# Review on Influencing Factors of Gender Identity Development of Adolescent Individuals

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#### ABSTRACT

"Adolescence" has always been the focus of the whole society. With the development of adolescent socialization, the hidden dangers of adolescent gender role identity and mental health problems are becoming more and more prominent. With the continuous attention of academic circles to adolescent education, family education and school education, as one of the important forms of adolescent education, have an important impact on promoting adolescent individuals' cognition of gender roles and the development of mental health. Through reviewing the previous relevant theories and literature, this paper focused on the internal and external factors that influencing the development of gender cognition of adolescent individuals. External factors include the influence from the family and school education. The internal factors include the physiological factors which are mainly related with hormone as it emerges the body to form the characteristic of a gender, and the body factors about health. This paper found that parental rearing patterns had significant effects on gender role cognition and mental health of adolescent individuals. Meanwhile, the development of school education.

Keywords: Gender Identity, Adolescence, Education.

### **1. INTRODUCTION**

Adolescence is a period of transition from children to adults [1]. It is not only a period of change, but also a key stage of growth. On the one hand, great changes have taken place in the physiology of adolescent children. On the other hand, children in adolescence also experienced a psychological change from hazy and unconscious to mature and independent. According to Eriksson's eight stage theory of personality development, in adolescence from 12 to 18 years old, the key to personality development is to solve the conflict between self-identity and role confusion [2]. The acquisition of self-identity is a process of continuous construction. In adolescence, on the one hand, self-awareness has developed rapidly, and the ability to think and solve problems independently has been improved. Therefore, adolescent children are eager to break through the shackles and obtain individual independent development. If they cannot balance the conflict between self-identity and role confusion, it is easy to lead to the intensification of psychological contradictions. The particularity of adolescence leads to a series of problems, which is not conducive to the development of adolescents' gender cognition in adolescence. Among them, the hidden dangers of gender role identity in adolescence have attracted the author's attention, and family and school, as important places for adolescent psychological development and socialization, have an important impact on the development of adolescence.

Adolescence is accompanied by the development of children's body, which is mainly marked by the maturity of secondary sexual characteristics. In this process, adolescent individuals redefine and recognize their gender identity, and have a sense of "gender differences" [3]. Driven by the gradual development and maturity of the body, the sexual psychology of adolescent individuals arises. They began to pay attention to the opposite sex, hoping to attract the attention of the opposite sex, like to express themselves in front of the opposite sex, and pay more attention to the evaluation of the opposite sex. At present, the academic research about the anxiety of adolescent gender role identity is mainly manifested in two aspects [1,4]. On the one hand, with the development of society, higher requirements are put forward for individuals. The changes of some gender role concept, and gender role expectations will cause the contradiction

of the subject's self-expectations, resulting in gender role conflict and anxiety. On the other hand, in the communication with peers, the ideal gender role and peer pressure will also lead to the anxiety of gender role identity. Adolescent individuals often pay more attention to their peers' evaluation of themselves, and it is also easy to lead to the contradiction of gender role identity between themselves and others in group interaction and communication, resulting in anxiety.

The anxiety of gender role identity is essentially a kind of cognition of objectification of self-identity. This cognition often makes adolescent individuals have a series of negative psychological feelings, such as inferiority complex, worrying about their masculinity or female charm, which directly affects the development of mental health in adolescence. Gender cognition runs through the whole adolescence and is an important process affecting individual physical and mental development. It is not only related to the development of teenagers' mental health, but also has an important impact on their future development [2]. However, at present, it seems that the problems in the cognitive process of gender roles in adolescence have not attracted extensive attention, and family education is easy to ignore the guidance of children's gender roles. Therefore, this paper explored the factors affecting the development of adolescents' gender cognition by reviewing the previous theoretical and academic research on adolescents' gender cognition. The aim of this paper was to review the internal and external factors that may influence the development of gender cognition for the children.

# 2. THEORY ABOUT GENDER IDENTITY DEVELOPMENT

As one of the most influential contemporary psychological theories, the basic principles of cognitive development are put forward by the famous Swiss psychologist Piaget. Cognitive development theory holds that people actively understand and master knowledge by virtue of cognitive structure Manipulate foreign things and assimilate them to form a new cognitive structure, and then understand new things through this experience structure. Kohlberg inherited Piaget's research and extended his cognitive principles to the field of gender roles.

De Vries et al. [5] believed that the formation of gender is the process of children's active learning, and children are the subject of gender socialization. Like intellectual cognition and moral cognition, the cognitive process of gender is also a process of continuous development from low level to high level and gradually becoming mature. Kohlberg divides the development of children's gender cognition into three stages. The first is the basic gender identity stage, about 2-3 years old. In this stage, children divide the surrounding world and themselves into two parts. They can correctly understand their gender, but they do not know that gender cannot be changed, which means that they lack the understanding of gender constancy [6]. For example, a two-year-old child knows to divide which toys or clothes are for boys or girls. Meanwhile, the child knows which gender the child is, but the child may wonder whether the child will keep this gender in the future.

The second stage is the stage of gender stability, about 3-5 years old. At this stage, children begin to realize that gender is stable and invariable and know how to choose adults of the same sex as their imitation. For example, they start to learn the behaviour of their parents or the adults they meet and understand that gender will not change when they grow up. The last stage is the gender identity stage, which is generally formed at the age of about 7 [7]. Children at this stage can clearly realize that gender will not change with time, behaviour, and situation, and can identify gender appropriate or inappropriate behaviour. For example, during the class break, boys and girls tend to gather in divided groups. Boys like plays physical games or fighting for joy, while girls like chatting with each other.

When children reach gender identity, they begin to gradually form attitudes and behaviours suitable for their gender, and begin to understand things consistent with their gender, and finally form gender stereotypes. The process of gender cognition is an active process. It is the result of children's active choice by actively trying to make their cognition and behaviour suitable for their gender [2]. Cognitive development theory provides a theoretical basis for this paper to explain the parenting style and parents' attitude towards themselves observed or felt by children, to internalize their gender attitude and behaviour.

### **3. EXTERNAL INFLUENCE FACTORS**

#### 3.1. Social Factors

Social learning theory is a theory rising in the 1960s, represented by Albert Bandura and Michelle [8]. The theory is based on behaviourism and attaches importance to the external performance of gender psychological differences, that is, the behavioural performance of both sexes. Social learning theory holds that learning is obtained through imitation, that is, an individual can learn a characteristic way of response by observing the behaviour response of another individual. Diamond [6] believed that most of people's social behaviour was obtained by observing and imitating others. Individuals obtain a certain cognitive image by observing others' behaviour, and then guide their own behaviour. Social learning theory divides people's observation and learning into four processes. The first is the attention process, so that the observer's perception should focus on the behaviour he wants to imitate. The second is the retention process, that is, the observed behaviours and actions are transformed into symbols and kept in memory. Thirdly, action reproduction, that is, put the observed into action, compare and feedback the operation state of the action and the behaviour of the observed object, to continuously self-correct. Finally, motivation process, motivation is caused by reinforcement. Bandura believes that the acquisition process of behaviour does not depend on reinforcement, but the performance or application of this behaviour is affected by reinforcement and divides this reinforcement into direct reinforcement and alternative reinforcement.

The first mock exam of social development is that the socialization of children is the result of social construction. In this process, the process of learning from the "observation and imitation" mode is included. In this "observation and imitation" model, the specific reinforcement process consolidates and stereotypes their acquired behaviour. In the process of children's growth, parents are the closest people. Parents will use various means of punishment or reward to strengthen their children's behaviour [9]. They often require and shape their children's behaviour according to the social norms for individuals, strengthen the behaviour they think is suitable for their children, and correct the behaviour that is not suitable for their children. In this process, observing and imitating children's behaviour of imitating their authoritative parents due to worship has become the main way of their behaviour acquisition. The application of social learning theory can be used to analyse the construction mechanism and influencing factors in society of gender role identity in the process of children's socialization.

With the deepening of the academic research on gender role identity, in recent years, some scholars have broken through a single research perspective and studied more deeply from the details. Taking adolescent girls as the research object, Favez [2] explored the impact of body and interaction between social groups on gender identity through qualitative research. His research shows that physical development promotes adolescent girls' awareness of female identity and gender differences and promotes the development of individual sexual psychology. In terms of interaction within the social group, the comparison between same-sex groups, the interaction and gaze within the group with mixed sexes, as well as family and school will have an impact on the gender identity of adolescent girls. Adolescent girls in the process of social interaction will improve the degree of gender identity with the increase of age. His research also proposed to reduce the gender bias in social culture and group interaction as much as possible, to create a good environment for the gender identity of adolescent girls. Drescher [3] took teenagers in a middle school as the research object and discusses the impact of adolescent idol worship on adolescent body image and gender role identity. The results show that idol body image will not affect adolescent gender role identity, but adolescent

gender role identity will affect their own body image characteristics.

In recent years, with the deepening of research, some scholars pay more attention to the relationship between gender role identity and social difficulties. Rose et al. [10] conducted a survey on the bullying of girls in vocational schools. Rose's research found that the incidence of bullying of girls in vocational schools is generally higher than that in ordinary schools. In the relationship between bullying and gender role identity, the degree of feminization is inversely proportional to the rate of direct verbal bullying and direct physical bullying. In the attitude of bullying, girls with bisexual temperament show the most positive emotional response and behavioural tendency, The undifferentiated girls are the most negative [6]. In terms of emotional response and behaviour tendency towards being bullied, the girls with feminine temperament will show more understanding and sympathy than the girls with masculine temperament, but their actual help behaviour is lower than that of the male subjects. Hines [11] compared college students with and without sexual abuse in childhood to explore the impact on gender role identity.

## 3.2. Parents' Education

At present, there are few studies on the relationship between parental rearing styles and gender role identity. Previous studies have shown that parental rearing style is an important factor affecting adolescent gender role identity. Stuart et al. [12] and others conducted a questionnaire survey on 230 college students to investigate the relationship between parental rearing styles and college students' gender role identity in different family structures. Through the survey, it was found that male traits were positively correlated with father's emotional warmth and understanding, and negatively correlated with father's overprotection, while female traits were negatively correlated with father's overprotection. Father's excessive interference and mother's preference were positively correlated with subjects, and negatively correlated with mother's punishment and severity. This conclusion is basically consistent with the research conclusions of Rose [10]. In addition, starting from the differences of family structure, this study analyses the relationship between parental rearing styles and gender role identity of only and nononly children. The study found that whether it is the only child, or a non-only child in the family, parental punishment and severe parenting style are significantly positively correlated with male traits.

In addition, some studies [4,5] directly define children's bisexuality as the gender temperament with both male and female dominant personality and investigate the impact of parental rearing styles on children's gender bisexuality development through empirical research. Martin's research [13] showed that parental warmth and understanding rearing styles are significantly positively correlated with children's androgyny level. Parents' severe and punishment, refusal and denial, excessive protection and excessive intervention are significantly negatively correlated with children's bisexual level, and the path of parents' training children's bisexual temperament is discussed. Olson et al. [14] investigated the relationship between parental rearing styles and gender role identity of hundreds of undergraduates. They divided the types of parental rearing styles into autocratic type, authoritative type and tolerant type. Their research found that there were significant differences in parenting styles of parents in different gender role groups. Both father and mother were authoritative parenting styles, which had a significant impact on their children's femininity, and boys had a more significant relationship than girls, while the father's authoritative parenting style was significantly correlated with their children's bisexual temperament.

## 4. INTERNAL FACTOR

### 4.1. Physiological Factor

The studies on the internal factors that influencing gender identity usually focused on the group of children, as children receive less amount of influence from external factors and these internal factors will continuously apply impact on the identity cognition when they become adolescences. In terms of the biological factors, hormonal factors are commonly regarded as the primary source that influences the gender identity of children [15]. Any physiological factors related to gender development, such as sex chromosome, gonad, sex hormone and genitalia, may cause gender identity obstacles. For example, if the sex hormone level of the opposite sex is high, and the testosterone level of girls is high, they are more masculine. Physiological factors occupy great significance in shaping the growth of children's body. For instance, the sexual organs that are unique for males and females are determined by the physiological factors, and when entering the period of adolescence, boys and girls will have clear gender identity with the development of secondary sexual features [16]. The second sex sign refers to the difference in appearance characteristics between men and women except reproductive organs, which reflects the differences in height, posture and appearance between men and women, and this type of feature is formed by hormones, which are the carriers of chemical compounds within the teenager's body to coordinate the formation of the secondary sexual characteristics.

Some studies have shown that homosexual hormones that can differentiate sexual organs in the uterus and then trigger puberty also play an important role in the formation of gender identity. Boys have more androgens (male sex hormones) than girls. However, some boys and girls are born with congenital adrenal hyperplasia (CAH), which leads to significantly higher androgen levels than their unaffected peers. Scientists studied children with CAH to understand how their excess androgen levels affect behaviour [17]. Boys with too much androgen play and behave very similar to their normal male peers. However, girls with high androgen levels tend to show more gender stereotyped male characteristics and behaviour than their peers with normal androgen. In addition, girls with CAH are born with external genitalia like male genitalia. Although these girls seem to have penises, they are still women. The true sex of a girl is determined by genes rather than anatomy. Females have two "X" chromosomes, while males have one "X" chromosome and one "Y" chromosome.

Even if girls with CAH underwent surgery to make their genitals look more feminine, they still showed higher male characteristics. For example, they prefer to play with their male peers, and may also prefer to choose traditional male toys and activities, such as building blocks, cars, models and sports, rather than playing more "female" toys and games [18]. In addition, such women will be physically active and aggressive. In addition, girls with CAH tend to avoid having girl playmates and do not like to play female roles in role-playing games, such as mother or bride. And compared with girls of the same age without CAH, they don't care about their appearance. In other words, higher levels of male hormones strongly affect girls, making them behave like boys.

### 4.2. Body Condition

The internal factors in aspect of the body are primarily related with the health of children or teenagers. The previous section has discussed about the influence of CAH as a disease on the gender identity of children. Meanwhile, according to Micali's research [4], if children are in poor health, they will be limited by various physical factors and have less communication with children of the same age, which may produce too much psychological pressure, and are prone to heterosexual behaviour inconsistent with their own physiological gender or more behaviour problems. Zhu [19] conducted a questionnaire investigation to find the relationship between the disorder of gender identity in children and teenagers and the individual conditions. The result was that individual physiological status and communicative competence are the risk factors of abnormal behaviour which did not obey the characteristic of the gender.

Apart from the health of the body, there is a phenomenon called Body Dysmorphic Disorder, which refers to a painful or harmful preoccupation of patients with non-existent or minor defects in their appearance. The onset of the disease has certain personality basis, genetic factors, and changes in cognitive behaviour. Body dysmorphic disorder often occurs in adolescence, with a prevalence rate of  $0.7\% \sim 2.3\%$ . The course of

disease is long, and it often turns to chronic if not treated in time. Many patients have no abnormalities in their bodies, but they do believe in asymmetry, deformity, and other defects, resulting in cognitive impairment of their bodies and even doubt about their gender. Joel [20] described an instance of a female individual who knew that she was a female since birth but had dysphoria on her gender because of the body dysmorphic disorder, resulting in her behaviour of continuously injecting testosterone and estrogen daily. Le [21] also described a case that an eighteen-year-old teenager had a thought that his pectoralis major muscle deformed like breast because of his-pulling up in the physical class. Although he checked himself in the hospital and received the result that everything was fine, he still feared that he might become a male. So, he feared to see anyone and did not dare to go to the toilets. This is a typical case of gender identity disorder.

# 5. INTERVENING IN CHILDREN'S GENDER IDENTITY

#### 5.1. Aspects in School

The influence of school on adolescence's gender cognition is mainly manifested in the degree of time load. Research of Pardhan [17] shows that children with heavy homework load spend too much time on homework, which may lack sufficient social activities and social communication, affecting the healthy development of their social behaviour. Meanwhile, it is also necessary for schoolteachers to pay attention to children's gender education, especially in the early stage of children's development. For example, Kindergarten teachers' own gender concept will imperceptibly affect children's gender consciousness [18]. If schoolteachers can have a clear concept of gender education, pay attention to gender education for teenagers, and carry out gender education for them through media, conversation, games, role play and other ways, it will have a good positive effect on gender cognition of adolescence.

### 5.2. Aspects in Family

Through the exploration of the relationship between adolescent parental rearing style and gender role identity, it is found that both father's emotional warm rearing style and mother's emotional warm rearing style are significantly positively correlated with adolescent bisexual gender role identity, while father's emotional warmth, mother's emotional warmth and over protection are significantly negatively correlated with adolescent undifferentiated gender role identity [22]. In other words, the higher the degree of parents using emotional warmth parenting style, the higher the possibility of Androgyny of adolescent gender role identity, and the lower the possibility of undifferentiation. Cognitive development theory emphasizes that children actively understand the external world, and the cognition of gender roles is a series of structures gradually established in the continuous interaction between individuals and the external world. This process is dynamic.

In addition, family economic conditions and housing area are important indicators of family stability. There is a correlation between family stability and children's behaviour problems. A more affluent family, a good living environment, parents' healthy body and mind and a supportive family atmosphere will provide a good growth environment for children, promote their better socialization, and be conducive to the healthy development of children's psychological behaviour [23]. On the contrary, it is easy to increase individual behaviours that violate social norms, such as gender role behaviour patterns that do not meet the cultural requirements, gender role abnormalities and behaviour problems.

#### 6. CONCLUSION

This review paper discussed the external and internal influential factors on the gender identity of children via relevant theory and previous literatures. From the perspective of family education and school education, combined with social learning theory, cognitive development theory, symbolic interaction theory and body construction theory, this study deeply explores the problems existing in the development of children's gender cognition. Ensuring the development of adolescent socialization requires the efforts of schools, families and individuals. Schools should improve the support and operation mechanism for gender education. At the family level, firstly, parents should change the traditional gender concept and establish the awareness of gender equality. Secondly, they should face up to the physical and psychological changes of their children in adolescence and create a good family atmosphere for their children.

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