of legal policies, regulations and so on. Achieving true gender equality will not happen overnight, it will be a long process. To achieve such a state, people need to change the stereotype and raising citizens' awareness of gender equality. It is important that today's teenagers are given the right guidance so that we can hopefully achieve real gender equality soon. But these hidden curriculums are opposite to this goal. Problems are not over. Problems are also existed in the other two research questions. If the images reflected their experiences, then the students' perceptions reflected those of the textbook. Conversely, if the images did not match their experiences or reality, students were able to use their surroundings to make sense of the textbook images. Through the student responses in this section, we show that complex signals are being sent due to the inherent contradictions in the textbook's gender composition [9]. The fictional, created characters and content in the book naturally don't fit into their lives, so they use their surroundings to understand the content of the book. In this textbook, gender aspects and the address and titles of male and female will have negative effect to students. It should be noted that in the aspect of gender, stereotypes are very serious in the book. The author gives women jobs that are relatively easy and do not require many certificates, such as sales assistant and housewife. And the men are given some of the higher requirements for professional skills, such as: athletes, white-collar workers. In addition, in all the settings or pictures in the book, the physical education and science teachers are all male, while the language teachers (Chinese and English) are all female, which is also related to people's stereotype. In addition, after reading through the book, it is not difficult to find that as long as there are questions in the article, most of them are asked by women and answered by men. When female characters and male characters appear at the same time, the height of male characters is always taller than female characters. To some extent, this is a gender bias. It is a tacit admission that men have more knowledge than women, and it is not an equal arrangement.

For the interview part, there are 5 student respondents in the qualitative part of the research. When the hidden curriculum theory and the data from quantitative research are not revealed to them, 80% of them think that there is no gender discrimination in the textbook, and it will not affect students' cognition. But when the investigator explained this to them and asked them to review the textbook and give them the opportunity to reconsider the answer, 50% of them changed their minds. Overall, 60% of them now believe that gender discrimination exists in the textbooks and will affect students. This also illustrates two points: First, the gender discrimination in textbooks is not easy to be found by students, but they will be received by them, and this information will become a part of the hidden curriculum, which is likely to affect students' cognition. Second, this study has certain limitations, not all textbooks have gender discriminations. And the only teacher respondent is Mr. Li, a high school Chinese teacher of China, he said 'The problem of male and female is a social problem. The future development of the textbook is to realize and correct the social inequality between male and female through textbooks.' He expressed his opinion on the matter from the perspective of a teacher, proving that there are certain problems in the existing textbooks, which need to be improved in the future.

3. Conclusions

Combining quantitative and qualitative data, it can be concluded that gender discrimination exists indirectly in the Grade 5 English textbook (PEP version), it is not difficult to find that there is more
male content in the role and language in the article, which are above 60%. In terms of appellation, the appellation of male roles is more formal than that of female roles. In terms of gender aspect, male roles also have a strong inherent impression. And there is room for improvement in the future. Not only for Chinese textbooks, but also for other countries. A quantitative analysis of 43 textbooks on six sports in Sweden found that boys were mentioned and photographed more frequently in books written by specialized sports federations. In swimming, girls and boys were mentioned and described the same number of times. In all six sports, males were also described as athletes more often than females. Although male athletes were often dominated, some textbooks highlighted knowledge about girls/females. These provide insight into the ways in which women are portrayed in the texts. Female athletes are portrayed with a female focus [10]. It shows that gender discrimination is not only appear in Chinese textbooks. According to NLP (Natural Language Processing) theory, language constructs reality, language generates power. The language in textbooks is a double-edged sword. It may teach students knowledge and life philosophy, but it may also affect students' cognition. Social Reproduction causes inequality to give rise to inequality. Although it is unlikely that there will be explicit gender discrimination conversations and photos in textbooks, such as advocating the superiority of male over female, etc., the inherent ideas and habits, such as: female is housewives, are more likely to appear in the textbook, our research has proved this hypothesis. The future research may be a research on the specific impact of gender discrimination in the hidden Curriculum on students' cognition and mentality on the basis of the result I have obtained.

This research suggests that the review phase of textbooks after they are written should increase the review of such content that may involve gender inequality, so that the ratio of male to female in textbooks should be closer to 1:1. Teachers should also make a final confirmation of the contents of the books before class. If there is any problem, they should change the textbooks in time to make sure that the content received by the students does not have any gender discrimination.

As it mentioned earlier, there are limitations to this study. The sample size of this paper is small and cannot represent all textbooks. In the future, more accurate results are expected to be obtained by analyzing textbooks of China and other countries.

References