

Research on the Impact of Smart Phone Use on Children's Socialization

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Abstract: *With the development of mobile Internet technology, smart phones play an increasingly important role in people's social life, and also gradually become an important companion in children's life. But at present, the content of children's access to mobile phones is mainly adult information with adults as the target group. Children's access to smart phones means that they are exposed to the adult information world without protection, which has an important impact on their socialization. This paper investigates children's smart phone contact behavior in the form of questionnaire, analyzes the impact of smart phone contact on children's socialization, and thinks that smart phone can help children understand society more comprehensively, cultivate calm personality, improve safety awareness, form correct communication concept, and clarify career ideal. At the same time, there are also some negative effects such as excessive use of mobile phones leading to children's personality loneliness, moral decline, social value distortion, Internet addiction and so on. Finally, from the family, school, society, government, media five aspects put forward corresponding strategies to reduce the negative impact of smart phones on children's socialization, so as to promote the development of children's socialization.*

Keywords: *Intelligent mobile phone, children, socialization, media literacy*

1. Introduction

Children are the foundation of the future development of society and the future of the whole society and its members. The process of children growing into independent, sound and useful social people plays an important role in children's personal, family and society. The environment in which children live has an important impact on their socialization process, especially the information environment, which includes not only the information obtained by children from family, school, society and other aspects, but also the information obtained by children from mass media.

Since 2011, China's mobile Internet technology has developed rapidly, and the society has entered the era of mobile Internet. Mobile phones have gradually become the main information receiving tool for people, and also become one of the sources of information for children. In addition, under the impact of the COVID-19 in 2020, in response to the call of national policies, schools across the country have adopted ways such as delaying the opening of classes and online teaching to carry out teaching activities. Therefore, for children in the primary learning stage who lack self-control and judgment ability and have strong imitation learning ability, their contact with screen media, especially mobile phones, has improved, so that mobile phones have become an important object for school-age children to accompany them in daily life. Many school-age children are addicted to the Internet because they are difficult to refuse the temptation of mobile phone content.

At the same time, we note that there are no restrictions on children's access to information from mobile phones. Like adults, children can search in search engines, participate in social interactions on network platforms, upload and download content on the network, and so on. Here, we have noticed that children have the same media contact with adults, the media content they are exposed to is not distinguished from the content they are exposed to, and most software does not set up a "children's channel" to provide content for children like TV media. For children personally, such excessive exposure to adult information will have a great impact on children's immature psychology and developing body, which is not conducive to children's social development. For the whole society, children's early adult will lead to the lack of qualified and sound social people among social members, which will even lead to the instability of social structure and the future development of society. Therefore, exploring the impact of smart phone use on the socialization of school-age children aged 6-12 and discussing methods and strategies to avoid some of these impacts are issues that we need to study.

Therefore, this paper proposes:

Research question 1: what impact will smart phone use have on the socialization of school-age children?

Research question 2: how to guide school-age children to correctly and reasonably contact smart phones?

2. Research overview

Socialization of children refers to the process in which children internalize socially recognized moral norms and values, understand folk customs, identify with social roles, master social life communication skills, integrate into social groups, and adapt to social life through family education, school education, personal learning, etc. Socialization of children includes socialization of social norms, socialization of moral concepts, socialization of social roles and socialization of national culture. ^[1]

At present, the domestic research on the impact of smart phones on children mainly started in 2006, and attracted the attention of some researchers and carried out relevant research in 2010, but the subject did not attract widespread attention in the academic community. By 2019, the subject once again entered the researchers' field of vision and attracted the attention of the academic community. The number of relevant studies published in journals has increased significantly in the past two years.

The current research mainly focuses on the impact of parents' mobile phone use behavior on children from the perspective of cultivation theory, and on the needs and impact of children's mobile phone use based on the use and satisfaction theory. At present, there are many researches focusing on teenagers and children. With the adult of media content and the younger age of media contact, researchers' vision has gradually expanded to the impact of mobile phone use on younger children.

In the relevant research on the impact of mobile phone use on children's personality characteristics, some scholars conducted research on mobile games and believed that in the absence of parental supervision, many children have become addicted to mobile games, which has a negative impact on children's mental health, such as loneliness, violence, indifference, etc. ^[2]; Scholar Yang Limin pointed out that the convenience of mobile terminals such as mobile phones to obtain information also leads to children's tendency to obtain immediate satisfaction, while in the face of delayed satisfaction, children will feel strong anxiety and produce negative emotions, leading to children's irritability ^[3].

With regard to the impact of mobile phone use on children's social interaction, some scholars believe that smart phone contact will also produce a "polarization effect" among children who are introverted and shy, that is, excessive contact with mobile media will lead to children with low social interaction level to further reduce their real communication activities and further enhance their loneliness, Children's inability to interact effectively with others will also lead to stagnation of social emotional development ^[3].

In the research on the impact of mobile phone use on children's moral concepts, scholar Liu Miao believes that the increasingly diversified information in the media has led to the diversification of children's value judgment standards to a certain extent ^[4]; Some scholars also believe that exposure to online culture is conducive to children's cultivation of self-esteem and self-confidence, can promote the self-identity of teenagers and children, and promote their independent and personalized ideological development ^[5].

In the relevant research on the impact of mobile phone use on children's sexuality, some scholars believe that the combination of mobile games and children's learning can fully arouse children's learning enthusiasm; Scholar Yang Limin believes that one of the negative effects of over exposure to mobile terminals on children is that it is easy to lead to children's Behavior Anomie and go astray ^[3].

In the above research on the impact of mobile phone use on children, most scholars believe that the impact of smart phone contact on children's socialization has two sides, and the focus of attention includes children's physical health, mental health, cognitive development and prosocial behavior. However, in general, there is a lack of targeted research on the impact of mobile phone use on children's socialization in the academic community, so this study starts from this perspective, Study the impact of smart phones on the socialization of school-age children, and try to make up for the deficiencies in the current academic research in this area.

3. Research methods and analysis of results

3.1. Questionnaire method

The three key factors of the questionnaire method are: designing the questionnaire, selecting the respondents and analyzing the results. On the basis of literature research, this paper draws on Liu Miao's media contact questionnaire for primary and secondary school students in Anqiu City^[4], and makes some modifications without affecting the reliability and validity of the questionnaire, so that the questionnaire is more in line with the research purpose. Then import the data into the professional statistical analysis software SPSS to establish the database, select the appropriate analysis method to study and analyze the data according to the research needs, and finally carry out further theoretical analysis and comparison of the processed data to get the final conclusion.

This survey was conducted on 210 school-age children. A total of 210 questionnaires were distributed, 207 questionnaires were recovered, and 200 valid questionnaires were available. The effective recovery rate was 95.23%. The research is mainly conducted for school-age children aged 6-12. Considering that primary school students in grades 1-2 have weak expression and understanding ability, and parents have stronger intervention in the process of using mobile phones for young children, the impact of mobile phones on their socialization is not particularly significant, so the questionnaire survey is mainly conducted for middle and high-grade primary school students. The demographic characteristics of the study population were as follows: of the 200 students surveyed, 130 were male and 70 were female, with a gender ratio of approximately 1.85:1. The grade distribution of the survey population is shown in Figure 2.1. There were 46 students in the third grade, 73 students in the fourth grade, 49 students in the fifth grade, and 32 students in the sixth grade.

3.2. Media exposure behavior of the research subjects

3.2.1. Purpose of media exposure

In question 11 of the questionnaire, the purpose of children's smart phone media contact behavior was investigated. In order to reflect the difference in the purpose of media use at different ages, the data analysis was still based on the grade of children. From the histogram of the main purposes of contacting smart phones in all grades, we can see that the proportion of using mobile phones to complete homework increases with the increase of grade, while the proportion of children who use mobile phones to watch entertainment videos decreases with the increase of grade. See Figure 1: For details.

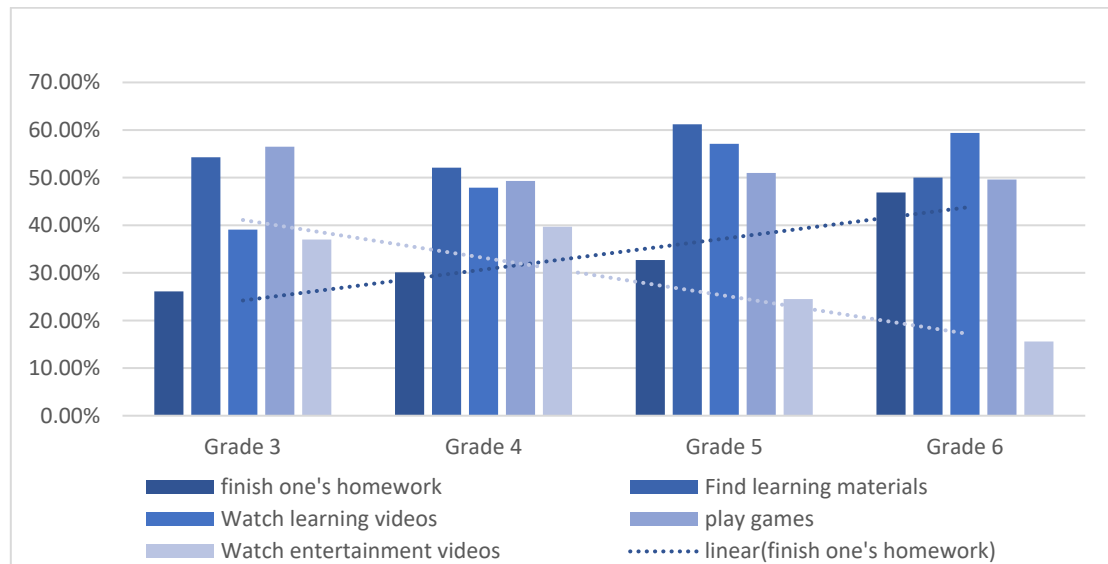


Figure 1: Purpose of smartphone media contact of surveyed students in all grades

3.2.2. Media contact freedom

Question 8 of the questionnaire investigates the freedom of children to use smartphones, that is, whether they are restricted by their parents. In data statistics, the two options of using a certain length of time every day and using mobile phones freely on weekends are combined into less restrictive ones. The

three options of using a certain length of time during the study day but not during the weekend, using a certain length of time during the semester but not during the winter and summer holidays and using a certain length of time every day during the winter and summer holidays are combined into a more restrictive one. This can avoid students from simply thinking that "my parents have restrictions on me" or "my parents don't let me play when I want to play mobile phones" when filling in the questionnaire is too restrictive to disturb the results of the questionnaire.

The survey results show that among students in grades 3 to 5, parents have certain restrictions on their access to mobile phones. Among the students in Grade 6, compared with other grades, the proportion of students with unrestricted access to mobile phones and the proportion of students with greater restrictions have decreased, while the proportion of students with less restricted access to mobile phones has increased. The reason may be that parents, considering the pressure of their children's entrance to school, understand that their children need access to mobile phones to assist in learning, but do not want their children to have access to mobile phones all the time, Therefore, there will be certain restrictions on their mobile phone contact behavior. The specific data are shown in Figure 2. It can be seen that primary school students have a high degree of freedom in terms of mobile phone access restrictions, but they will still be subject to certain restrictions from parents.

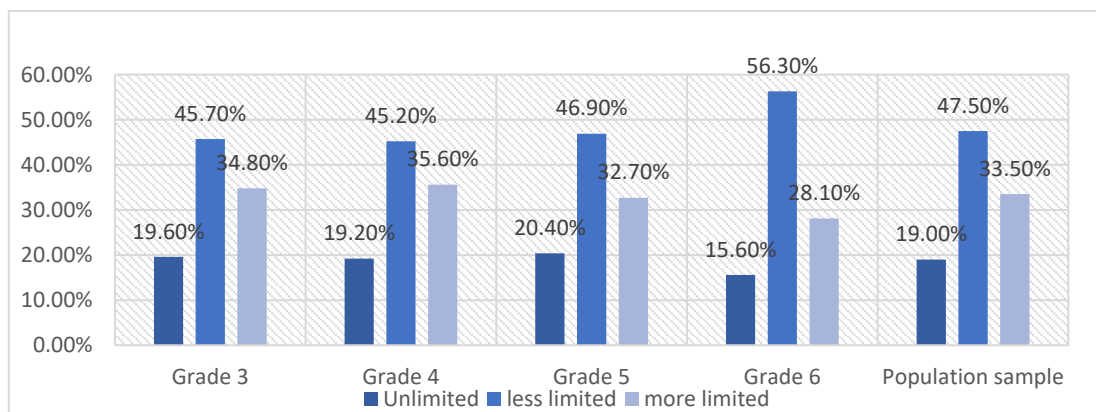


Figure 2: Degree of freedom of smart phone media contact of surveyed students

3.2.3. Media literacy

Question 12 of the questionnaire investigated children's ability to use smart phones. Children's ability to use smart phones is scored through the Likert scale, in which those who choose "always" get 3 points, those who choose "occasionally can't" get 2 points, those who choose "occasionally can" get 1 point, and those who choose "can't" get 0 point. According to the survey results, the average score of the surveyed children in all grades is counted. It can be seen that the higher the grade, the higher the children's ability to use smart phones, this is the embodiment of the development of children's own information acquisition ability with their personal growth, and also the embodiment of the influence of children's age on children's ability to use smart phones, that is, children of the same age can obtain an approximate level of smart phone use ability through mutual communication and learning, as shown in Figure 3.

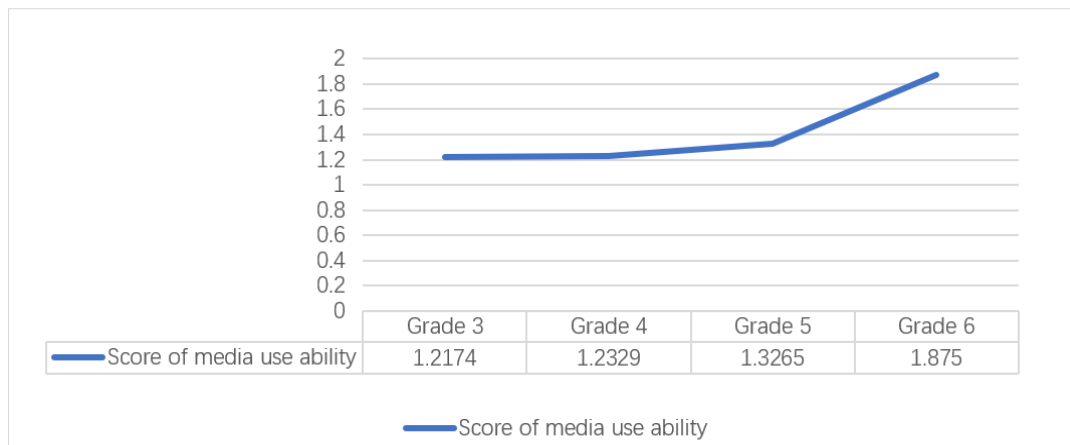


Figure 3: Average broken line chart of media use ability of surveyed students in all grades

3.3. Analysis on the correlation between smart phone use and children's socialization

3.3.1. Personality characteristics: long-term smart phone contact is easy to cause children's personality loneliness

Question 24: the personality characteristics of the school-age children surveyed were investigated, and classified statistics were carried out based on Zhou's smart phone contact time. The results are shown in Figure 4.

It can be seen that among children who have been exposed to smart phones for less than 2 hours, Zhou chose "have many friends" the most, 17.2% higher than other options at the highest, and nearly 10% higher at the lowest. The reason may be that children with less mobile phone contact have a lot of time to contact people of the same age in real life, While children in several categories who have a long week of mobile phone contact may be tempted by more other mobile phones and ignore the interaction with their peers, but this situation has no significant correlation with the length of smart phone contact; The proportion of children who choose "unwilling to talk to others" increases with the increase of mobile phone contact time. The reason should be that the online social space is more hidden, which makes children feel that netizens are full of mystery. Children are more willing to choose mobile network social networking than real communication.

Based on the results of the above data, it can be said that too long contact time of smart phones is easy to lead to children's indifference, self isolation, impulsivity, etc.

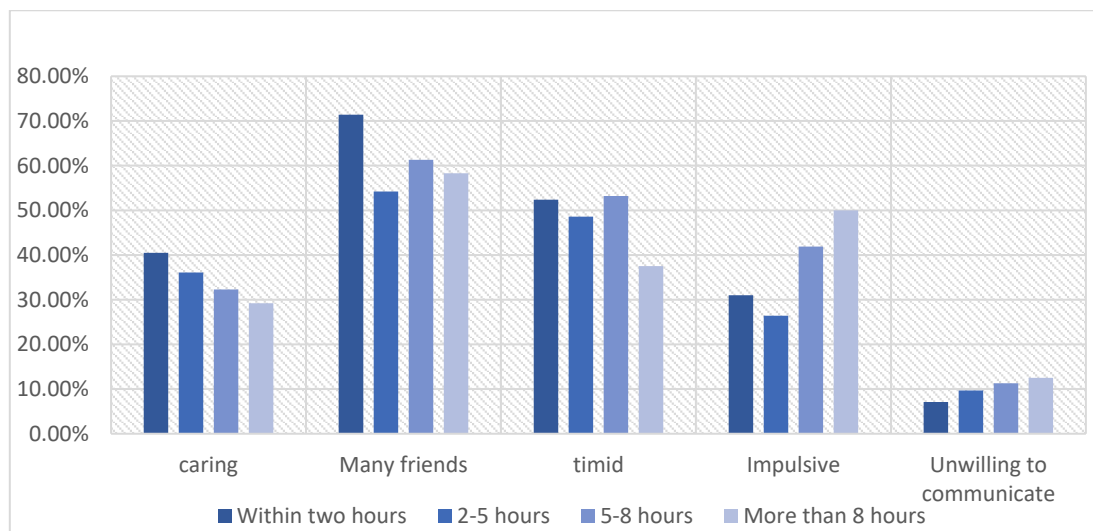


Figure 4: Distribution of personality characteristics of surveyed students

3.3.2. Behavior characteristics: long-term smart phone contact is easy to cause children to form bad habits

The behavior characteristics of children were investigated in question 25 of the questionnaire. In terms of "observing discipline" and "doing housework", children's compliance with discipline or doing housework decreased with the increase of weekly mobile phone contact time. Secondly, in the option of "sometimes lying", there was no significant difference among children whose weekly mobile phone contact time was less than 8 hours, but 66.7% of children who spent more than 8 hours chose this option, It can be seen that too long smart phone contact will lead to children's dishonest behavior.

As for the choice of retaliation, the number of people who have this behavior decreases in each category of the duration of using smart phones. It can be said that the longer the contact time of smart phones, the less likely children are to have hatred and retaliation; In addition, American sociologist Ross' imitation theory believes that, "Imitation is a learning process. When teenagers feel that they can get benefits through imitation, they will compete to imitate. On the contrary, they will not try easily if they know that imitation will be punished. [6] children can get new information about juvenile delinquency through mobile phones, which brings a" juvenile delinquency is equally harmful to themselves, others and even society and will also be punished "to their cognitive level Therefore, when taking action to deal with the conflict of opposites, we will also take a more moderate approach because we take this impression into account. See Figure 5 for details.

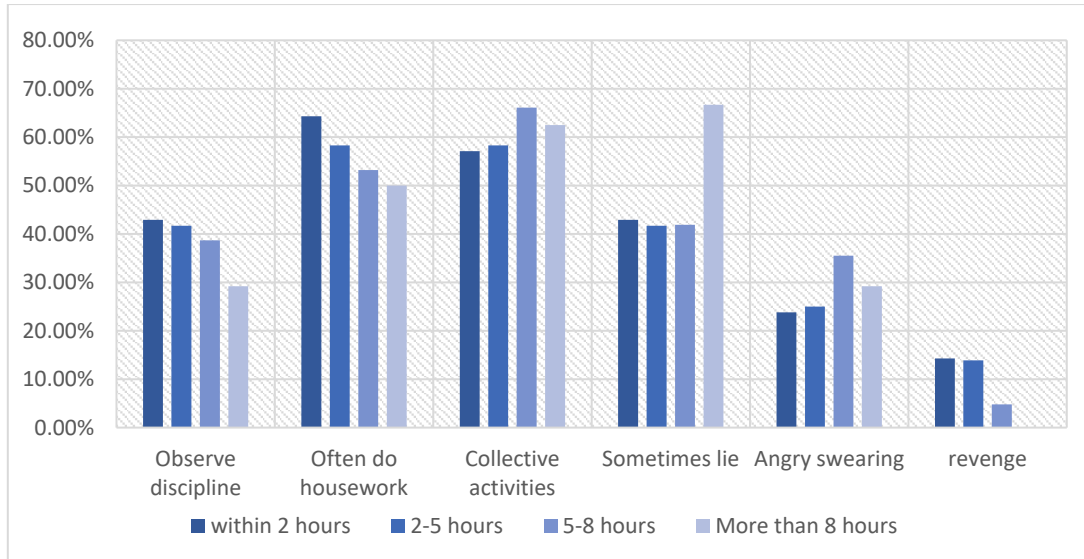


Figure 5: Distribution of behavior characteristics of surveyed students

3.3.3. Communication concept: long-term smart phone contact is easy to lead to the distortion of children's communication concept

Question 23 of the questionnaire investigated children's communication concepts, and the specific situation is shown in Figure 6. It can be seen that the proportion of children who choose to "look good" increases with the increase of mobile phone contact time. The reason may be that the more children contact mobile phones, the more they will be exposed to the view of "selfishness" in mobile media, so there is some deviation in the concept of making friends, In the online interview with parents, some parents also reflected the phenomenon that their children came home from school and said, "today, the teacher is so ugly without makeup"; Among the children who have been exposed to mobile phones for 2-8 hours a week, the proportion of children who choose "good grades" is above the average level of 24.5% of the overall sample. It can be said that appropriate smart phone contact will bring children good guidance in making friends.

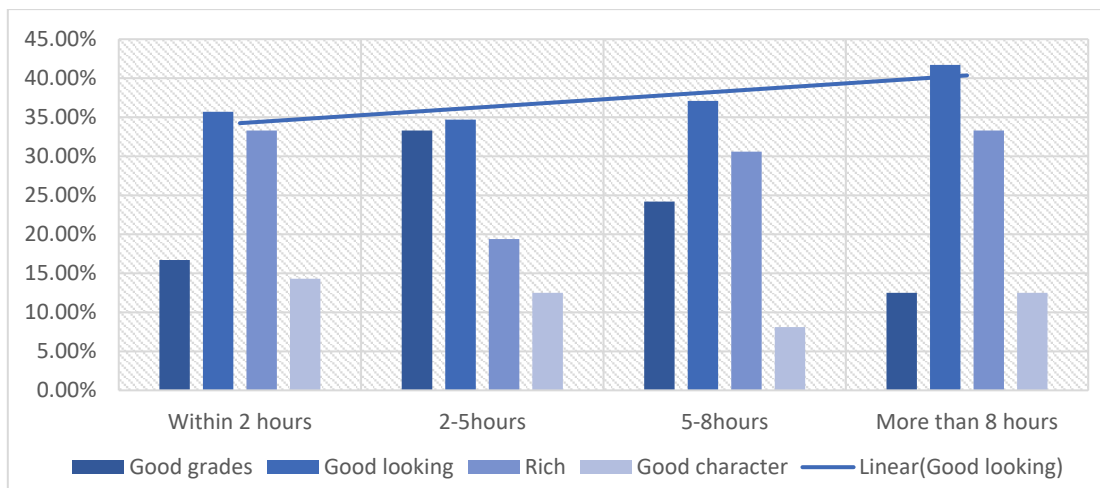


Figure 6: Distribution of the surveyed students' concept of surrender

3.3.4. Career ideal: appropriate smart phone contact helps children plan for the future

Question 20 of the questionnaire investigated the career ideal of children. Through data comparison, the distribution of children who choose "think, I have goals, and I am working hard" and children who "think, but it is difficult to achieve" shows a quasi normal distribution curve with the weekly smart phone contact duration as the abscissa, and the peak value is at the weekly smart phone contact duration of 5-8 hours, as shown in Figure 7. It can be said that mobile phone contact with an appropriate length of time will help children clarify their career ideals and enhance their confidence in realizing the future.

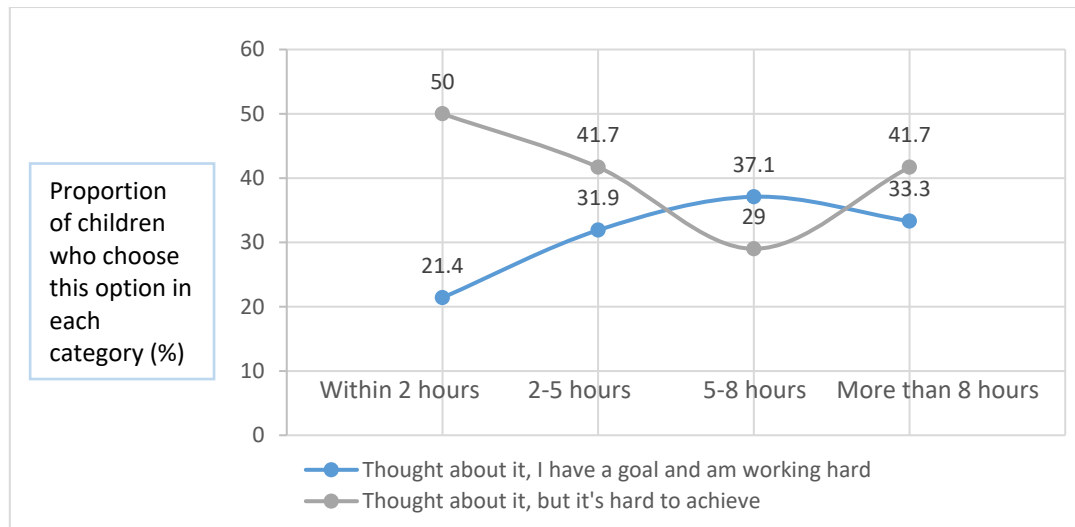


Figure 7: Distribution of media contact duration of career ideal options of surveyed students

4. Conclusion and discussion

This study takes 200 children from grade 3 to grade 6 of primary school as the survey object, combines children's socialization behavior with smart phone contact behavior, adopts the method of questionnaire survey, and uses SPSS data analysis software to analyze children's media behavior and several dimensions of socialization. The results are as follows:

The study found that, first of all, children's media literacy in using smart phones is generally not high, which is specifically manifested in immature content discrimination, purpose selection, and one-sided entertainment tendency, which also hinders the expansion of their horizons and the improvement of media literacy. Secondly, there is a certain correlation between children's smart phone contact time and socialization. Moderate contact with smart phones is conducive to children's cultivation of calm personality, and excessive contact is easy to cause children's personality to be withdrawn. Moderate contact with smart phones is conducive to children's establishment of self-confidence, and excessive contact will have a negative effect. Excessive contact with smart phones is easy to lead children to develop bad habits, and even endanger children's health.

Although the media information in mobile phones enhances children's multiple perceptions of the real society, it can make them understand how the subsystems of the whole society work together, and have a better grasp of the changes in the external environment. However, to a certain extent, it hinders the communication between children and some members of the first group, which is not conducive to the formation of an objective and comprehensive "me in the mirror", and may lead to the deviation of children's self cognition. At the same time, children indiscriminately accept all kinds of entertaining, vulgar and superficial information. Long-term contact is easy to make children addicted, and it is difficult to obtain the deep spiritual satisfaction brought by deep reading and learning, which is not conducive to children's mental health development.

To sum up, we need to rationally and dialectically view the impact of smart phone use on children's socialization, and help children use mobile phones correctly by guiding rather than completely stopping them, so as to help children form a correct view of media. This paper focuses on the healthy development of children and follows the law of media, and puts forward the following strategic suggestions from five aspects: family, school, society, government, media and so on:

4.1. Parents' reasonable discipline and active care

Family is the most important place for children to grow up and the most important source of children's mobile phone contact. Therefore, from the perspective of family, it is crucial to analyze methods and take actions to avoid the negative impact of smart phone use on children's socialization.

First of all, parents should impose reasonable restrictions on the length of time children have access to smartphones. Children are in the critical period of socialization, and the development of self-control ability is not perfect, so the external force restriction from the family is indispensable. Secondly, parents

should take the initiative to care for children's physical and mental health. Children want to get psychological and spiritual satisfaction through mobile phones. In addition to the temptation of the online world, a large part of the reason is that children's psychological demands are not satisfied in real social interactions. This requires parents to take the initiative to care about children's psychological status, provide necessary guidance to children, interact with children, and promote children's mental health development. Parents should set an example, improve media literacy, refuse to indulge in mobile phones, and create a good family information environment for children.

4.2. Teachers' self-improvement and quality education

School is not only an important place for children to learn knowledge, but also an important way for children to learn how to integrate into society. In the new media era, everyone can speak, and children in school also need to learn to identify the credibility of information in the network, that is, to improve media literacy.

First of all, we should strengthen the media literacy of serving teachers. Teachers are an important source for children to acquire knowledge. Only under the correct guidance of teachers can children know how to use various media correctly and reasonably, and actively participate in social activities beneficial to their own development. Secondly, teachers should improve their sense of responsibility to students. Teachers, especially class teachers, should often pay attention to children's learning and living conditions, children's media contact behavior, and children's socialization progress. Finally, media literacy education should be integrated into educational practice. Through systematic learning in school, children can improve their ability to judge and use the media, better use the media to express their ideas correctly, and give full play to their enthusiasm to participate in the production of media products. Therefore, it is also very necessary to change the existing educational concept, change the teaching concept that blindly pays attention to grades, change the way of cramming teaching, change the teaching mode that takes "teaching" as the center, and pay attention to the psychological needs of students; Make use of natural, labor, science and other curriculum resources, carry out rich and colorful teaching activities, mobilize students' learning initiative, enable students to master knowledge and enhance their ability in hands-on, observation and practice, and cultivate students with diverse growth.

4.3. Social environment creation and public welfare services

Society is the place where children's socialization is ultimately integrated. In short, the process of socialization is to enable children to develop themselves and integrate into society. The whole society's attention to the socialization of children also reflects the society's concern for future development, which is progressive and forward-looking. First, all sectors of society should work together to create a safe and healthy network environment.

In addition, various social welfare organizations can set up network information consultation function. Children may have pressure in the face of parents and teachers, resulting in many inner thoughts nowhere to talk. And network consultation opens a door to open their hearts for children, which can relieve psychological pressure and promote mental health development without completely paralyzing themselves through the network.

4.4. Government system optimization and information supervision

The government is a subsystem of the whole social system, which regulates the writing operation of other subsystems by issuing relevant regulations or legislation. Information system is also a social subsystem, which interacts with other subsystems and operates in the overall social system. To avoid the negative impact of smart phone contact on children's socialization, it is necessary to manage the information that children are exposed to, and the role of the government is very critical.

First of all, we should speed up the construction of a grading system to purify the information environment. Locate and grade the program content, and set a reasonable broadcast time to reduce the physical and mental pollution and injury of some bad TV programs to children. Secondly, strengthen the punishment of bad culture and purify the cultural environment. Network culture is an online public behavior that has formed a certain scale and produced a certain atmosphere. With its scale as its advantage, it is very easy to have an impact and influence on children. Therefore, we need to strictly rectify some bad network culture and strengthen the punishment of bad culture. Finally, strengthen the supervision of media behavior and improve the quality of information. The government needs to strengthen the

supervision of media behavior, standardize media behavior, and pay attention to content review and language inspection in children oriented content, so as to create a good and healthy information environment for children's social development.

4.5. Media self-regulation and content classification

Due to young age and limited experience, children are prone to have a wrong understanding of media content. The bad values presented by the media can easily affect children's value judgments, and even lead to the formation of distorted world outlook, outlook on life and values. Therefore, our media, especially some we media people on mobile media, should pay more attention to "self-control" when producing information.

First of all, the media should promote the correct value orientation. Good works should not only be market-oriented. A really good work should publicize the correct value orientation and put social benefits first. Secondly, the media should strengthen the classification and positioning of programs in content production. The fine positioning of the media is not only conducive to quickly and efficiently seizing market resources and obtaining economic benefits, but also conducive to protecting the physical and mental health of teenagers and obtaining good social benefits. [4] In addition, we media workers should also pay attention to the user analysis of their followers at any time, and should mark them in the content. These classifications and labels are not only conducive to children's identification when receiving content, but also convenient for parents to accompany children in time when children receive some restricted content, and also convenient for the construction and implementation of the content classification system.

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