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The Influence of Occupational Gender Cognitive Thinking in Chinese Education on Individual and Social Development

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Abstract. The issue of gender stereotypes in occupations has received extensive attention before, but there are still deficiencies in effectively eliminating these biases or perceptions. This article analyzes several important factors that lead to gender stereotypes in occupations and affect children's self-perception, such as textbooks, teachers, and the roles of family. The analysis concludes that the stereotypes caused by these three factors have a lifelong impact on individuals, and are likely to continue to the next generation, and have an impact on the entire society and economic conditions. Based on this, the article proposes the following suggestions: from individuals to society, everyone should pay attention to this issue and take action. Different scenarios can implement different actions. In schools, activities and courses can be carried out to allow children to experience the diversity of the world and have a certain self-perception; at home, through interaction with family members, children's career choices and paths can be correctly guided.

Keywords: Gender Stereotypes in Occupations, Gender Inequality, Chinese Textbooks

1. Introduction

Over the past few decades, China has vigorously promoted the concept of gender equality nationally. For instance, through laws such as the National Marriage Law, it has aimed to promote gender equality and equal rights in fields and areas like education and inheritance. However, gender bias still exists today. At the same time, the phenomenon of gender bias leads to occupational stereotypes, which are very obvious. To be more specific, in Chinese textbooks, men take up a wide range of social and professional roles, such as presidents, entrepreneurs, scientists, engineers, etc. These positions are authoritative and influential. In contrast, women's occupations are nurses or housewives. Focusing on different textbooks, the average number of times that mothers interact with the family members is 67.21% [1].

The impact of occupational stereotypes in reality is also significant. For example, in China, in terms of the proportion of their respective occupations, men account for 11.6% in government agencies, enterprises, or management positions, while women only account for 5.6% [2]. In this way, in order to address or at least mitigate the issue of gender-based occupational stereotypes, one of the most crucial elements has come to the stage, which is education. Education can be divided into school education and family education, and the roles of both parties have a significant impact

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on students' perceptions. It is possible to change students' notions regarding gender stereotypes through education.

In addition to the solution, it is important to understand the reasons why this career mindset has persisted. Thus, in this article, not only will the stereotypes presented in the textbook illustrations be mentioned, but it will also explore the guidance of teachers and the role of parents in creating gender and occupational stereotypes. These factors bring more complex problems about the fixed career thinking in real life, and suggestions are highlighted in this issue as well.

2. Factors influencing the formation of children's career perceptions in the educational environment

2.1. Stereotypical characters presented in the textbooks

In Chinese textbooks, gender stereotypes still exist. For instance, women are always depicted as not being good at logical subjects such as mathematics and science. At home, they are often portrayed as wives who obey and abide by their husbands' instructions. Female roles are usually depicted as passive and submissive. However, boys are portrayed as being good at solving problems and having stronger logical abilities. They are often described as active and having leadership skills. Textbooks with gender stereotypes distort students' understanding of the facts. For example, the sentence "The mother gets up early to clean the house, while the father gets up early to read books and newspapers". This indicates that the people playing the roles of mother and father have different responsibilities [3]. Mothers should prioritize household chores, which undermines their own value and contribution to society, at the same time, fathers need to consider matters related to work and outside affairs. Additionally, in a series of primary school textbook illustrations in Guangzhou of China, women in the role of mothers wore aprons a total of 11 times at home, but men never wore aprons in the illustrations [4].

The Gender Schema Theory suggests that children learn the roles of male and female from the community and social values in which they live. Then, children adjust their behaviors in the initial stage of social development to be consistent with the gender norms in the culture. Therefore, when combining the previous experiments, it can be found that authoritative textbooks, also known as textbooks, have an impact on students' values and beliefs. If the content contains stereotypes, then there will be a negative effect because, through extensive learning, students will connect the behaviors presented by the characters in the textbooks with their own or others' behaviors and attribute these traits to gender. Therefore, the stereotypes presented in these textbooks will have negative impacts on values, abilities, self-perceptions, and future career choices of children [5].

2.2. The role of teachers

For another authoritative figure, apart from textbooks, the teacher comes to the stage. The support provided by teachers plays a significant role in helping students make unconventional career choices. They are believed to have a greater influence on female high school students who choose to study in stereotypical fields such as engineering and science [6]. For STEM subjects, teachers believe that this discipline inherently requires students' natural talent, and they cannot catch up or master it by using their own efforts. Moreover, teachers think that this subject is more suitable for men, and they can perform better in STEM subjects compared to women. When it comes to situations where girls and boys perform equally or girls demonstrate better capabilities in STEM subjects, teachers are surprised [7]. In fact, the gender stereotypes of this subject, or the expectations

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and ideas of teachers, give males and females different degrees of attention and support. This affects girls' decisions to choose the field of STEM or more challenging fields of science and engineering, and increases their psychological burden [7].

Furthermore, in terms of behavior, teachers will also reflect this stereotype. For instance, when encountering difficult questions in class, teachers are more likely to ask boys to answer the questions. Also, in universities, professors tend to choose males when it comes to students' applications for research assistant positions [7]. Because of the attitudes, thinking, and behaviors of teachers, there are gender differences or gaps in educational and career choices in the fields of science, technology, engineering, and mathematics among teenagers [6].

2.3. The role of parents and their occupations

In fact, parents have a significant influence on the career choices of their children in the future, and this influence can even exceed their own expectations.

Jacobs, Chhin, and Bleeker reported that gender stereotypes would become a significant variable in children's future career choices. During growth, parents constantly convey information about gender to their children. For example, they would enroll girls in dance classes and send boys to football training. At the same time, parental behavioral norms and values affect their children's thoughts and cause them to internalize and act according to their parents' norms. In addition, children also observe the roles that their parents play in the family. For instance, many mothers are mainly responsible for household chores, and they find out which parent has greater power in terms of speaking and the economy. In this family, the father presents and maintains the rights through continuous interaction. Children constantly come into contact with such power structures of interaction, and therefore, they may think that men have greater influence in some aspects. This authority also affects their career choices. In a family where the father has greater authority, when asking his daughter about her career choices in the future, the girl will be more inclined towards traditional careers because they are less likely to choose a career that men would pursue [8]. It is worth noting that whether they have received gender socialization can greatly influence their future career choices. As an illustration, children raised by housewives believe that if they have children in the future, women need to stay at home. In contrast, if the child is raised by a career-oriented mother, their thoughts will be different. They will think that women will return to work after having children [8].

3. The impact of occupational cognitive thinking

Gender stereotypes in the workplace not only leave an impression on individuals' career choices and developmental trajectories but also restrict the productivity and economic conditions of a country. Such stereotypes lead to structural biases in the selection and utilization of talent, preventing the full exploitation of potential human capital and thereby affecting the innovative vitality and sustainable economic development of society.

3.1. Individual

Regarding the individuals, the gender, as one of the most significant structural factors, will shape and often strictly limit people's career development and the outcomes of employment. The resulting phenomenon is also unequal and deeply rooted in various systems, institutions, society, and even history. Besides, when educational attainment and skill factors are taken into account, young women

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have greater difficulty entering the workforce and achieving employment success. The proportion of women in the service sector (such as healthcare and social services) is still too high, while the proportion in fields of science, technology, engineering, and mathematics is too low (under the condition that all other factors are the same). Although young women often perform better academically than men, regardless of their degree of education, their employment rate is not as high as that of young men. The proportion of those young girls becoming "unemployed, untrained and uneducated" after reaching adulthood is higher than that of their male peers [9].

Furthermore, related to the differences in the types of work between men and women, there are differences in wages between the two genders. For China, the wage gap among those responsible for production, equipment operation, and related personnel is the largest. On average, men in these occupations hold wages that are nearly half of women's salaries higher than those of female. In occupations such as those of managers in state organs, enterprises, and public institutions, professionals, and commercial and service personnel, men earn wages that are about 30% higher than women, but only the average wages of women in administrative positions are slightly higher than those of men [2].

3.2. Societal problems at the economic level

The distribution of gender differences in the workplace can directly affect a country's productivity [10]. In other words, the wage gap between genders affects the income of women; subsequently, it prevents them from entering the labor market, leading to a decline in labor participation rate and productivity, and ultimately impacting economic development and growth [9].

Gender stereotypes harm the development achievements of society. For instance, if women are unable to obtain appropriate education and employment opportunities due to the influence of stereotypes or inequality, and cannot receive equal wages compared to men, this will have adverse effects on the education of the next generation and their health conditions. Meanwhile, the learning abilities and capabilities of the next generation may be affected, resulting in a slowdown in economic growth and development [9].

For the topic of gender inequality, research in OECD countries has found that for every 1% increase in the wage gap between the two genders, the economic development level will decline by 0.013%. That is, the uneven distribution of occupations and wage disparity caused by gender stereotypes can affect a country's economic development [9].

4. Suggestions

Granted, there is no direct solution to gender stereotypes and gender-based occupational stereotypes, but there are some indirect methods to deal with them. On one hand, by reviewing what has been said before, there are certain gender biases in both the academic stage and the job search stage. Through research, it is found that women present their performance and it is comparable to that of men, but they have fewer opportunities for employment or tenure compared to men. Currently, where women bear more responsibilities for child-rearing, gender biases or stereotypes limit many opportunities for women. However, openly acknowledging and recognizing social biases is a turning point. In different fields, from the individual to the organizational level, people should get involved. Both males and females should take action because gender biases do not only involve women, but they also impose pressure and impact on men. With the idea of bringing benefits to both parties and viewing it with a growth mindset, there will be certain positive responses.

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At the same time, children should be actively guided by people around them, such as parents or teachers. To be more specific, boys should be accepted to show their personal emotions and deal with affairs delicately and childishly, and they are accepted as the compliant party. Meanwhile, they will not be excluded from the "male group" because of their gentle personality. Girls are also encouraged to be independent, mature, have leadership or competitiveness, who can be assertive or make their own decisions, rather than just cooking in the kitchen at home or spending all their time around the children.

Additionally, the school can organize some activities where students can go to different places, experience different jobs, and gain different ideas. Therefore, in the future, they will have more thoughts about themselves. In the meantime, regarding the curriculum, schools can offer some courses to enable students to realize that housework doesn't necessarily have to be done by girls. For instance, since 2013, a project initiated by the Guangdong Provincial Women and Children Work Committee and the Education Department has changed the topic of the art class. During the class, the art teacher led the students to recall memories about the family members who do housework. Students discovered that it's not just their mother who does the housework, and then, the teacher asks a question and lets students think about " Who Can Use the Apron?". After that, students start to consider and make the apron independently. Finally, the students made many kinds of aprons. Some said to give them to their fathers, some said it's for their grandmothers, and some students said that they might choose to give aprons to themselves. This project changed the original art class "Mom's Good Helper" to "Who Can Use the Apron", encouraging students to realize that housework is not the exclusive domain of women [11].

Moreover, career guidance services or classes can be set up, which can have a certain impact on children's self-awareness and worldview. Effective career guidance enables students to reflect on who they are and what kind of person they want to become, and critically to consider the relationship between themselves and their future lives [12].

5. Conclusion

In summary, the surrounding environment, such as the content in textbooks, the information conveyed by teachers, and interactions with parents, can all have a negative impact on children's self-perception. For instance, they might believe that they can only do certain things or cannot do something. Especially for girls, under such an environment, this limits their opportunities and courage to choose challenging subjects. Additionally, this can also cause problems in the social economy. The different wage distribution between the two genders leads to a decrease in productivity and labor force, and at the same time, it reduces the degree of education of the next generation. Therefore, it is necessary to address this issue and take action. From a social perspective, face problems, encourage people, and support them can be provided; for the family, the family members of the child can correctly guide their thoughts and choices; in school, children can try and experience more things, and activities and courses can be set up to help them find the path that suits them best.

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