学位論文要約

A Study on Children's Media Use and School Adjustment During the Transition from Preschool to Primary School in China

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Chapter 1　Introduction

As Chapter 1,this chapter states the necessity and feasibility of the current study. It provides the objectives, problem statement, hypotheses, as well as the definitions of terms.The purpose and significance of the study in relation to previous research is stated, and specific research objectives were carried out. The chapter concludes with key terms and definitions that are used in the following chapters.

With the development of information technology in modern society, various media have become an indispensable part of children's life.The aim of this study is to examine multidimensional relations between children's media use and school adjustment to understand the relative contributions of children's media use in predicting school adjustment during the transition from preschool to primary school in China context to fill the gap in terms of media use and school adjustment and gain knowledge of successful adjustment under a media environment.

The issue of children's transition from preschool to school and the coordination and cooperation between these different school settings has been arouse continuous attention on both national (The Guidance of ECE,2001,Ministry of education;Outline for the Development of Children in China (2011-2020),2011) and international political agendas (OECD, 2006,2017). Discussions are often based on perceptions that children's transitions are important (of great significance to the subsequent school years and life event of young children, especially for children's personality plasticity, behavioral development, future interests and academic achievement (Helen,C.H,Carida,2011; Rous & Hallam,2006; Ramey,1998;Lazzari,1991) and problematic (for example,can't gain peer acceptance (Deng,Luo,Lin,Xie, 2016;Li,2012;). Or,avoid school and can't adjust to a learning state after entering primary school from preschool, cannot shift their focus from playing to learning activities, or they cannot concentrate in the class (Li,2012)), therefore must be handled carefully,calling for more research that examines predictors of school adjustment when children transit to school. Children are currently in an intricate media environment which provides a picture of possibility that links their development and school adjustment which as Figure 1 shows below, thus further research is needed to explore relations and the effects of various media on their school adjustment during this transitional period.
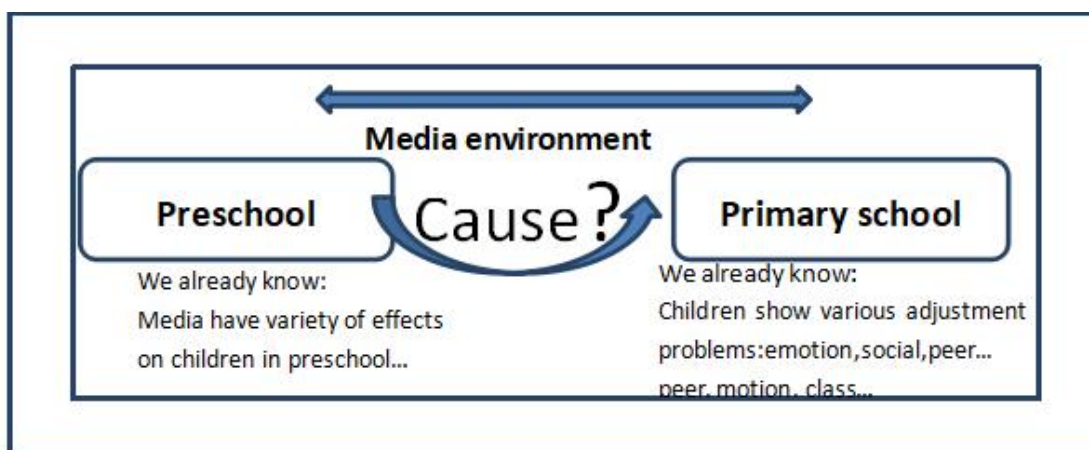
Figure 1. Hypothesis of children's early school transition in media environment

Based on the previous studies and practice,key research questions were put forward as follows:

1. Does children's media use correlate with school adjustment when transit from preschool to primary school?

2. What is the effect of children's media use on school adjustment when transit from preschool to primary school?

3. How might media act as an exacerbating (make things worse) or protective (make things better) factor for young children when transit from preschool to primary school?

4. What are the motivations for children to use the media when transit from preschool to primary school?

Specifically,the objectives were set out to:

1. To examine the correlation of children's media use on school adjustment when transit to primary school.

2.To investigate the effects of children's media use on school adjustment when transit to primary school.

3.To explore the motivations of media use in children when transit from preschool to primary school.

And hypotheses were carried out below:

1. There will be a correlation between the amount of time in children's media use and school adjustment.

2. There will be different degrees of correlation with school adjustment when the different media are used by children.

3. There will be different degrees of relevance to school adjustment when children expose to different media contents.

4. There will be different degrees of relevance to school adjustment when children have different motivations for using the same media.

In Chapter 2, I review the literature of school adjustment relevant to this study. The literature review includes the definition, measurements,school adjustment outcomes and influencing factors on this topic.

In Chapter 3, I review the historical context and current situation of children's transition from preschool to primary school, as well as, a diverse range of perspectives on this issue organized by researchers at China and abroad.

In Chapter 4, I review and summarize the definition, historical development and features of media and the research trends of children's media use. As well as the characteristics of children aged 5-6 years,the subjectivity of children and the relationship between media use and school adjustment. This chapter states the various influences of the media on children,it provides the research foundation and support for the study on the relationship between children's media use and school adjustment in the following chapters. These themes formed a strong theoretical basis and practical instruction for the need to investigate children and their school adjustment during the transition from preschool to primary school. Bronfenbrenner's ecological framework,as well as uses and gratifications theory,and how they related to the study, were discussed.

Chapter 5   RESEARCH 1

This section includes the purpose of the RESEARCH 1,research questions,methodological approach,selection of participants,procedures,data collection and data analysis,and the summary.

In this quantitative study, I used purposeful sampling under natural environment nationwide. There were 102,488,000 school-age children enrolled in primary schools in 2019 in China (Ministry of Education,2019)[1].Considering the significant differences in economic levels in different regions of China and the differences in children groups, such as exceptional children,left-behind children,sample size formula was adopted with a 90% confidence level,0.5 standard deviation, and a margin of error (confidence interval) of +/- 7%. The survey was conducted in two phases. The first time to collect data from 172 families in preschool in April 2019, and the second time to collect data after the 172 children entered the first grade of primary school in March 2020. The findings are based on results

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[1] Net Enrolment Ratio of School-age Children in Primary Schools,Ministry of Education,http://www.moe.gov.cn/s78/A03/moe_560/jytjsj_2019/qg/202006/t20200611_464792.html

from the survey of 172 families with children aged 5-6 as well as their teachers in April 2019 and March 2020 (The enrollment time of primary /elementary school in China is September each year) . One hundred and seventy-two families with children between 5 and 6 years of age participated in this study (48.8% male, 51.2% female) along with their parents and teachers. They were recruited to take part in a questionnaire regarding media use,children's social behavior and the relationship with teachers.

In the total sample, 51.2% were boys and 48.8% were girls (N=172,boys=84,girls=88). The distribution of subjects were shown as Table 1 below.

Table 1   The distribution of subjects (N=172)

Item	Sample group	n	%
Gender	Female	88	51.2%
	Male	84	48.8%
Only child	Yes	52	30.2%
	No	120	69.8%
Annual household income	1.Less than 100,000 CNY (less than 1,500,000 JPY)	18	10.5%
	2.100,000—200,000 CNY (1,500,000yen-3,025,000JPY)	41	23.8%
	3.200,000—300,000 CNY (3,025,000yen-4,530,000JPY)	29	16.9%
	4.300,000—400,000 CNY (4,530,000-6,000,000JPY)	25	14.5%
	5.400,000—500,000 CNY (6,000,000-7,500,000 JPY)	25	14.5%
	6.Above 500,000CNY (Above 7,500,00 JPY)	34	19.8%
Maternal education level	1.Junior high school or below	15	8.7%
	2.High school or technical secondary	47	27.3%
	3.Higher vocational college degree	59	34.3%
	4.Bachelor degree	48	27.9%
	5.Master degree or above	3	1.7%
Paternal education level	1.Junior high school or below	17	9.9%
	2.High school or technical secondary	51	29.7%
	3.Higher vocational college degree	47	27.3%
	4.Bachelor degree	50	29.1%
	5.Master degree or above	7	4.1%

Maternal employment status	1.Leaders of public institutions or administrative organs	4	2.3%
	2. Enterprise manager	24	14%
	3.Private entrepreneur	29	16.9%
	4.Professional scientific and technical personnel(teachers,engineers...)	23	13.4%
	5.Clerical staff or General civil servants	29	16.9%
	6.Individually-owned business	63	36.6%
Paternal employment status	1.Leaders of public institutions or administrative organs	4	2.3%
	2. Enterprise manager	33	19.2%
	3.Private entrepreneur	36	20.9%
	4.Professional scientific and technical personnel(teachers,engineers...)	29	16.9%
	5.Clerical staff or General civil servants	11	6.4%
	6.Individually-owned business	59	34.3%

How data for each research question were analyzed has been summarized in Table 2.

Table 2   Research Objective and Data Analysis Technique

| Research Question	Data Analysis Technique
1. Do children's media use correlate with school adjustment when transit from preschool to primary school?	Spearman's Rho Correlation Test
2. How might media act as an exacerbating (make things worse) or protective (make things better) factor for young children when transit from preschool to primary school?	Independent t-test One-way ANOVA test Levene's Test
3. What is the effect of children's media use on school adjustment when transit from preschool to primary school?	Regression analysis
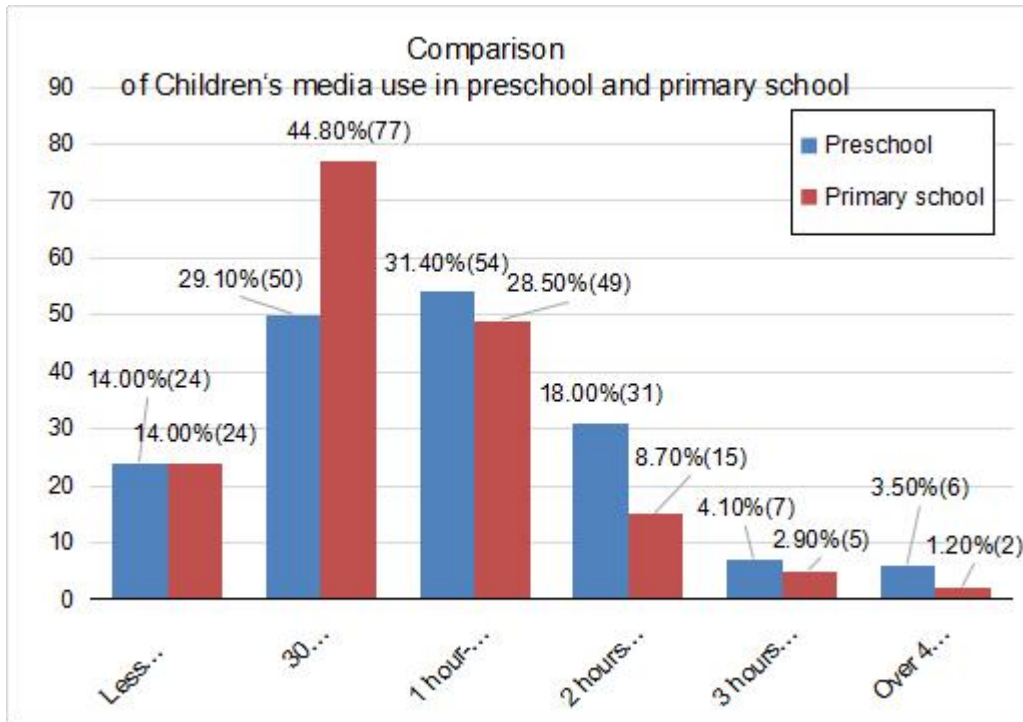
Figure 3: Comparison of children's media use in preschool and primary school

Children spent an average of 2.8 hours a day using media in preschool (M=2.8,SD=1.214) ,while when they entered into the first grade of primary school (M=2.45,SD=1.011), the average time spent on media use is 2.45 hours per day. After children entered primary school, the proportion of using media for more than one hour showed a downward trend.However, the proportion within one hour exceeded that of the preschool.

Table 3   Results From Regression Analysis Showing Predictors of School Adjustment After Entered Primary School

Regression Block	R2	△R2	F	△F	p	β	t	p
Block 1: Sociodemographic characteristics	.004	-.002	.737	.737	.392			
Gender						.066	.858	.392
Block 2: Children's media use control	.097	.065 **	2.969	3.405	.009			
The amount of time spent on media						-.287**	-3.912	.000
Media content						-.215**	-2.870	.005
The amount of time spent on media (preschool experience)						-.243**	-4.639	.000
Media content (preschool experience)						-.293	-1.422	.157
Block 3:Family background	.143	.078*	2.202	1.393	.014			
Only one child						.136	1.722	.087
SES						.156	1.649	.101
Maternal education level						.204**	2.747	.007
Paternal education level						-.011	-.087	.931
Maternal employment status						.045	.564	.573
Paternal employment status						-.038	-.452	652
The amount of time parents spent on media						-.053	-.656	.513

Note: Standardized betas from the final model.
*p < .05. **p < .01.

Table 3 shows children's media use experience in preschool has a significant predictive effect on school adjustment, especially the amount of time they spent on media use time in preschool (Bata=-.287,t=-3.912, P=.000), and also after entering primary school (Bata =-.243, t =-4.633) P=.000) , as well as the content of media use (Bata=-.215,t=-2.870, P=.005).

Summary of findings:

1.The total amount of time children spent on media shows a significant negative correlation with teacher adjustment (t=-.179,P<0.01),social adjustment (t=-.157,P<0.01) ,emotional adjustment (t=-.195,P<0.01), achievement motivation (t=-.273,P<0.05) and peer adjustment (t=-.309,P<0.01).

2.T-test was performed for the gender and grade difference on the amount of time children spent on media.There is no significant differences in the amount of time in media use between children of different gender when they enter primary school (boys=2.54h, girls=2.38h). Regarding the grade,P value is 0.005,which is less than .05,there shows a significant difference on the amount of time children spent on media when the in preschool and primary school respectively.

3.Among the media surveyed, children are most exposed to mobile phones(M=1.85,SD=0.849), followed by televisions (M=1.35,SD=0.883),tablets (M=0.26,SD=2.236), computers(M=-.07,SD=2.381) and video game machines (M=-.14,SD=1.614). From the standard deviation, the smallest is the mobile phone, which is 0.849, the mobile phone is the one with the

smallest difference among the subjects.

4.In terms of content selection of TV programs, children in preschool and first grade of primary school show a significant grade differences.The TV programs are : TV series,variety show,music show and children's program. After children enter primary school, the average value of variety shows and music shows show a downward trend, while the average value of TV series and children's programs increases.

5.There is a significant gender difference among children in TV series,movies,variety shows and military programs.Boys scored higher than girls in movies(M_b=.33, M_g=.20) and military programs (M_b=.07,M_g=.00), while girls scored higher than boys in TV series (M_b=.17,M_g=.29) and variety shows (M_b=.26,M_g=.36)

6.The frequency and time period of children watching TV are not correlated with school adjustment but the amount of time.

7.There is a significant correlation between children's preference for TV programs and school adjustment to different degrees.Specifically,children's preference for TV programs has the highest correlation with peer adjustment (t=-.234,$P<0.01$), and the correlation with emotional adjustment is the lowest   (t=0.020,$P>0.05$).

8.In terms of mobile phone use,When mobile phones were used only as basic communication tools, they showed no correlation with school adjustment,which is consistent with the results of using mobile phones to surf the internet.However, when using mobile phones to play games, there was a significant negative correlation with school adjustment,the strongest correlation was the achievement motivation   (t=-.267,$P<0.05$),   social   adjustment   (t=-.217,$P<0.05$),   peer   adjustment (t=-.201,$P<0.05$) ,teacher adjustment (t=-.156,$P<0.05$) and emotion adjustment (t=-.140,$P<0.01$) follow close behind. The average value of mobile phone as a learning tool is the highest among children before school and when they enter primary school.When mobile phones were used as learning   tools,   there   was   a   significant   positive   correlation   with   peer   adjustment (t=.157,$P<0.01$) .However, there is a significant negative correlation between it and teacher adjustment (t=.157,$P<0.01$) .

9.Of the negative effects given regarding parents' attitudes towards the negative effects of computers   on   children,the   average   value   of   impaired   vision   was   the   highest (M_{pre}=1.03,M_{pri}=0.8) ,and there is clearly a large discrepancy between whether parents think the computer makes their children social or unsocial.

10.SES is not significantly related to the amount of time children spent on media (t=.023,$P>0.05$) , but the amount of time children spent on media is significantly related to the maternal education level (t=.209,$P<0.01$) and paternal education level (t=.187,$P<0.05$) .

11. In the preschool stage, whether the child is the only child is significantly related to the amount of time spent on media (t=-.260,P<0.01), but it is not relevant when the child enters primary school (t=-.018,P=.816>0.05).

12. There was a significant positive correlation between parents' total media use time and children's media use time both in preschool (t=.286, P<0.01) and primary school (t=.303,P<0.01).

13. The total amount of time children spent on media could predict school adjustment.Specifically,it is a predictor of teacher adjustment(β =-.178, R2=.033,P=0.001),social adjustment (β =-.153,R2=.049,P=0.004), emotional adjustment(β =-.193,R2=.040,P＝0.000) ,and peer adjustment (β =-.162, R2=.46,P＝0.003). Secondly,types of media used by children was not a predictor of school adjustment,because all of their p-values are greater than the common alpha level of 0.05 that accept the null hypothesis,it suggests that there is no statistically significant between types of media used by children and school adjustment.Thirdly, children's viewing of media content predicts school adjustment to varying degrees. It has predictive effect on teacher adjustment(β =-.128, R2=.033,P＝0.003),social adjustment (β =-.155, R2=.049,P＝0.005), peer adjustment (β =-.125, R2=.046,P＝0.005), but does not have statistical significance on emotional adjustment (β =-.050,R2=.040,P＝0.345＞.05) and achievement motivation (β =.063,R2=.005,P＝0.451＞.05) .

14. Children's media use experience in preschool has a significant predictive effect on school adjustment, especially the amount of time they spent on media use time in preschool (Bata=-.287,t=-3.912, P=.000), and also after entering primary school (Bata =-.243, t =-4.633) P=.000) , as well as the content of media (Bata=-.215,t=-2.870, P=.005). By contrast, the amount of time children spent on media when they in preschool has a more negative predictive effect on school adjustment.

15. The maternal education level not only related to the amount of time children spent on media both in preschool (t = .189, P < 0.05) and primary school (t = .209, p < 0.01), but also maternal education level (Bata = .204, t = 2.747, p = .007) has a significant positive predictive effect on children's school adjustment in this early transitional period.

Chapter 6   RESEARCH 2

This chapter based on the findings of RESEARCH 1,20 children were interviewed among the 172 families.

The semi-structured Interview investigated the following main research questions:

(1)What type of TV show do you like most? why?

(2)How did your preferences for media(Mobile phone,tablet,computer,...) change from kindergarten to primary school and why?

(3)What are you usually do when use media ?(Mobile phone,tablet,computer,...)

In Summary,the data presented in this chapter bring children's media needs into the discussion of children's transition to school. Due to individual differences and environmental differences, children have different needs for different media.There are 5 main motivations for children to access to various media in this early transitional period. They are entertainment needs,escapism (belongingness), social needs (social interaction),self-learning needs (information seeking) and self-realization needs. At the same time, children's media needs are also affected by age and gender factors.What is particularly outstanding is that after children entering primary school, the use of media to gain peer acceptance is prominent, which confirms the importance of children's peer relationship at this stage.Children use media as a tool or topic to communicate with peers or to company friends,or even to seek new connections with new peers. In children's middle childhood period,different media use among children can contribute to the forming of the self identity and promote the formation of peer groups.

Chapter 7 Discussion

In the last chapter,based on the findings of RESEARCH 1and RESEARCH 2,the relations between school adjustment and children's media use in terms of the gender difference,establishment of peer relationship in children's early transitional stage, parents' media use behavior, Chinese parents' parenting style and concept, and family background, such as SES and parents' educational level,and children's media use experience   in preschool(the amount of time children spent on media and the contents children expose to) were interpreted. limitation and recommendations also were discussed.The biggest limitation of this study is the insufficient sample size, so it is necessary to focus on the sample size nationwide and scales in future research.

This study broadens our understanding of predictors of children's successful adjustment to school. Consistent with Rimm-Kaufman and Pianta's (2000,2005) ecological perspective on the transition to primary school, the transition to school occurs in a social context and reflects both children and their family and school experiences in the transition ecology. Children's adjustment to school needs to be understood in terms of the interaction between the environmental processes and children individuals. The present findings highlight the need to support children's adjustment to primary school through transition practices that relate to the joint efforts of family and school in the media environment.

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