

A Comparative Study on Creativity Between Migrant Children and Non-Migrant (Urban) Children

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Abstract: Migrant children represent one of the most pressing issues in today's world, as they frequently encounter serious obstacles such as forced displacement, limited educational opportunities, and trauma from their experiences. Researchers have made progress in studying the general challenges faced by migrant children, such as education and socialization. However, there is a research gap in the details of the difficulties. Therefore, this paper aims to study creativity, which is becoming an important part of education, by collecting data on the factors affecting creativity in previous studies and comparing migrant and non-migrant children on these factors. It is found that the creativity of migrant children is generally lower than that of non-migrant children mainly due to family and school factors. However, migrant status can also contribute to the development of creativity to some extent. Therefore, the strengths of both statuses should be combined to better foster creativity and also to narrow the educational gap between the two groups of children.

1 INTRODUCTION

In recent years, the topic of migrant children is getting more and more attention. According to a research of 2020 China's Child Population conducted in 2023, there were 71.09 million migrant children in total, which occupied 24% of the total China's child population (National Bureau of Statistics, 2023). This was mainly caused by the large-scale migration. Due to various disparities between migrant and non-migrant children, such as in education and social aspects, migrant children are facing challenges such as limited educational resources and reduced parental involvement, which have been documented in many previous studies. Nowadays, creativity gradually becomes a crucial part of education, not only from a personal perspective but also from the national perspective. On May 29, 2023, the fifth collective study of the Political Bureau of the Chinese Communist Party Central Committee emphasized the need to strengthen the independent training of innovative talents to support the core technology research in China (Bai et al., 2024). As the critical period of talent development is the early year, it is important to cultivate children's creativity in primary and secondary school (Zhou, 2024). Although the factors that influence creativity have been studied, there remains a notable gap in exploring the

differences in migrant children's and non-migrant children's creativity levels. As a result, this study aims to address this gap by comparing two groups of children in terms of factors affecting creativity, further providing practical advice on closing the education gap.

2 KEY CONCEPTS

2.1 Definition of Creativity

The definition of creativity always remains vague and dynamic. Until now, the researchers have had difficulties coming up with a universal and explicit one (Craft, 2001). Nevertheless, researchers once collected different versions of definitions in Webster's Dictionary from 1953 to 2008, finding that each version defined it differently but with just slight differences (Robinnson, 2008). This shows that despite the discrepancy, the general direction of defining creativity is similar. In this research, creativity is defined on the grounds of Johnston and Torrance's work: "the process of sensing problems, forming ideas, and driving unprecedented solutions of unique problems with elaboration and embellishment" (Tennent & Berthelsen, 1997).

2.2 Migrant Children

The definition of migrant children also remains dynamic. Depending on the focus of each era or the changes in economic, social or policy environment, the concept of migrant children is constantly changing (Han et al., 2020). According to a 2015 report by the National Bureau of Statistics (NBS), UNICEF, and other organizations, migrant population suggests the population whose place of residence and place of household registration are not consistent and who have been away from the place of registration for more than half a year, excluding those who have been separated from their households within the municipal district. Migrant children are the ones aged 0-17 in the migrant population (National Bureau of Statistics, 2017).

Under the backdrop of a growing awareness in education, the situation of migrant children is in fact gradually improving. A study shows that most of the migrant children in China have already come to the cities in which they live when they were infants and toddlers. 26.6% of the interviewees were born in the place of inflow, more than 52.8% came to the place of inflow before kindergarten, and as many as 76.7% came to the place of inflow before elementary school (Wan, 2024). However, migrant children still face some problems that other urban children might not face or are not that severe, such as bullying, psychological health problems and unfairness in education. Specifically, in terms of bullying, in 2022, 39.2% of migrant students were bullied in schools and about 21.1% experienced cyberbullying (Wan, 2024), which is already higher than the international average of about 15.0% (Modecki et al., 2014). In addition, in education, although the issue of fairness in compulsory education has been basically solved, in the stage of non-compulsory education, they still face some challenges, including ineligibility for public pre-school education system and inability of cross-provincial migrant children to enjoy the same qualifications for senior secondary education (Wan, 2024).

Therefore, it can be seen that the gaps between migrant children and urban children still exist, especially in the field of education.

3 CREATIVITY OF NON-MIGRANT (URBAN) CHILDREN

As mentioned before, creativity is increasingly valued in the education field. In order to trace this trend, Qin and Wang created a childhood creativity research keywords highlight time zone mapping. They found that mutant words “creativity development”, “creative thinking skills”, “interest”, “art education”, “music education” and “innovation” gradually emerged one by one during 2010 to 2015. “Developmental strategies” appeared in 2018 and continued through 2019. These reflected the research and fostering focus - childhood creativity (Qin & Wang, 2020).

3.1 Main Factors that Affect the Creativity Level

3.1.1 Family Factors

Family factors play a big role in the development of creativity. It includes various aspects such as number of siblings, birth order, socioeconomic status (SES), parenting style, parental relationship, and sibling relationship (Nakao et al., 2000).

Several studies have found that SES is closely related to the creativity level for children. In the study conducted by Yufang Yang, the researchers use Preschool Creativity Activity Scale for Preschoolers to assess the creativity level of 905 preschoolers and Children and assess their SES. The correlation coefficient (r) between creativity level and SES is 0.255. Thus, there is a positive correlation between the two variables. The absolute value of correlation coefficient (r) is not very close to 1, so the positive correlation may not be very strong. The overall trend can be obtained: the higher the SES, the greater the creativity level (Yang, 2023). This trend is not only true for preschoolers. Many studies have explored creativity level of children of different ages and found similar positive correlation, including preschool children, kindergarten children and elementary and middle school children (Yang, 2023).

Parenting style can be another important factor that affects children's creativity. There are four main parenting styles: authoritative, authoritarian, permissive and neglectful. In the present study, the first three styles are discussed. Authoritative parenting style is characterized by warmth and autonomy encouragement. Parents usually have close ties and positive emotional bonds with children.

Authoritarian parenting style suggests that parents are low in acceptance, autonomy and close ties. Permissive parenting style is high in warmth but low in involvement (Mehrnejad et al., 2015; Jankowska & Gralewski, 2022). Mehrnejad et al. examined the relationship between these three parenting styles and creativity level. Researchers collected data from 400 junior high school students. For authoritative parenting styles, $r=0.14$, indicating there is a positive relationship between creativity and authoritative parenting styles. By contrast, for authoritarian parenting styles, $r=-0.15$, indicating the negative relationship between two variables. The p -value for both styles is smaller than 0.01, indicating significant correlations. As p -value for permissive parenting is larger than 0.01, there is no relationship between creativity and permissive parenting. Therefore, the characteristics of authoritative parenting style, which are high levels of warmth, autonomy and close ties, are thought to be beneficial for the development of children's creativity.

This conclusion is also consistent with the results of Yangyu fang's study. In addition to studying the relationship between SES and creativity mentioned earlier, she also examined the effect of parental involvement in children's play on creativity. Based on the analysis, she found that the correlation coefficient (r) was 0.521. As r is positive, and its absolute value is closer to 1, there is a positive and strong relationship between parental involvement and creativity. That is, the more appropriate parents participate in children's play, the better their children's creativity develops. The characteristic of parents' appropriate participation in children's play is exactly what authoritative parenting style involves, and authoritarian parenting does not do well.

3.1.2 School Factors

School, as a place other than home, where children spend most of their time, can play a significant role in shaping their personality and cognitive abilities. The sources of influence can be divided into three categories, namely school physical environment, teachers and peers.

Firstly, from the aspect of school physical environment, open, spacious indoor and outdoor areas help students develop creativity. Besides, the influence of a teacher is dependent on his teaching mode. Researchers investigated the relationship between students' creativity and teachers' encouragement, intrinsic motivation and creative process participation. The results showed that the three factors mentioned above all had significant

positive effects on students' creativity ((Mehrnejad et al., 2015). Moreover, the influence of peers is mainly determined by the harmonious relationship between peers. A collaborative peer atmosphere and participation in more group activities can help foster creativity (Yang, 2023). Children who are members of peer circles are slightly more creative than non-circle members (Bai et al., 2024).

4 CREATIVITY OF MIGRANT CHILDREN

4.1 Overall Creativity Level

Compared to non-migrant (urban) children, the creativity level of migrant children is much lower. A study conducted by Yiqi Dai et al. focused on the comparison of creativity between migrant and urban children. In the study, researchers collected data from 1047 participants in Hangzhou, while 40.78% were migrant children and the rest were urban children. Using the Chinese version of Williams' Creative Inclinations Test, they got the result that the mean total score for migrant children was 107.86, which was lower than the score for urban children, which was 114.42 ($p<0.001$). This indicates that there are indeed significant differences between the creativity level of two groups, with the urban children being more creative (Dai et al., 2024).

This result is generally aligned with a comparative study between migrant and urban supernormal children conducted by Wang, Y., He, C., & Cheng, L. They selected 40 migrant supernormal children from Beijing and 141 urban supernormal children from Wuxi as samples and assessed their creativity from three dimensions, which are fluency, flexibility and uniqueness respectively. From the perspective of the total score, the average creativity score of urban supernormal children was 28.16 points, much higher than that of migrant supernormal children (25.12 points) ($p<0.05$). Thus, significant differences exist between two groups. However, individual p -value for uniqueness was 0.58, which was larger than 0.05, suggesting the great possibility that the differences were caused by chance. Therefore, there were no significant differences between the two groups. What can be implied from this is that migrant status can help develop uniqueness or urban status has negative impact on uniqueness (Wang et al., 2017). Another conclusion that came out of this study is that the creativity level of migrant supernormal children can exceed the urban supernormal children at a certain point in time. Researchers compared the creativity

level of supernormal children with 12 years old and 13 years old respectively, finding that the score in all three dimensions for the 13-year-old were all much higher for migrant supernormal children (Wang et al., 2017). Although there could be some limitations due to regional differences arising in comparison between children from different provinces (Beijing and Wuxi), what can be deduced is that migrant status may in some ways be more conducive to creativity than urban status in present social content. Consequently, in order to boost children's creativity, it's important to identify the factors that contribute to the creativity gap between two statuses and to incorporate the benefits of both.

4.2 Factors that Lead to Differences in Overall Creativity Level

4.2.1 Differences in Family Factors

In 3.1.1, some main family factors that will affect the creativity level have been discussed. Indeed, previous

studies have found certain differences in these factors between migrant and urban children.

SES is mainly measured by three indicators: parents' education level, family economic income, and parents' occupation (Bradley & Corwyn, 2002). According to the study conducted by Yiqi Dai et al. which has been discussed before, among 1047 participants, around 65% of urban children's mothers and fathers respectively had a level of education that was college and above, while there was only about 9% of migrant children's mothers and fathers respectively had a level of education that was college and above (Dai et al., 2024). Another study also conducted in 2024 quantified parents' occupation. Researchers divided parents' occupation into five levels (shown in Table 1). The final average score for mothers' occupation was 2.65, while the average score for fathers' occupation was 2.91 (Lu, 2024). Immigrant children's parents all have lower occupation scores. Therefore, combining the low education level and occupation, the overall SES of migrant children is quite low compared to urban children.

Table 1: 5 Levels of parents' occupation.

Level	Score
Farmer, herdsman, fisherman or retired, unemployed, or laid-off	1
Ordinary worker, elementary worker, or self-employed	2
General worker, service worker, or skilled worker	3
Doctor, lawyer, primary and secondary school teacher, or technical staff	4
Leading cadres of government agencies/institutions or professional and technical personnel	5

In addition, from the perspective of parental involvement, based on the study conducted by Yiqi Dai et al., among the participants, 14.75% of migrant children's parents were both away a lot, while only 6.13% urban children's parents did so. Besides, 25.59% of parents of migrant children rarely give parental guidance on learning to their children, compared to only 12.42% of urban children (Dai et al., 2024). As a result, compared to urban children, migrant children generally receive less learning guidance and companionship from their parents.

Combining these two-family factors, migrant children's creativity will become lower.

4.2.2 Differences in School Factors

Migrant children usually have poor academic performance than urban children (Wang et al., 2017; Tang et al., 2024). According to the study conducted

by Yiqi Dai et al., among the participants, 60.48% of urban children had good or excellent academic performance, while only 49.88% of migrant children had good or excellent academic performance (Wang et al., 2017). Consequently, migrant children were allocated to ordinary or low-quality schools (Tang et al., 2024). Accordingly, migrant children will lag behind in the two school factors mentioned above: school physical environment and teachers.

Besides, as mentioned before, a large range of migrant children have experienced bullying in school. This, of course, destroys collaborative peer atmosphere. High frequency of bullying among migrant children can be attributed to two main reasons: stigmatization and perception of discrimination. Stigmatization is the cause from the perspective of the bully. Stereotypical thinking assumes that migrant population is the subject of criminal incidents, which leads to rejection of migrant

children by ordinary students. The perception of discrimination is from the perspective of ones who are bullied. After migrant children enter a big city, the discrimination they experienced will make them feel helpless and self-contemptuous. This can promote the occurrence of school bullying as they cannot communicate well and build good social relationships with others (Ren & Cheng, 2021).

The school factors above would indeed lead to low creativity level for migrant children.

4.2.3 Factors that Lead to Higher Creativity of Migrant Children

In 4.1, the possibility that migrant status can contribute to the development of creativity has been discussed. There are three main possible factors.

Firstly, Chinese education culture is always known as examination oriented (Pan et al., 2022). Common sense dictates that the better the school, the deeper the penetration of this culture. This type of culture can easily seduce children to inertial thinking, which would hinder creativity development (Dai et al., 2024; Wang et al., 2017).

Besides, under this type of education, nowadays Chinese students are undoubtedly under high pressure, and most is from their parents. Chinese parents always have high expectations to their children and especially pay attention to exam scores. The internal logic is actually simple: “in order to get a good job, one has to get into a good university. In order to get into a good university, one must do well on the entrance examination of university. In order to do well on the entrance examination, one must study very hard, and for many years. Thus, scores of testing determines their quality of life” (Ogura, 1987). This also has a negative impact on creativity development.

5 DISCUSSION AND SUGGESTION

5.1 Discussion

Generally, migrant children have a lower creativity level than non-migrant (urban) children. Childhood is a key stage for developing creativity, and since children primarily spend it at home and school, this study examines how these environments influence creativity.

Family factors mainly involve SES and parents' involvement. The higher the SES and the more appropriate the parents' involvement, the higher the creativity level. School factors involve school

physical environment, teachers and peer relationship. The higher the quality of these three factors, the higher the creativity. Nevertheless, migrant children generally lag urban children in all the factors mentioned above.

However, migrant status can, to some extent, benefit creativity. Possible reasons can be inertial thinking and high pressure associated with the favorable educational environment in which urban children live.

5.2 Implications, Limitations of the Present Study and Directions for Future Research

As migrant and non-migrant status both have potential benefits for creativity development, the best way to boost children's creativity is to combine the benefits of both.

Firstly, relevant laws and regulations should be improved. Migrant children and other children should be given equal access to education and, especially, the unfairness during kindergarten and high school education (non-compulsory education) should be fixed as far as possible. When their status gradually becomes equal, it can also effectively alleviate the problem of bullying. Besides, as family and school play a big role in creativity development, schools should work closely with families to create a supportive environment that nurtures creativity. Since it is quite difficult to change one's SES dramatically in a short period of time, the best way to create a supportive environment is to ask parents to participate more and in a proper way in the growth of children and to ask teachers to create a more creative, warm teaching atmosphere. Last but not the least, based on 4.2.3, a way to boost creativity is to get rid of traditional teaching approach, which is strict and examination-oriented, and encourage more innovative teaching approaches. This suggestion has also been proposed by Dai et al., 2024. By doing so, the gap such as disparities in education between migrant and non-migrant children can be minimized, which can further boost children's creativity.

However, this study still has some limitations. Family and school are the main but not the only factors that would affect creativity development. Others like play and cultural background can also affect creativity levels. As a result, future research can focus on these different factors and compare the magnitude of effects of all of them.

6 CONCLUSION

This study focuses on the comparison of migrant and non-migrant children on the topic of creativity. Although the general trend is that migrant children have a lower creativity level due to family and school factors, both migrant and non-migrant status have their own benefits. Therefore, the benefits of both should be combined to provide the child with an optimal education. Society should provide both groups of children with equal education assessment and resources, eliminating discrimination to migrant children. Besides, society as a whole, from family to country, should do all it can to create an encouraging environment for children to grow up in, rather than the traditional test-oriented education type. In this way, the gap between migrant and non-migrant children, especially in the education field, can be reduced. The reduction of inequality and the increase of creative talent will not only boost children's creativity but also promote the whole society.

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