

The Impact of Gender Stereotypes in Education on Female Students' Psychological Development

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ABSTRACT

This paper uses psychological insight to review the research about gender stereotypes in the secondary school environment. By analyzing research done previously, the researcher seeks to find out the impact of gender stereotypes on adolescent woman's gender development. There are gender stereotypes from multiple aspects of education, school education, family education and educational environment. This paper presents stereotypes from these all three aspects and seeks to investigate a logical link between gender stereotypes and the characteristic that adolescents show during their gender development using a psychological perspective. The psychology theory used was observational learning and developmental psychology. Observational learning is corresponded to the spreading way of gender stereotypes and its influence to the environment. Developmental Psychology is used to analyse how do gender stereotypes affect female students' development and self-identification, which is of great importance.

Keywords: Gender, Stereotype, Education, Gender development

1. INTRODUCTION

Throughout history, gender stereotype has been universal and potentially threatening. For instance, Simon Baron Cohen, a Cambridge University psychologist, stated that "males are good at leadership, decision-making and achievement, while females are suited for making friends, mothering, gossiping and 'reading your partner'" [1]. This claim was based on a study conducted in 2000 [1]. However, this study has never been replicated, nor has it appeared in a peer-reviewed journal. Nevertheless, the quote had been posted in the *New York Times*, on the cover story of Newsweek, PBS documentary, and many other major media.

Gender stereotypes had unconsciously seeped into every aspect of our lives, even education. Education is one of the most important factors for the development of individuals and society. However, gender stereotypes are constraining different gender groups from getting an equal education quality. The most threatening consequence is that gender stereotypes are easy to be accepted and imitated by students, and then the next generation forms stereotyped gender concepts. Once stereotypes are formed, it has a significant and negative effect on students' development. Gender stereotypes made individuals to be expected to behave in a particular

way that is more appropriate for their gender. Because of this, gender stereotypes limit adolescents' development by shaping their character according to social norms [2].

Adolescent is a critical period for the development of self-cognition. Erikson identified adolescence as a period of identity vs. identity confusion [3]. He believed that during this stage, individuals will evaluate their previous experience, social expectations and aspirations in establishing values and "finding themselves" [3]. According to Erikson, getting contradictory information about an adolescent's gender role may lead to role confusion for a lifetime. Otherwise, if they get misleading characteristics about their identity, it may lead to a negative self-cognition for their entire life. Therefore, it is important to find gender stereotypes that will negatively influence secondary school girls and minimize their impact. This paper seeks to investigate the nexus between gender-related stereotypes in secondary school education and psychological concepts. More specifically, this paper examines how stereotypes and their related concepts, such as discrimination and prejudice can influence the evaluation system of adolescent women.

2. UNDERSTANDING GENDER STEREOTYPES

2.1. Gender Stereotypes

Stereotypes are defined as a universal generalization about a social group [4]. The concept of “gender stereotype” had existed and developed for a long time. And the definition of this concept had been discussed by many scholars. Scholars had formed different understandings based on their research. For instance, Marsden agrees that gender stereotypes are beliefs or assumptions about gender that have been rigid, simplified, and generalized. That gender stereotypes ignore the differences between people of the same gender role [5]. While Chinese scholars Wei and Chen argue that gender stereotypes are relatively fixed views and concepts of male and female gender that people widely accept [6]. A recent article published by the United Nations Human Rights defines gender stereotype as a generalized view or preconception about attributes or characteristics, or the roles that are or ought to be possessed by, or performed by, women and men [7]. It can be concluded from all the definitions above that there is a universal and consistent understanding of gender stereotypes. The concept of gender stereotype refers to a generalized and fixed view of the gender between men and women.

2.2. The Impact of Gender Stereotypes

Nevertheless, stereotypes can be equally as harmful as prejudices or discrimination. Because of the stereotype’s neutral and generalized nature, stereotypes can hardly be identified. This enables stereotypes to become more easily accepted, and gradually becomes the “general view of gender” [8]. One of the most well-spread examples is at the field of mathematics. Some men are good at math and science. But the traditional gender stereotypes assume all men are good at math and science. People generally believe men are more suitable for computer science and technology fields, while women are more suitable for art and literature majors. If math teachers at schools believe in these stereotypes, they will be likely to treat students differently in school. Teachers who believe in these stereotypes tend to encourage female students in art and literature subjects and pay more attention to boys in math and science. These behaviors from teachers can impact the choice of their students’ future and occupation [2]. In conclusion, gender stereotypes influence people in an invisible way. It has gradually shaped the environment, the social norms. Because of this, it passes the biased view to individuals. The impact of gender stereotypes can last for a lifetime.

2.3. Gender Stereotypes in Secondary School

This section will discuss any factor that will influence the physical and mental development of adolescent women in secondary schools. The secondary school environment studied by the researcher includes all kinds of material and mental elements closely related to the activities of promoting the development of secondary school education. It also focuses on the individual and collective development of secondary school students. The material elements include textbooks and the design of the school. The mental elements include the relationships between students and teachers, the atmosphere in the classroom, and the history of the school.

Therefore, in this study, the researcher summarizes the concept of environment in a secondary school as all tangible and intangible factors that will affect the physical and mental development of adolescent students. It includes secondary school textbooks, students' points of view and the atmosphere in the class, teachers' and parents' language, behaviors, expectations and attitudes.

2.4. Self-identification

The “self-concept” in psychology refers to how an individual view oneself as a physical, social, and spiritual being [9]. How people define their self-concept is their self-identification. This paper will specifically focus on adolescent woman’s self-esteem, self-evaluation, and understanding of their gender roles. Since these are the factors that will most likely be influenced by gender stereotypes.

2.5. Adolescent

The concept of “adolescent” was promoted by two psychologists named Piaget and Erik Erikson. It is defined as individuals between years 10 and 19 [2]. During this stage, individuals experience physical and psychological transition. Erikson believes that during this stage, adolescents develop their own understanding of their identity [2].

3. THEORETICAL FRAMEWORK

3.1. Observational Learning

According to Myer, learning occurs not only by direct imparting knowledge but also with observation such as by watching and imitating others. For example, a child may watch an adult speaking a language they do not understand, but they can repeat this phrase later on [10].

The main way to learn gender behaviors is by observational learning. Children observe the behaviors of

people around them in a variety of ways, some of which are related to gender. Observational learning has subconsciously influenced adolescents' views on gender by invisibly spreading gender stereotypes.

3.2. Developmental Psychology Theory

Developmental psychology examines our physical, cognitive, and social development across the life span. This paper specifically discusses Erik Erikson's developmental psychology theory. Erikson believed that personality developed in a series of stages. Erikson was interested in how social interaction and relationships played a role in the development and growth of human beings. Each stage in Erikson's theory builds on the preceding stages and paves the way for the following periods of development. If people successfully deal with the conflict, they emerge from the stage with psychological strengths that will serve them well for the rest of their lives. If they fail to deal effectively with these conflicts, they may not develop the essential skills needed for a strong sense of self [10].

This paper will discuss adolescents. Adolescence is the age from teenager to early 20s. Children in this stage explore their independence and develop a sense of self. Those who receive proper encouragement and reinforcement through personal exploration will emerge from this stage with a strong sense of self and feelings of independence and control. Those who remain unsure of their beliefs and desires will feel insecure and confused about themselves and the future [10].

4. GENDER STEREOTYPE IN EDUCATION

4.1. Gender Stereotypes in Secondary School Textbooks

As the most important teaching materials used by teachers and students, textbooks are the main materials of spreading knowledge. Therefore, in the field of studying gender stereotype in education, stereotype is one of the most frequent topics in textbooks. Scholars from different countries had done several studies to come up with the conclusion that gender stereotypes and gender bias are common in different textbooks from different countries, and even children's literature. Islam and Asadullah conducted a study of Malaysian, Indonesian, Pakistani and Bangladeshi school textbooks and found out evident exclusion and underrepresentation of women - only 37% of all characters used in the text are women. In addition, the choice of occupation, personal attributes and activities shows a high degree of misunderstanding of women. Female occupations are mostly traditional occupations with low social prestige. In terms of personal characteristics, the female roles used are mainly introvert and passive, they also participate in indoor activities more than outdoor activities comparing to men. Studies

in African countries also reflect misrepresentation of females. For example, in Zambia, the content analysis of secondary school textbooks shows that 73.94% of examples were used for males and they were shown as hardworking as well as involved in wage-earning sectors [11]. Moreover, Chinese scholars had found that from English textbooks that male characters occur more frequently and were portrayed with better characteristics than female characters. At the same time, men have more types of professional roles than women, and men are mostly engaged in jobs with higher status and higher salary such as musicians, athletes, inventors and writers. Women are mostly engaged in lower-paid jobs such as teachers, nurses and salesmen [12]. Similar situation happens in famous literature for children as well. Journal published that analysis of several award-winning books for children shows supporting characters were far more likely to be male, with the majority of female main character needing help and the majority of male main character giving help [13]. Although these issues seem to be better in the present days, but most teachers themselves grew up with older books that represented highly traditional gender roles. They might unconsciously pass their thought to the next generation, or even deliberately selected books with male main characters.

4.2. Parents' Language, Behaviour, Expectation and Attitudes

Parents are the first teachers and the most direct source of information for a child. Parents guide their children to adapt with their environment. Children learn appropriate gender behaviors from their parents. Parents plan, guide and lead children when they are not mature enough to make decisions on their own. For most of time, parents decide on the children's primary and secondary school. Therefore, parents' attitude towards education and gender greatly determines their children's decisions [2].

Unfortunately, many parents are unwilling to send their girl child to go for higher education due to their own gender stereotypes. Sarkar found that parents with high traditional gender role attitude and gender bias have a positive and favorable attitude towards boys' education, but their attitude towards girls' education has decreased significantly [14]. As a result, rural girls are particularly excluded from higher education. Therefore, for overcoming these hazards, parents need to understand the importance of education for all genders and be free from gender social prejudice in education [14].

Furthermore, in most families, the mother is responsible for raising the child, and the father is often absent in a child's development. Statistics on absent fathers show that 7 million American dads were absent from the life of all their minor children [15]. When it comes to the importance of fathers, statistics can help

determine how children see school and education. Especially for girls, seeing their mother taking care of them for life discourage them from learning hard in school. As they believe they are going to become a mother in the future and take the main responsibility of taking care of the family, their education is not as important as males. As a result, children with their father's absence have a 4 times greater risk of poverty, 7 times more likely to become pregnant as a teenager, and are more likely to have behavioral problems and face abuse and neglect [16].

4.3. Teachers' Language, Behaviour, Expectation and Attitudes

First of all, there is a great gap in teachers' gender distribution. According to Zippa, 59.9% of all middle school teachers are women, while 34.1% are men [17]. The unbalanced distribution in teachers' gender had impacted both male and female students. For male students, it made them difficult to connect with their teachers because most of them are female. For female students, these implicit messages push them to choose low-paid jobs in the future. First, they do not have a role model in textbooks as mentioned in the previous section. Second, many low-paid jobs they see in schools, such as cleansing ladies and their teachers, are mainly conducted by women. It potentially influences their view of their own gender.

Moreover, teachers, who grew up in gender-stereotypical educational environments, also tend to pass those stereotypes to the next generation. In Guo's published article, common gender stereotypes are collected. It was shown that in daily teaching situations, Although teachers believe that they do not treat students unfairly in the classroom, after being affected by traditional education and culture, they often unconsciously ignore the gender differences between male and female students in teaching. Some of them also treat male and female students differently consciously. Some common stereotypes include boys are more interactive, brave and willing to speak up; girls are shy, silence, and unwilling to speak their ideas. Teachers often show dissatisfaction when a girl was unwilling to speak. However, they did not show any attitudes towards boys who were silent. Even though girls often perform better than boys, teachers still tend to believe that boys are smarter and have more potential. In fields like math and science, teachers tend to believe that boys can do better [18]. This subconsciously influences female students' self-esteem and future job selection.

This phenomenon was not unique to Chinese class environment. Carlana's study in Italy documented the impact of teachers' stereotypes on Italian middle school students' standardized test scores in math and reading, which found that teachers tend to believe the stereotype that "women are bad at math" [19]. As a result, girls,

especially those with lower initial math skills, got lower test scores, chose less challenging academic tracks, and displayed lower self-confidence when assigned to teachers who promote gender stereotype. Female students have worse math skills and grades with those teachers. However, boy's test scores and self-confidence were not affected by math teachers' stereotypes. Further worsen the gender gap [19].

4.4. Peer Environment

Growing up in a stereotypical environment, male adolescents adopted a hostile attitude towards the other gender. Moreover, because society pushed the idea that to be "man" means to be strong, tough and not to cry, the male adolescent tends to turn all their emotions and tears into aggression. In AP Psychology textbook, it was mentioned that males tend to be more aggressive than females. At the same time, a female adolescent who was influenced by gender stereotypes ends up with lower self-esteem and more vulnerable. These two factors push males to become the major school bullies and females to become the major school bully victims. As World Health Organization reported, bullying prevalence rates were higher among boys than girls in all the 40 countries surveyed and boys tend to engage in physical forms of bullying and sexual harassment more than girls. Nearly four in 10 girls reported being made fun of because they are a girl, compared to under one in ten for boys, and 1 in 5 schoolgirls says they are "unhappy to be a girl" [20].

4.5. Impacts on Adolescent Girls

4.5.1. Low Self-Esteem

Both boys and girls experience changes in self-esteem during adolescence, but girls' self-esteem seems to have a more negative impact during adolescence, while boys seem to have a more positive impact [21]. According to Mahaffy, girl's self-esteem drops precipitously from childhood to early adolescence [22].

4.5.2. Future Career

Because of the biased information and attitude girls receive in school, they tend to choose their careers similar to the stereotypes that they receive. Males tend to major in Science, Technologies, Engineering, or Mathematics (STEM) after they graduate. These majors bring higher social status and higher salaries. While women still major in literature and art which are "less profitable". This was also caused by the differences in self-esteem. Compared with boys, some girls lack confidence in their performance. The difference in self-confidence between girls and boys leads to gender differences in competitiveness to some extent [23].

4.5.3. Social Roles

The misrepresentation of females in educational textbooks, environment, and daily conversations reflects society's attitude towards females. On the other hand, this influences females' self-evaluation and their understanding of their social identities, which makes the girls feel that they are inferior and subordinate [2].

5. CONCLUSION

In the review, the researcher found three outcomes resulting from gender stereotypes: low self-esteem, future career tendency and social identities. The link that led to this result is concluded as follows: gender stereotypes were passed through teachers and parents' language, behavior and attitudes; children learned the stereotypical attitudes through observational learning, which lead to a negative impact on children's peer environment; as a result, receiving negative information about their gender during their crucial developmental stage, women tend to reveal the negative outcomes as the paper stated. Therefore, by pointing out these issues, adolescent women may realize the impact of gender stereotypes on their psychological development and try to modify the outcomes.

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