

The Development of Gender Roles: From Two-Parent Families to Single-Parent Families with One Gender Role Missing

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Abstract

As the number of single-parent families is increasing, the issue of structural changes in single-parent families is gaining more attention. The impact of single-parent families on children's gender role development due to the absence of one parent is worth exploring. Gender roles are shaped by the interaction of innate and acquired factors. Innate factors such as sex hormones and genome lay the basis for gender socialization. In contrast, acquired factors are dominated by the family environment (e.g., parent-child interactions, sibling relationships, family structure, etc.) and permeated by the social environment (e.g., regional culture, media culture, etc.), which together influence gender role development. To explore the in-depth role of family factors in gender role development, especially the impact of changes in family structure, this study explored five databases (four English and one Chinese) and identified 1573 studies; 112 studies were included in a systematic analysis. To summarize relevant studies, there are two main arguments for the "effect theory" and "no effect theory" on family structure changes and children's gender role development. Moreover, the results that support the effect theory account for more. Studies holding significant effects indicated a higher prevalence of masculine traits and undifferentiated types in children of single-parent families and found that the gender configuration of single-parent family members influences children's gender role development. However, a few studies have also concluded that changes in family structure have little effect on children's gender roles. For this reason, the article proposes three reasons for the discrepancy and highlights future research breakthroughs.

Keywords

Family Structure, Gender Roles, Single-Parent Family, Social Development, Children

1. Introduction

With the rapid development of the economy and society, the family structure is changing sharply, and the proportion of single-parent families is increasing daily. In 2020, a total of 4.339 million couples divorced in China, an increase of 1.19 per thousand from the divorce rate in 2000 (Ministry of Civil Affairs of the People's Republic of China, 2020). In Western countries, the proportion of single-parent families has increased by nearly 20% in the past 20 years (Smock & Schwartz, 2020), and the increase in single-parent families worldwide has become more universal. The influence brought by the family structure of a single-parent family cannot be underestimated. A single-parent family refers to a family in which only one parent lives with the child due to widowhood, divorce, separation, or being unmarried (Xiong et al., 2021). Most studies on single-parent families focus on divorced families, exploring the correlation between marital conflict and children's development in divorced families, which indirectly reflects the impact of changes in family structure on children's development (Morris et al., 2007; Tiwari, 2022). However, studies of family structural changes on children's development have focused on academic achievement (Lee & Kushner, 2008), behavioral problems (Dufur et al., 2018; Mack et al., 2015), mental health (Motti & Aaron, 2016; Wang et al., 2017), and social adjustment (Chen et al., 2016). Studies have found that children living in single-parent households are more involved in crime and drug use, have lower grades, and are less well-adjusted overall than children living in two-parent households (Amato, 2005). Some studies have also found that changes in family structure affect the development of children's gender traits. For example, children from single-parent families may have fewer traditional gender schemas (Leve & Fagot, 1997), and independent growth space increases their masculine traits (Slavkin & Stright, 2000). The gender socialization of children is an important part of their personality development. Although less attention has been given to the structural changes in single-parent families and the development of their children's gender roles, their importance cannot be ignored.

The development of individual gender roles is influenced not only by biological factors but also by the interaction of multilevel environmental systems such as family, school, and society. Related theories such as the challenge hypothesis clarify that parental sex hormone levels are associated with gender role parenting attitudes (Bell, 2020; Endendijk et al., 2018). Gender schema theory emphasizes the process by which individuals in the family selectively absorb environmental information to construct schemas that guide their gender behavior (Bem, 1981; Starr & Zurbriggen, 2017). Social learning theory focuses on individuals actively observing and learning the gender role behaviors of people around them (Miller et al., 1966; Morawska, 2020). Social role theory attributes gender behavioral differences to the division of social roles in the context of the social environment (Bosak et al., 2012; Koenig & Eagly, 2014). These theoretical constructs provide a strong theoretical basis for exploring the biological, familial, and social factors of

gender role development. Biological research has found that physiological factors such as testosterone and sex chromosomes influence individual gender role development (Auyeung et al., 2009). At the family level, it is found that family environment factors such as family structure, parental gender parenting attitudes, and sibling relationships are pivotal in the development of children's gender roles (Mandara et al., 2005; McHale et al., 2004). Parents may influence children's gender role development through gender dialog, differential parenting, and field. Another study also found that the gender value system in the social environment affects the individual's perception and acceptance of self-gender (Cai et al., 2008).

The results of the research on family structure and children's gender role development show a binary phenomenon of "influence" and "no influence". That is, most studies show that a single-parent family structure has a significant impact on children's gender role development (Jiang et al., 2007; Yang et al., 2021). However, some studies have found that changes in family structure have little effect on children's gender role development (Boothroyd & Cross, 2017; Stevens et al., 2002). In addition, the gender traits of children in single-parent families are no longer universally undifferentiated, and their gender role types are developing toward androgynous (Chen et al., 2019). Therefore, it is of practical significance to break the deep-rooted "negative influence theory of single-parent families" and pay attention to the gender role development of children in single-parent families. Therefore, the purpose of this study is 1) to clarify the factors influencing gender role development; 2) to analyze the impact of changes in family structure on the development of children's gender roles based on the research results of single- and two-parent families; and 3) to summarize the significance of the existing results and the direction for future study.

2. Acquired and Innate Gender Role Development

There are two major theories of gender role development: acquired and innate. The acquired influence theory began in the 1960s. The innate influence theory emerged in the 1980s. To date, these two theories have become the major trends in the investigation of gender role development. In the mid-20th century, psychologists believed that gender behavior acquisition was mainly derived from gender socialization and individuals' active observation of gender roles in the learning environment (Mischel, 1966), which laid the foundation for acquired influence theory. By the 1980s, evolutionary psychologists were applying the neural structure of the brain and sex hormones to the study of sex (Hines, 1982). It was not until the 1990s that biogenetic factors, such as sex hormones, were widely recognized as influencing the development of sex traits, reversing the dominance of the acquired theory. However, the rise of innate factors has not stopped the exploration of acquired factors. Numerous studies have found the influence of family, school, social and other acquired factors on gender roles (Wylie et al., 2013). Since the 1980s, these two theories seem to have developed

in parallel, enriching the study of factors affecting gender role development. Therefore, this study will conclude and analyze the influencing factors of gender role development from the perspective of innate biogenetic factors, the micro family environment, and the macro social environment.

2.1. The Foundation of Biological Genetic Factors

The biological study of sex differentiation began in the 1940s with animal populations and by the 1980s had extended to humans. The role of testosterone and the genetic effects of genes are important discoveries in the study of biological sex roles. During the emerging period of biological inquiry between 1940 and 1960, most theories assumed that sex differences in organ development were caused by testicular secretions. The presence of testosterone stimulates the development of masculine characteristics and vice versa for female features. However, it is increasingly noted that the gonads are not differentiated by testosterone action but are directly controlled by genetic mechanisms and not regulated by the secretion of steroid hormones (Vigier et al., 1973). In the 1960s and 1980s, most researchers suggested that genetics is the main mechanism controlling the hormonal regulation of sex differentiation in the brain and gonads. At the end of the 20th century, sex hormones and genetics played a similar role in gender differentiation. However, some researchers have identified the one-sidedness of these theories, synthesized the two mainstream theories, and proposed new ideas: both “sex hormone regulation” and “genomic inheritance” may contribute to differences in human gender behavior (Auyeung et al., 2009; Gettler et al., 2011).

In the 21st century, biological studies of human sex differentiation have reached a mature stage. Some studies also sampled T levels at multiple points and found that prenatal, postnatal, and pubertal T levels affect human sex development (Hines et al., 2016). However, experimental manipulation to obtain T levels is challenging. Most studies use atypical samples for T levels in association with sex type. For example, children with congenital adrenocortical hyperplasia are exposed to high levels of androgens early in gestation. This lacks comparison with samples with a normal sex hormone environment.

In contrast, recent studies have proposed biological models linking biological factors to sex differentiation and parenting behavior. Children’s biological characteristics may indirectly influence parental gender socialization through their gender behavior. For example, sex hormones or genes that lead to differences in children’s sex behavior will cause parents to treat them differently, which also strengthens the gender behavior differences in children’s biological factors (Gettler et al., 2011). The family ecosystem is a “petri dish” for individual gender role development. From the parents’ innate heredity to the acquired attitude of gender socialization, the interaction affects the establishment of individual cognition and behavior of gender traits. To date, biological studies of sex differentiation seem to have found an interaction between innate and acquired differentiation.

2.2. Dominance of Family Environment Factors

The family is the earliest “unit” that individuals grow up in contact with. The atmosphere it creates directly affects the development of children’s personality and gender socialization. Research on family environment factors has been widely explored since the rise of gender role research in the 1960s. For example, social learning theory holds that parents’ gender behaviors, occupations and interests provide observational learning models for their children (Mischel, 1966). Other studies have found that the gender role of the dominant parent in the family has a greater impact on the development of children’s gender roles (Bandura, 1962; Hetherington, 1965). In the past 60 years, research on the influence of the family environment on the formation of children’s gender roles can be classified into three core elements: “parent-child interaction”, “sibling relationship” and “family structure”. One of the earliest studies on “parent-child interaction” was conducted by Freud and Hall in the early 20th century (Sears, 1940). The study of parent-child relationships in China is nearly a century later than in Western countries (Zhou, 2007). Then, came the study of “family structure”, which sprang up in the 1950s (Brim, 1958) and became widespread at the end of the 20th century (Leve & Fagot, 1997). The study of “sibling relationships” was the latest to develop, starting in the 1960s and gaining more attention in the 1990s. To date, this field of research seems to have taken multiple factors into account, and the proportions of research on various factors are similar.

First, the “parent-child interaction” study found that parents’ selection of the type of games, gender talk, and differential parenting styles may affect their children’s gender socialization. For example, parents express explicit gender stereotypes by restricting their child’s preferred gaming and reinforce traditional gender behavior by using gender labels (Endendijk et al., 2014). Other studies have found that parents are more likely to use supportive parenting strategies for girls than boys (Acar-Bayraktar et al., 2019; Grazyna et al., 2009). When parents respond differentially to the same behaviors in boys and girls, children will understand the differences between boys and girls and know that certain behaviors are only suitable for specific genders (Endendijk et al., 2018). Moreover, many studies have found that family SES is also closely related to parental gender role upbringing. Children of high-education level parents and high SES families have better gender role development than children of low SES families (Yang et al., 2021). Although the research on “parent-child interaction” is fruitful, there is a lack of research on “comparative analysis of the influence of each gender in parenting”. Too much of the research is cross-sectional and does not interpret the influence of other members of the family.

Second, as an important source of children’s social comparison, sibling relationships may also lead to the development of children’s gender role differences. For example, studies have found that in families with mixed-sex children, parents have the opportunity for gender-differentiated parenting and exhibit more gender stereotypes than families with same-sex children (Leve & Fagot, 1997). However, some studies have also found that parental gender talk may be more

equal in mixed sibling gender families (Endendijk et al., 2013). In addition to gender-differentiated parenting, sibling relationships may also influence children's gender role development by their gender, age, and intimacy (Bigner, 2012). For example, it was found that the number of older brothers was related to androgynous sex role development for girls, and perceived closeness to older sisters was related to androgynous sex role development for boys (Lamke et al., 2010). Sibling relationships provide children with opportunities to observe and learn the roles of the opposite sex or to reinforce the characteristics of the same sex. This is more beneficial for children's androgynous sex role development. However, there is still a lack of strong evidence on whether siblings bring about a positive effect of differential parenting on children's gender role development.

Other studies point to changes in family structure as an important influence on the development of children's gender roles (Boothroyd & Cross, 2017). Research on family structure has focused on both single-parent and two-parent families. Previous studies have mostly focused on the process of gender role reduction from "two-parent to single-parent" (Tatyana et al., 2016), and few have explored the process of increasing gender roles from "single parent to reconstituted family" (Danielle, 2014). However, due to family disintegration, most children in blended families are older, and their gender role development has stabilized. Therefore, most studies focus on analyzing the structural changes from two-parent to single-parent families. A comprehensive study of the last 40 years found that changes in single-parent family structure not only created a freer context for children to develop gender roles but also reduced the formation of traditional gender roles (Slavkin & Stright, 2000). However, it may also lead to the absence of gender roles in the family, which hinders the comprehensive development of gender roles in children due to the lack of opposite-sex imitation learning objects (Yang et al., 2021). It is evident that there is a contradiction between the research results of family structure change and children's gender role development.

2.3. The Infiltration of Social and Environmental Factors

In addition to the dominant role of the family environment, the social environment cannot be underestimated. The study of social environmental factors also began in the 1960s, a period when the rise of the feminist movement in the West brought about fundamental changes in social conventionality (Freeman, 1973). At that time, research focused on the shift from "unisexuality to androgyny" under the cultural movement (Huston, 1985). The influence of the social environment on the development of individual gender roles has been widely studied (Levy, 1989). Overall, research in this area emphasizes the sociocultural factors that shape the meaning of the masculine and feminine roles of individuals. That is, individuals form gender behavioral differences in adaptation to the social environment. A comprehensive analysis of sociocultural influences can be divided into two broad categories: regional culture and media culture. Both factors emerged in the 1970s (Friedman, 1978). Because the craze of acquired influence theory has

given scholars the opportunity to study gender roles from a cross-cultural perspective, the related research has been fruitful.

First, the “regional culture” study found that socioeconomic and regional-ethnic culture are the main sources of the social environment influencing the development of gender roles (Minsun et al., 2022). For example, in the late 20th century, it was found that parents in high socioeconomic areas had more positive gender role parenting, which promoted the full development of children’s gender roles and mathematical skills. In the 21st century, cross-cultural gender studies have developed rapidly. Relevant studies are limited to exploring gender role differences between developed and lagging regions within countries (Moreira et al., 2016), and the development of cross-cultural gender roles internationally has attracted more attention (Minsun et al., 2022). For example, the study found that Eastern collectivism and Western individualism define masculinity and femininity differently. Additionally, individuals develop different types of gender roles to accommodate cultural differences (Cai et al., 2008). However, among Mexico-born adolescents, females exhibited significant declines in traditional attitudes from early to late adolescence, but males’ attitudes were stable over time. U.S.-born females and males, in contrast, did not differ in their gender attitude trajectories (Updegraff et al., 2014). Although there is a large body of cross-cultural research on gender roles, most studies use gender roles as moderating variables to predict individual abilities or developmental levels, and there is a lack of independent research on individual gender role types.

Second, the “media culture” study found that mass media and schooling may influence individual gender role development. For example, in the 1970s, most studies concluded that television gradually became the main information medium, and there was a clear gender division in TV programs for preschool and primary school children (Sternglanz & Serbin, 1974). The number of females leading in television casting was much lower than that of males, and women were underrepresented (Gerbner, 1970). Other studies have found that textbooks and teaching aids are also important tools for the permeation of students’ gender roles (Bernard, 1979). By the 21st century, the media culture of the Internet era has added more channels for the dissemination of gender role norms, such as advertisements, games, video software, and electronic publications, which quickly infiltrate individuals’ gender cognition (Scharrer & Warren, 2022). For example, most of the spokespersons for clothing, beauty and home appliances are women, which implicitly assigns women the gender roles of being beautiful, slim, and doing housework (Xu, 2010). Technological advances have also led to an increase in the exploration of acquired factors, but there is still a lack of longitudinal data to track how the social environment affects gender role development over time.

3. The Effects of Changes in Family Structure on Children’s Gender Roles

In conclusion, gender roles are the result of both innate and acquired interac-

tions, and the family of origin has a profound influence on the development of children's gender roles, so research on family structure is ongoing. In exploring the effects of changing family structure on children's gender roles, the most common focus has been on single-parent and two-parent family structures. Comparing the two types of family structures is a good way to analyze the impact of their changes. By searching four foreign databases (i.e., Web of Science, Meline, KCL-Korean Journal Database, and Scopus) and one Chinese database (i.e., China National Knowledge Infrastructure [CNKI]) with the keywords of family structure and gender roles (see [Figure 1](#)), 112 studies on the gender roles of children in single- and two-parent family structures were selected, most of which were focused on the last 40 years. There are two distinct views on the gender role development of children in single-parent and two-parent families: One group of studies argues that children's gender socialization is influenced by changes in family structure ([Chen et al., 2019](#); [Tatyana et al., 2016](#)), while another group of studies indicates that changes in family structure have no significant effect on children's gender role development ([Boothroyd & Cross, 2017](#); [Stevens et al., 2002](#)).

3.1. The Universal Truth: Changes in Family Structure Significantly Affect Children's Gender Roles

This study found approximately 90 studies supporting the idea that family structure has a significant effect on the type of gender roles of children. It seems to be a common "truth" in the history of gender role research that changing from a two-parent to a single-parent family structure can have a negative impact. The findings of the study can be summarized into three arguments:

First, children in single-parent families have high masculinity. Most studies have found that children in single-parent families have higher masculinity than children in two-parent families ([Leve & Fagot, 1997](#); [Tatyana et al., 2016](#)). Parents' gender-role parenting attitudes play a critical role in their children's perception of gender roles and gender identity ([Morawska et al., 2021](#)). Changes in the structure of single-parent families can lead to changes in the gender parenting style of parents, which in turn affects the gender socialization of children ([Heath & Cavanaugh, 1993](#); [Mandara et al., 2005](#)). Moreover, single-parent families are more likely to develop unisex gender roles for children due to the absence of one parent's parenting role ([Chen et al., 2016](#)). Single parents, especially single mothers, are more likely to expect their children to behave in traditionally masculine roles ([Slavkin & Stright, 2000](#)). Another study found that most of the children from single-parent families are characterized by a high level of masculine-feminine identity (48% of the respondents), and their peers from nuclear families showed a high level of masculine-feminine identity only in 18% of the cases ([Tatyana et al., 2016](#)). It is evident that children in single-parent families are prone to unilateral attachment in imitating their parents' gender roles and exhibit relatively homogeneous masculine gender traits.

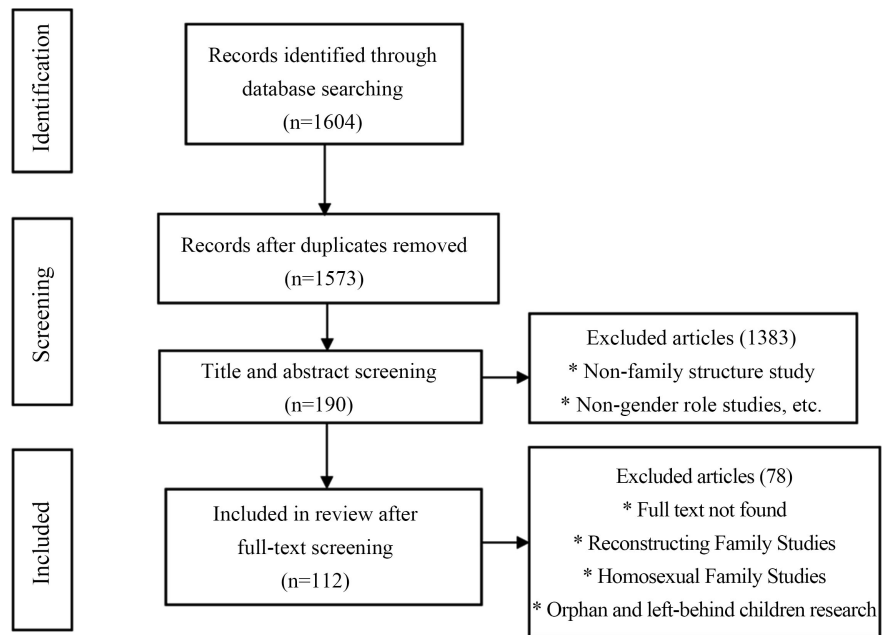


Figure 1. Literature search and screening flow chart.

Second, the proportion of undifferentiated children in single-parent families is high. It was found that the proportion of undifferentiated children in single-parent families was higher than that in two-parent families (Tatyana et al., 2016). For example, an intergenerational study found that single parents had significantly higher undifferentiated gender roles with their children than two-parent families. Single parents' undifferentiated gender roles can be passed on to their children in an intergenerational manner (Yang et al., 2021). Undifferentiated gender roles of parents can easily cause conflict and changes in marital relationships (Chen et al., 2019). Changes in family structure have forced single parents to take on the gender responsibilities of absent parents, making it easier for them to confuse their own gender roles and pass on undifferentiated gender roles to their children (Carlson, 2011). The lack of gender awareness in most single-parent families aggravates the imbalance in the development of children's gender roles (Mandara et al., 2005). In single-parent families, children may misinterpret gender images when observing parental gender behavior due to the lack of intact intersex role models (Chen et al., 2016), contributing to the emergence of children's undifferentiated roles. Changes in family structure affect both parents' and children's gender socialization. The highly undifferentiated roles of single-parent children are the result of intergenerational interactions between family systems.

Third, the gender composition of single-parent families affects the development of children's gender roles. Some scholars have explored the gender differences of single parents on children's gender role development and found that single-father families have a developmental disadvantage, with a lower proportion of undifferentiated children in single-mother families than in single-father families (Boothroyd & Cross, 2017). It is also inferred that the traditional mascu-

line role of single fathers is deeply entrenched. Single fathers are more likely to disrupt their children's gender roles than single mothers due to changes in family structure that lead to "two roles in one" (Beaty, 1995). Other studies have further analyzed the gender pairing of single parents and their children. Among the four categories of "mother-son, mother-daughter, father-son, and father-daughter" studies, it was found that children in single-parent families with same-sex parenting of "father-son and mother-daughter" are more likely to develop masculine or feminine traits corresponding to their parents, which weakens the possibility of gender role confusion in single-parent families (Jim & Yesilernis, 2003). Specifically, boys raised by single mothers have fewer masculine traits and more feminine traits than boys from other structural families, whereas girls do not have such differences (Stevenson & Black, 1988). It has also been suggested that boys who live with their fathers are more likely to acquire stable gender role perceptions and engage in play appropriate to their gender identity. Moreover, the warmth of fathers facilitates the formation of androgynous traits in their sons but has no connection with the development of daughters' gender roles (Boothroyd & Cross, 2017). Other studies have also revealed that the negative parenting attitudes of single parents affect the gender socialization of heterosexual children. For example, when single mothers express hatred for their ex-husbands in parenting, they not only fail to provide behavioral norms for masculine roles but also aggravate boys' avoidance of masculine traits, resist masculine behaviors, and develop feminine tendencies (Ding, 2008). Alternatively, transgendered parents show excessive spoiling of their children, resulting in the extreme display of their children's masculine or feminine traits, which is not conducive to the development of gender roles (Wang, 2008). Despite the overwhelming evidence supporting family structural changes and children's gender role development, a few current studies question this finding and predict that children in single- and two-parent families will have increasingly similar gender role types.

3.2. The Status of the Few: Family Structure Changes Have Little Impact on Children's Gender Roles

Although only 22 of the 112 articles supported the "no significant effect of family structure change on child gender role type", they also provided novel interpretations of the gender role development of children in single-parent families. In the "no effect theory" studies, nearly 50% noted no significant differences in the gender roles of children in single father families versus two-parent families, with family structure changes having a much weaker effect on daughters' gender roles (Stevens et al., 2002). For example, Boothroyd and Cross (2017) analyzed samples of European and American countries through the Bem scale and found no evidence of correlation between father absence and gender behavior changes in daughters. They also suggest that the impact of changes in family structure on children's development is due to their reactive behavior in response to changes in the family environment rather than to changes in children's gender role types.

In addition, the increasing similar proportion of children in single- and two-parent families may also lead to the “no effect theory”. For example, studies have found that the gender role types of single parents and their children are no longer traditionally unisex but are more androgynous (Chen et al., 2019). The study of the gender roles of children in two-parent families in China over the past 20 years shows that children in two-parent families have moved from traditional unisexuality to “androgynous and undifferentiated predominance” (Huang et al., 2010). Children of two-parent families have a similar trend to children of single-parent families in terms of “substantial increase in the proportion of undifferentiated” and “transition from unisexuality to androgynous”. This also reveals that although there are complete gender roles in two-parent families, parents do not regulate their gender role behaviors or do not actively participate in parenting, which may lead to delayed development of children’s gender roles. With the advent of the information age, children in single-parent families have more access to gender information, and their gender role cognitive constructs tend to be more complete. At the same time, the reference effect of other male figures in the lives of single-parent children also alleviates the disadvantage brought by the absence of parental gender roles (Stevens et al., 2002). Overall, although the “no effect theory” research is weak and suffers from “subjective bias in data sources due to single parent reporting”, some of the findings do highlight a holistic perspective on gender role development.

3.3. Pushing Back to the Source: Exploring the Reasons for the Contradictory Conclusions of Family Structure Changes

The research in this area has grown richer and richer, with “effect theory” and “no effect theory” competing. Among the 112 studies that have been conducted, there are more findings that “family structure has an effect on children’s gender role development” than “no significant effect of changes in family structure”. Therefore, this study suggests that there are three reasons to interpret the differential effects of family structure changes on children’s gender role development:

First, the age of the sample varies widely, and individual development interferes with the effects of changes in family structure. Kohlberg first studied gender roles from a cognitive developmental perspective and found that gender constancy is gradually formed between the ages of 2 and 7. After the age of 7, children observe and learn the social norms of gender roles (Kohlberg & Ullian, 1974). In high school, there is steady development (Jiang et al., 2007). However, current research on gender role development involves children from preschool to college age. For example, Chen et al. (2016) investigated children aged 8-18 years, and Jiang et al. (2009) used 434 high school students as respondents. Therefore, it is not possible to exclude the effect of age differences in the sample group on their gender role development. Moreover, children of different ages experience single parenting at different times. Therefore, to investigate the influence of family structure changes, we cannot ignore the length of time children have experienced single parenthood and their own gender role development.

Second, the fit of multiple measurement instruments affects the source of scientific data. The current approach to assessing gender role traits is based on questionnaires and interviews. At present, questionnaire surveys and interviews are the main ways to evaluate gender role traits. The most famous measurement tool is the Sex Role Scale (BSRI) developed by Bem in 1974 (Bem, 1974). BSRI is the originator of psychological scales for measuring androgynous traits, and its first mention of androgynous gender role typology created a boom in gender role research after the 1980s (Myers & Gonda, 1982). Several studies have tested the reliability and validity of this scale (Boothroyd & Cross, 2017). Despite this, the BSRI also revealed shortcomings in areas such as “older definitions of androgyny” and “scales developed with roots in American culture may not be appropriate for other country samples”. For example, studies have pointed out that compared with the 1990s, American college students in recent years are less likely to agree with the feminine characteristics presented by the scale. BSRI concepts of masculine and feminine traits need to be updated to better reflect current gender role norms (Donnelly & Twenge, 2017). The first self-administered gender role scale in China was created in 2000 when the Chinese College Student Sex Role Inventory (CSRI) was developed based on socially accepted gender role norms and social stereotypes in Chinese society (Qian et al., 2000). This scale broke the single-quadrant positive gender schema of the BSRI and innovatively treats the traditional gender schema as a four-quadrant distribution with “one dimension and two endpoints”. Its high reliability and validity have been tested in many studies (Zhang et al., 2012). However, there are still shortcomings, such as the lengthy scale and the thin test study of the multidimensional theory of gender schema. Subsequently, the BSRI was revised in 2003 to consider the cross-cultural differences of the BSRI scale due to its general diffusion in China (Lu & Su, 2003). However, the revision was limited to the deletion of low-load vocabulary from the BSRI entries, and no replacement vocabulary was considered. Because of the inadequacy of the existing scales, Liu et al. (2011) developed the CSRI-50 based on the BSRI and CSRI, which has a significant change in word selection compared with the Bem and CSRI and retains 50 moderate items with good reliability and validity. However, the CSRI-50 was developed nearly 10 years ago, and entries that fit the gender culture at that time may not be applicable to current gender roles. Moreover, most of the test groups were college students, so we need to be cautious about whether the scale can be extended to other age groups. Thus, gender role research requires both culturally appropriate and sensitive measurement tools, as well as an up-to-date examination of changes in sample groups.

Third, a single measure is prone to subjective bias in data reporting. Although gender role studies can obtain data through scales and interviews, most studies tend to use scales to measure children’s gender types (Russell & Denise, 1991). The tests only considered unilateral parental reports (Stevens et al., 2002) or child reports (Zhang et al., 2012). Few studies have used paired parent-child co-participation tests to examine differences in parent and child subjective re-

ports (Hillary & Maureen, 2016). Gender role parenting in families is formed gradually during the life interactions between parents and children, so the unilateral reports by parents and children are prone to subjective bias.

In conclusion, it was seen that out of 112 included studies, nearly 90 studies agree with the theory and showed that the changes in family structure led to a considerable impact on children's gender roles. Studies have indicated a higher prevalence of masculine traits and undifferentiated types in children of single-parent families, which further found that the gender configuration of single-parent family members influences children's gender role development. In contrast, 22 studies supported the theory of no effect of family structure, providing a dialectical perspective on the relevant studies. In exploring the differences in the results of these studies, it can be concluded that the sample source, measurement method, and instrument selection in the process of gender role research may have an impact on the whole body and affect the differences in research results.

4. Summary and Prospects

The study of gender roles has developed for nearly a century. Despite some notable empirical research, the specificity of research participants, such as the wide age range of samples and varied family structures, may still affect research results. Numerous empirical studies are scattered in various fields and are unable to highlight the strengths of each study. Therefore, a concise study that summarizes the essence of empirical research and systematically outlines the development of gender roles is needed. This study addresses the innate and acquired theories of gender role development in a timeline. It not only explored the factors influencing gender role development based on existing research but also further analyzed the studies related to family structure change and gender role development. The shift from two-parent to single-parent families is the core of family structure changes. There are two major arguments for the "effect theory" and "no effect theory" regarding the single-parent family structure on children's gender role development. The dominant "effect theory" emphasizes the high masculinity and undifferentiated type of single-parent children. The minority "no effect theory" reveals that children of single- and two-parent families may have similar gender role development. We also highlight that the sources of samples, measurement methods, and tool selection in gender role research may affect the results comprehensively and systematically. Furthermore, the logical chain based on the timeline helps researchers quickly grasp the development process of this field and efficiently make scientific decisions.

In the 80 years of gender role research, although the research results are fruitful, there are some shortcomings. Future research can make greater breakthroughs in the following three aspects:

First, we focus on the differences between single-parent families of different genders, especially single-father families. At present, few studies use family gender-

er structure to understand children's gender role development, especially for families with single fathers, whose participation plays a pivotal role in the gender role development of children (Wang, 2005). Studies also found that the father's role has a greater impact on children's gender roles (Jacklin et al., 1984). Therefore, it is necessary to further compare the influence of single parent gender types.

Second, multiple research methods should be integrated, and measurement instruments should be scientifically selected. To prevent subjective reporting bias of questionnaires, the survey can be conducted by using "questionnaire-interview" and "parent-child", which are collected from multiple perspectives. In the past, single-parent comparative studies were mostly conducted with cross-sectional data. However, the journey of a family from intact to broken up requires a longitudinal study to deeply analyze the impact of changes in family structure on children's gender roles.

Third, to control for multiple factors that influence gender role development, we need to draw precise conclusions about family structure and children's gender role types. Related studies have shown that socioeconomic status (Marks et al., 2009), parental education (Yang et al., 2021), sibling relationships (Bigner, 2012), and parent-child relationship quality (Zhou, 2007) may influence child gender role development. Family background factors influence children's gender socialization and personality development. Future research should consider the interference effects of relevant factors when discussing changes in family structure and children's gender roles.

In summary, focusing on the gender role development of children in single-parent families not only emphasizes parenting for parents but also requires continuous exploration of the gender types of single parents and children by experts and scholars to offer more valuable and constructive scientific conclusions for single parents.

Data Availability Statement

This paper is a critical review, so there are no shared data.

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Conflicts of Interest

The authors declare no conflicts of interest regarding the publication of this paper.

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