

Effects of media use on children's school adjustment in the transition from preschool to primary school

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Abstract

This study investigates whether children's media use affects their school adjustment across the transition to primary school. Participants were 250 families from the first year of primary school. (N=250, 121 girls, 129 boys) correlation analysis, "T" test and exploratory factor analysis were performed in this study. Results show a significant difference between children's media use and school adjustment. 5 factors were extracted from school adjustment scales. In children's media use, The length of time on children's media and emotional adjustment ($t = -.323, P < 0.01$), teacher-child relationship adjustment ($t = -.177, P < 0.01$), peer adjustment ($t = -.159, P < 0.01$) and social adjustment ($t = -.213, P < 0.01$) showed a significant negative correlation regarding the school adjustment, which has the greatest impact on emotional adjustment and teacher-child relationship adjustment. Meanwhile, gender difference on the choice of TV programs is found in this study, different TV program types are significantly related to peer adjustment, social adjustment and achievement motivation.

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Keywords:

Media use;
School adjustment;
Transition from preschool to primary school.

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1. Introduction

Smooth preschool-primary school transition is of great significance to the life event and process of young children, especially for children's personality plasticity, behavioral development, and academic achievement (Lazzari, 1991; Helen, C.H., Carida, 2011; Rous & Hallam, 2006). Fletcher's research proves that children who accept younger transitions will obtain a smoothly transition between the educational stages, and will soon be able to adapt to the teaching methods and rules and regulations of primary schools, and their academic performance will increase rapidly (Fletcher, 1997; Ramey, S. L. & Ramey, C. T., 1994). By using the cases to illustrate that transition experiences would last a long time and would have an impacts on children's future interests, developments and achievements (Ramey, 1998). Numerous studies have stressed the relational concepts of children's transition to primary school and development, as well as proved that they have mutual effects on each other (Thorpe, & Tayler, 2005; Ramey & Ramey, 1998; Meisels, 1996; Graue, 2006).

However, preschool transition is theorized to be studied in an ecological perspective, considering children's environments, schools, surroundings and community resources into a net of relationships with changing interactions (Bronfenbrenner, 1979; Rimm-Kaufman & Pianta, 2000). The first years of school predict later school success. (Alexander & Entwisle, 1988) which implies that the early transition is a period when a comprehensive and developing system (e.g., a child and his or her social and physical environment) is open to new influences (Pianta & Walsh, 1996; Rimm-Kaufman, 2000). Influences of the environment on children's play behaviors and development have been stated theoretically and empirically (Lewin, K., 1931; Vygotsky, 1967; Piaget, 1962; Wachs, T.D., & Chart, A., 1985; Rosalind, Charlesworth & Craig

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H.Hart...el,1993), thus minor adjustments in the trajectory of development in this period may have disproportionate effects on the direction of the child's school career. For this reason, the factors that affect this trajectory warrant considerable attention(Rimm-Kaufman,2000).

Children face many adjustments when entering to primary school from preschool.Their success in overcoming the challenges in peer relationships,classrooms,teachers,academic performance,school rules and procedures predict school success (Birch,S.&Ladd, G.,1997;Lakhani, P.K., Jain, K., & Chandel, P.K.,2017;Margetts, K.2009). Adjustment refers to the ability to adjust and accommodate to changing and often unpredictable physical, interpersonal, cultural, and task environments. Students' school adjustment is the process of adapting to the role of being a student and to various aspects of the school environment. It is not only related to a child's progress and achievement, but also their attitudes towards school, anxieties, loneliness, social support and academic motivation (Cronback,L.J,1989;Kathryn R. Wentzel & Deborah E. Watkins,2002;Wentzel,K.R.1999). Researches defined the school adjustment as "The degree to which children become interested,engaged,The literature on children's school adjustment to the first year of schooling stresses various individual and objective environmental factors,the former focuses on the individual differences in children and the latter pays emphasis on the family,community and school environment.Regarding the differences in children,importance has been attributed to his/her psychological states,temperament and social behaviors,especially their social relationships with peers,teachers and parents (Morrison,2002,2006;Baker,2006;Karla Correia &Alexandra Marques-Pinto,2016; Liu 2004, 2005;Wang,2007;Dale.F.Hay&Chadwick,2004;Maudry,M.,&Nekula,M.1939;Pellegrini,A.D.,&Long,J.D.200 2;Rubin,K.H.,1998). Within the family environment variables,the literature refers to economical level,family structure,expectations,parenting style (Baumrind,1971;Grolnick, W. S., & Ryan, R. M.,1989; Chen,Dong & Zhou,1997;Sy, S. R. , & Schulenberg, J. E.,2003). Some evidences show that positive parenting is favorable to the positive behavioral outcomes(Darling&Steinberg,1993). The curriculum system,pedagogy,class size,personal qualities of teachers and parents' interaction with the school are related to children's educational achievements and social development(Perry, K. E., & Weinstein, R. S.,1998;Pianta, 1994;Pianta & Walsh, 1996;Pianta, R. C., & Harbers, K.,1996;Hamre&Pianta,2001). School adjustment is important as it is linked to future academic success and a decreased likelihood of dropping-out (Li, Lerner,&Lerner, 2010; Slaten, C., Ferguson, J., Allen, K., Brodrick, D., & Waters, L., 2016).

Children's media use in China

China is a late comer on the research on children's media access and use .Starting in the 1980s, which can be divided into two phases.The first stage was from the 1980s to the end of the 1990s. With the rapid spread of television nationwide, the influence of television on children has become a hot spot of concern for the whole society. In 1994, China's TV population coverage rate has reached 83.4%, and every 100 people have 25 TV sets, a average of 3-4 people in an urban household have one television, and the rural areas account for 4-5 people(CHINA RADIO AND TV YEARBOOK,1995;Song,1997). The main contents of this period are: 1. The type of TV program, the time and frequency of viewing, and the difference between TV media and print media (Buo Wei, 1991, Dream Circle, 1997). (2)The motivation of children's media use, parental involvement, etc (Wu Wei, 1993, 1996). (3) Research on the impact of television on children, including the impact on children's health, morality, psychology, development, gender roles, and social attitudes and behaviors(Yang Zidi, 1985, Bu Wei, 1994, 1997, 1999; Yuan Chunqing, 1995).

In the second stage, from the beginning of the 1990s and after entering the 21st century, the media ownership rate of urban families among children in China continued to rise. The TV penetration rate is 98.3%-98.9%, and the telephone penetration rate has reached more than 80% in 1998. The game machine ownership rate is about 47.3%-60%. Computers, VCDs and the internet are called new media. More than 20% of households have computers among urban children. Children in Beijing have a computer ownership rate of 42.4%(Liao,2005;Yuan,Long,Han,1999). Owing to the support of the National Social Science Research Fund and cooperation with other subject projects, the research on children's media has made a comprehensive breakthrough in two aspects. On one side, the scope of the study has expanded, which including children's media use in length of time, genre, frequency and individual differences. The other side,regarding the content, it involves from television to network, computers, game consoles, etc (Chen Shuo, 2009, Lin Pin, 2009, Zhang Xinqiu, 2010) .The mass media is characterized by its generalized dissemination,openness, diversity and entertainment, It has played an active role in promoting emotional regulation of children in rural areas (Zhang,2008), diversification of children's personality development, and self-determination of values (Wang Yan, 2001; Han Ying, 2007;) . However, Wang Gang also pointed out that the media mimetic environment is adultized, as well as the adultization of TV program content, misleading on the values of fame, fortune, money, and consumption, which has a negative impact on children's psychology(Wang,2008).

Despite such a multiplicity of studies on early transition and school adjustment, the past research reviewed so far have been devoted to examining the connections between the preschool and primary school. On the one hand, the importance between them have been emphasized and a bridge is established, on the other hand, there is still a gap between the theory and the practical explanations. In China currently, the research on this theme is scarce. Li Qi (2013) conducted a study on the children's media use and TV preferences in Shandong Province (aged from 0 ~12). In this study, the children displayed age differences in their TV viewing time, their motivation to watch TV shows, and their preferences for content and type. Therefore, this study aimed to contribute to knowledge about the adjustment process of children during the school transition, by investigating the effects of media use on children involved in the transition to school in China. Specifically, it sets out to explore: (1) the indicators of school adjustment as considered to be affected by the media use when children transit to primary school. (2) The school adjustment factors in the transition to primary school from the perspective of family and siblings which related to the environment of media use.

2. Research Method

2.1 Objectives

- 1. To study the correlation of children's media use on school adjustment when transit to primary school.
- 2. To study the effects of children's media use on school adjustment when transit to primary school.
- 3. To explore the differences in the impact of gender on children's media use on school adjustment.

2.2 Hypotheses

1. There will be a correlation between children's media use and school adjustment.
2. Different genres of children's media use have different effects on children's school adjustment and behavior.
3. Different contents of children's media use have different effects on children's school adjustment.
4. The gender difference of children is significant in media use and school adjustment.

2.3 Sample

A total of 250 parents of first graders in primary school (121 girls and 129 boys) participated in this study. All the samples were randomly selected from March to April 2019 in central and eastern China.

2.4 Research Tools

General media use questionnaire (which contains 20 questions for children and family) and parent-child rating scale (10 items), teacher-child rating scale (12 items) and social behavior scale (34 items) are adopted in this study.

2.4.1 General media use questionnaire

General media use questionnaire was used to measure the length of time, genre, frequency, content, etc. of the media used by children and parents. It contained 20 questions.

2.4.2 Adjustment Inventory of School Children

For this study, Adjustment Inventory contained 56 questions with various areas such as parent-child relationship, teacher-child relationship, peer relationship, emotional regulation and social behavior. All the scales were estimated using Cronbach's alpha coefficient method. The resulting internal consistency reliability coefficients were .736 for 10 parent-child relationship items, and .854 for 12 teacher-child relationship items and .941 for the 34 social behavior and skills items.

2.5 Procedure

According to the literature and the contents of this study, 45 respondents were selected for prediction on this questionnaire on December 2018, in Xiamen, Fujian Province. After the data was collected, with adjustment and revision, and a formal questionnaire was formed.

Data were gathered from 250 families with 1st grade children in different cities during March to April 2019 in central and eastern China.

The results were analyzed using SPSS 23.

2.6 Statistical Analysis

To analyze the data, correlation, "t" test and exploratory factor analysis were used.

3. Results and Analysis

The section below present and discuss the findings from the quantitative data analysis.

Table 1 KMO and Bartlett's Testa

KMO and Bartlett's Testa

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.908
Bartlett's Test of Sphericity	Approx. Chi-Square	9004.920
	df	1653
	Sig.	.000

Five factors were extracted from the exploratory factor analysis(KMO=.908,P=.000<0.01). They are: (1) peer adjustment; (2) Teacher-child relationship adjustment; (3) emotional adjustment; (4) social adjustment; (5) Achievement motivation

(1) peer adjustment

Peer relations play a fundamental role in the socialization process as communicative competencies and basically only be acquired by experiencing and participating in various social environments and situations(Ivar Fronnes,1989). According to Bukowski's suggest, friendship not only provides a sense of self-value and personal validation,serves a protective function,but also facilitates learning and develops new skills (Bukowski, W. M.& Hoza, B.,1989),and shapes development through shared cultures.the quality of friendship in childhood has a profound effects on the psychological states like self-worth and even extended to the adulthood (Rachel Maunder& Claire P. Monks,2018;Tu, Erath, & Flanagan, 2012; Sabongui, A. G., Bukowski, W. M., & Newcomb, A. F., 1998; Bagwell, Schmidt,Newcomb, & Bukowski, 2001;Maunder, Rachel & Monks, Claire.,2018;Raboteg-Savic & Sakic, 2014;Sakyi, K.S., Surkan, P.J., Fombonne, E. et al.,2015). Peer relations are associated with school adjustment (Gifford-Smith & Brownell,2003;King, 2015; Ladd, 1990). Peer acceptance predicts school liking and engagement while failed in peer adjustment can lead to lower school performance and participation.(Betts, Rotenberg, Trueman, & Stiller, 2012;Boulton, Don, & Boulton, 2011;Bagwell et al., 1998;Furrer & Skinner, 2003).

(2) Teacher-child relationship adjustment

Teacher-child relationships have been shown to correlate with school adjustment such as academic performance(Ariana Pavelka ,2016) . Sondra H.Birch (1997) points out that dependency in the teacher-child relationship emerged as a strong correlate of school adjustment difficulties for young children, including poorer academic performance, more negative school attitudes, and less positive engagement with the school environment.several researchers have sought to extend the school adjustment measuring variables like relational factors rather than the acquisition of cognitive skills (Christopher Murray&Kelly M. Murray,2008).

(3) emotional adjustment

Emotional development is essential for children to make them able to adjust in the solutions of conflict, stress and various problems (Meenakshi Sharma,2016). Research has indicated that young children who are emotionally well adjusted have a significantly greater chance of early school success, while children who experience serious emotional difficulty face grave risks of early school difficulty (Wentzel & Asher, 1995;McClelland et al., 2000). And also, for many children, academic achievement in their first few years of schooling appears to be supported by a fairly foundation of children's emotional and social skills (Ladd, Kochenderfer, & Coleman, 1997; O'Neil et al., 1997).

(4) social adjustment

Mohammad Reza Tamannaefar (2014) pointed out that social adjustment refers to an individuals adaptation in social relationships with other people, both inside and outside of school, as reflected in the individual's attitudes and behaviour. Meanwhile,some research indicates that social adjustment is the prerequisite to the other aspects of adjustment for a person living in a human society where a set of values and expectations paradigm is rooted in (Mazaheri, Baghiyan, & Fatehizadeh, 2006). It is acquired through the relationship with children's parents, teachers, peers or strangers to establish positive and satisfactory connections. it related to problem-solving, decision-making and behavior control when interact with him/herself and others (Hartup & Rubin, 2013;(Mcintyre, 2003;Doroudiyan,2011;Khankhani Zadeh and Bagheri, 2012).

(5) Achievement motivation

Motivation refers to the dynamics of our behavior, which involves our needs, desires, and ambitions in life. Achievement motivation consists of a varied and complex set of assumptions, assessments, predictions, inferences, values, standards, and affective reactions that may be irrational, inaccurate, and contradictory (Dweck & Elliott, 1983). It is based on satisfying the needs through different means by individuals, and are driven to succeed for varying reasons both internal and external (Harackiewicz, Barron, Carter, Lehto, & Elliot, 1997; Eccles, 1994; Meece et al., 1990; Wigfield & Eccles, 1992). There is a positive correlation between achievement motivation and academic performance, which has been documented in previous studies (Walberg & Uguroglu, 1979; Cattell, R.B., Sealy, A.P. & Sweeney, A.B., 1966).

Hypothesis Test**H1 1. There will be a correlation between children's media use and school adjustment**

Measure	1	2	3	4	5	6	N	Mean	SD
1. Peer adjustment	1	.448**	.714**	.626**	.088**	-.159**	250	27.24	3.6
2. Teacher-child relationship adjustment	.448**	1	.535**	.406**	0.103**	-.177**	250	45.76	7.2
3. Emotion adjustment	.714**	.535**	1	.638**	.263**	-.323**	250	40.11	5.3
4. Social adjustment	.626**	.406**	.638**	1	.071**	-.213**	250	20.4	3.5
5. Achievement motivation	.088**	.103**	.204**	.341**	1	.137**	250	17.14	4.4
6. The time of children's media use	-.159*	-.177**	-.323**	-.213**	.137*	1	250	2.36	0.918

notes: **p < .01; *p < .05

Pearson's correlation coefficient was used for testing the hypotheses stated in the current study and this part mainly summarized the correlation between the concerned variables. All "r" values were significant at 0.01 or 0.05 level of significance. It means these variables are related significantly. There is correlation among these variables like children's media use and peer adjustment, teacher-child relationship adjustment, emotional adjustment, social adjustment and achievement motivation. The length of time on children's media and emotional adjustment (t = -.323, P < 0.01), teacher-child relationship adjustment (t = -.177, P < 0.01), peer adjustment (t = -.159, P < 0.01) and social adjustment (t = -.213, P < 0.01) showed a significant negative correlation. Except that, there is a correlation between media use and achievement motivation (t = .137, P < 0.01), to some extent, like obtain good academic performance or realize the staged learning goals.

Table 3 Participant characteristics (N=250)

	n	%	p -value
Sex			0.072
Female	121	48.4	
Male	129	51.6	
One child			0.273
Yes	76	30.4	
No	174	69.6	
Annual household income			0.853
1.Less than 50,000 RMB	24	9.6	
2.50,000—100,000 RMB	60	24	
3.100,000—150,000 RMB	37	14.8	
4.150,000—200,000 RMB	38	15.2	
5.200,000—300,000 RMB	37	14.8	
6.Above 300,000 RMB	54	21.6	
Maternal education level			0.087
1.Junior high school or below	24	9.6	
2.High school or technical secondary	67	26.8	
3.Higher vocational college degree	84	33.6	
4.Bachelor degree	70	28	
5.Master degree or above	5	2	
Paternal education level			0.088
1.Junior high school or below	22	8.8	
2.High school or technical secondary	73	29.2	
3.Higher vocational college degree	65	26	
4.Bachelor degree	82	32.8	
5.Master degree or above	8	3.2	
Maternal employment status			0.136
1.Leaders of public institutions	3	1.2	
2.Enterprise manager	33	13.2	
3.Private entrepreneur	48	19.2	
4.Professional scientific and	31	12.4	
5.Clerical staff or General civil	43	17.2	
6.Individually-owned business	92	36.8	
Paternal employment status			0.742

1. Leaders of public institutions or administrative	7	2.8	
2. Enterprise manager	49	19.6	
3. Private entrepreneur	62	24.8	
4. Professional scientific and technical	38	15.2	
5. Clerical staff or General civil servants	16	6.4	
6. Individually-owned business	78	31.2	
Parental average spending time of Using media			
1. 0	1	0.4	0.000
2. Less than 30 minutes	15	6	
3. 30min—60min	41	16.4	
4. 1 hour—2 hours	48	19.2	
5. 2 hours—3 hours	42	16.8	
6. Over 3 hours	103	41.2	
How much time does your child spend on media contact every			
1. 0	41	16.4	1
2. Less than 30 minutes	107	42.8	
3. 30min—60min	76	30.4	
4. 1 hour—2 hours	23	9.2	
5. 2 hours—3 hours	2	0.8	
6. Over 3 hours	1	0.4	

Table 3 shows that 42.8% of the children surveyed use media no more than 30 minutes per day. 30.4% of the children surveyed use media between 30--60 minutes. The amount of time in media use is not related to whether the only child or not, while is significant related to the total time of parental in media use. ($P=0.000<0.01$)

Table 4 Type of mobile phone use

	N	Mean	Std. Deviation
1. Make calls and text message	250	.29	2.198
2 Surf the internet (like chatting)	250	.02	2.452
3 Play games	250	.33	2.354
4. learning tools	250	.91	1.391

On the item of mobile phone, children use it as a learning tool shows the highest score ($M=.91$, $SD=1.391$). After children enter the primary school, with the increase of learning tasks, from the perspective of teachers, using some mobile phone applications to assign homework; or students using mobile phones to look up information or answer questions. In children's daily life, mobile phones have become an inevitable trend as one of the learning tools.

Table 5 Comparison of the negative impact of the internet on children

	N	Mean	Std. Deviation
1 Decline in academic performance	250	-.02	2.290
2 Vision loss	250	.95	1.366
3 Addicted to playing video games	250	.34	2.453
4 Irregular lifestyle (daily routine)	250	.01	2.587
5 Conflict with parents frequently	250	-.40	2.872
6 Estranged from friends	250	-.28	2.929
7 Unsocial	250	-.34	3.167

Table 5 shows that the internet has caused children's loss of vision ($M=0.95, SD=1.366$) to be one of the biggest negative effects. While in the participants' responses, the score that caused conflicts between parents and children ($M=-.40$) was the lowest. Participants' views differ the most on the point that internet makes children unsocial ($SD=3.167$).

Table 6 Relationship between peer, teacher, emotional, social, achievement motivation adjustment and vision loss, unsocial and Conflict with parents

Variable	Vision loss	Conflict with parents	Unsocial
Peer Adj	.098	.082	-.617**
Teacher Adj	.137*	.072	-.293**
Emotional Adj	.138*	.051	.046
Social Adj	.021	.043	-.485**
achievement motivation	-.058	.118	.067

Correlation is significant at the 0.01 level (2-tailed).
Correlation is significant at the 0.05 level (2-tailed).

Table 4 indicates that mobile phones have become a trend as one of the learning tools for children entering primary school. Children's access to the internet has a different degree of relevance to school adjustment. Table 6 shows that vision loss is significantly associated with teacher-child relationship adjustment ($r=.137, P<0.05$) and emotional adjustment ($r=.138, P<0.05$). Furthermore, there is a correlation between unsocial which affected by internet addiction and peer adjustment ($r=-.617, P<0.01$), teacher-child relationship adjustment ($r=-.293, P<0.01$), social adjustment ($r=-.485, P<0.01$)

Table 7 Gender Difference on the choice of TV programs

	Gender	N	Mean	SD	't' value	Sig	df
1. News Program	Boys	129	.07	.256	-.614	.220	248
	Girls	121	.09	.289			
2. TV series	Boys	129	.15	.356	-2.462	.000	248
	Girls	121	.27	.447			
3. Movies	Boys	129	.30	.461	1.577	.002	248
	Girls	121	.21	.412			
4. Variety show	Boys	129	.31	.464	-2.235	.000	248
	Girls	121	.45	.499			
5. Music show	Boys	129	.10	.302	-.774	.122	248
	Girls	121	.13	.340			
6. Sports Program	Boys	129	.09	.292	1.327	.008	248
	Girls	121	.05	.218			
7. Country show	Boys	129	.01	.088	.968	.052	248
	Girls	121	.00	.000			
8. Military Program	Boys	129	.05	.227	2.624	.000	248
	Girls	121	.00	.000			
9. Economic Program	Boys	129	.01	.088	.968	.052	248

	Girls	121	.00	.000			
10. children's Program	Boys	129	.96	.194	-.625	.211	248
	Girls	121	.98	.156			
11. Science and education Program	Boys	129	.36	.481	1.425	.005	248
	Girls	121	.27	.447			
12. Fashion show	Boys	129	.03	.174	.745	.135	248
	Girls	121	.02	.128			

Table 7 above clearly indicates the difference between boys and girls children on various TV programs watching. The 't' ratio of boys and girls on TV series, movies, variety show, sports program, military program, science and education program is significant, which means boys differ significantly as compared to girls. It also can be seen in mean score. On TV series, the mean score of boys was .15 (SD= .356) and mean score of girls was .27 (SD=.447). Meanwhile, on movies, the mean score of boys was .30 (SD= .461) and mean score of girls was .21 (SD=.412). On variety, the mean score of boys was .31 (SD= .464) and mean score of girls was .45 (SD=.499) On sports program, the mean score of boys was .09 (SD= .292) and mean score of girls was .05 (SD=.218) On military program, the mean score of boys was .05 (SD= .227) and mean score of girls was .00 (SD=.000) On science and education program, the mean score of boys was .36 (SD= .481) and mean score of girls was .27 (SD=.447) Boys score higher than girls on movies, sports program, military program, science and education program, while girls score higher than boys on TV series and variety shows.

Table 8 Correlation between TV program and school adjustment

Table 8 shows that there is a significant difference between science and education program and peer

	Peer adj	Teacher adj	Emotional adj	Social adj	Achievement motivatio n
TV series	-.031	.038	-.027	-.052	.142*
Movies	.057	-.028	-.038	.065	.071
Variety show	.021	.034	.079	.311**	-.074
Sports Program	.037	.074	.069	.032	-.084
Military Program	-.036	-.018	-.040	-.030	.049
Science and education Program	.175**	.114	.150*	.086	-.035

Correlation is significant at the 0.01 level (2-tailed).

Correlation is significant at the 0.05 level (2-tailed).

adjustment (t=.175, P<0.01), emotional adjustment (t=.150, P<0.05). TV series was significantly linked to achievement motivation (t=.142, P<0.5), variety show is significant to the social adjustment (t=.311, P<0.01)

4. Discussion

In the current study, we found that in the children's transition period, there is no denying that children's media use has an impact on school adjustment. Our analyses were conducted using the correlation analysis and "T" test. We found that routine and frequent use of media such as TV, mobile phone, tablet, computer without restrictions and educational purpose is likely to be related to behavioral problems in the early childhood school transition.

First, frequent media use is likely to be a catalyst for children's isolation and unsocial in the transition stage, which also can become an obstacle to the development of children's social competence. The first grade of primary school is a crucial period for the development and formation of children's interpersonal relationships (Dale F. Hay & Alexandra Payne, 2004) children spent more time on media other than on the

face- to- face interaction with peers, family and teachers in childhood can hinder social adjustment and psychology development in later life (Eisenberg N&Fabes R,1998;Coie JD&Dodge KA,1988) , some previous studies on computer indicate that moderate use does not significantly impact children's social development or relationships with peers and family (Phillips CA, Rolls S&Rouse A,1995). In addition,internet use has been found to contribute to social well-being though the expansion of social networks(Jackson LA.2008;Jackson LA, von Eye A, Biocca FA, et al.,2006). In the current study, the survey on the negative impact of the Internet found that the score on the conflicts with parents is lowest, which is somewhat consistent with previous research. Though current study shows that 73.2% of the children in first grade surveyed (N=250) use media less than 60 minutes a day is significant to peer and teacher interaction,emotional and social behavior ,what's more linked to achievement motivation. future studies should investigate in detail how much time is appropriate for children in the transition stage to spend on various media.

Secondly,There is a possibility that not only the quantity of time using various media, but also the quality of use of media devices has influences on children's school adjustment on the transition stage.In this study,we found that when children entering to primary school, mobile phones have become one of the indispensable learning tools. Some mobile applications or educational learning software provide convenience and help for children to learn knowledge, which helps them to gain their academic achievements. Several recent studies, using a variety of methods reveal that there is a relationship between mobile phone use and academic performance,such as heavy video game playing with mobile phone has been associated with lower GPAs(Jackson, et al., 2011), Furthermore, the use of some social application such as Facebook will make students distract attention and get a lower GPA (Kirschner&Karpinski,2010;Junco,2012),while other studies show that a cell phone is a very important tool for study such as online information retrieval, file sharing, and interacting with professors and fellow students (Md. Moyazzem Hossain,2019). In this study we also found that some TV programs were significantly associated with peer adjustment,emotional adjustment and social adjustment.The enjoyment of media results from a flow experience realized when media message content balances with individual ability to interpret that message (Sherry, J.L.,2004). With the enrichment of current TV programs,they do contain lots of contents such as sharing,cooperating,new vision of the wonderful world outside.These positive factors in TV programs can promote children's self-learning or develop their social competence.Future studies should investigate in detail how specific content may impact on children using TV media and different media and . Current study also shows that gender differences appeared in the choice of TV programs. Patti M. Valkenburg's study in 2009 indicators that the negative effects of television were significant predictors of style of television mediation(Patti M. Valkenburg , Marina Krmar , Allerd L. Peeters & Nies M. Marseille,2009), thus,the content accessed by the children in the media use may be reflected in the association between frequent media use and externalizing behavioral problems,which as a result to has impacts on the children's school adjustment.

Lastly,in this study, we found that the frequency of children's media use in the early transition isn't significant to family income and parental occupation also whether it is an only child, but is positive significant to the frequency time of parents' media use. It is plausible that children are easily affected by the surrounding media environment at this stage.If their parents or guardians have strict restrictions on children's exposure to various media, their behavior can be better restrained. If the parents do not intervene, the child may access to different media with peers, parents, siblings,etc.

5.Conclusion

Children face various environmental changes and temptations during the preschool-primary school transition. As various media are an integral part of our daily life,the extent of the developmental effects of media use is mostly depend on the amount of time spent by children,the attitude and use pattern held by children,and the content viewed by them. Frequent media use is correlated with children's school adjustment, which for instance, is likely to increase children's peer and social isolation,weaken the interaction between children and teachers,both of which are likely to become a stumbling block for children to adapt to the school life.On the other hand,in current dynamic era of digital technology ,with the development of digital education,media as an effective learning path to improve cognitive skills and academic performance,it will also play an irreplaceable role in children's life.Therefore, parents are favorable recommended to limit the amount of time that children spend using media and seek for content that is beneficial to the development of children,which can better to achieve the smooth transition from kindergarten to primary school. Further research on the amount of time spent by children using various media and the contents viewed by children are needed to help to maximize the positive effects and minimize the negative effects of media use in children's lives.

References

- [1]. Alexander, K. L., & Entwisle, D. R. (1988). Achievement in the first 2 years of school: Patterns and processes. *Monographs of the Society for Research in Child Development*, 53(2), 157. <http://dx.doi.org/10.2307/1166081>
- [2]. Ariana, Pavelka., 2016, The Impact of Teacher-Child Relationships on Social Adjustment and Behaviour in Schools, *Journal of Initial Teacher Inquiry* (2016). Volume 2.
- [3]. Bagwell, Catherine & Schmidt, Michelle & Newcomb, Andrew & Bukowski, William. (2001). Friendship and Peer Rejection as Predictors of Adult Adjustment. *New directions for child and adolescent development*. 2001. 25-49. 10.1002/cd.4.
- [4]. Baumrind, D. (1971). Harmonious parents and their preschool children. *Developmental Psychology*, 4(1, Pt.1), 99-102. <https://doi.org/10.1037/h0030373>
- [5]. Betts, L.R., Rotenberg, K.J., Trueman, M. and Stiller, J. (2012), Examining the components of children's peer liking as antecedents of school adjustment. *British Journal of Developmental Psychology*, 30: 303-325. doi:10.1111/j.2044-835X.2011.02041.x.
- [6] Birch, S. H., & Ladd, G. (1997). The teacher-child relationship and children's early school adjustment. *Journal of School Psychology*, 35(1), 61-79.
- [7]. Birch, S.H. & Ladd, G. W. 1997, 'The Teacher-Child Relationship and Children's Early School Adjustment', *Journal of School Psychology*, vol. 35, no. 1, pp.61, Society for the Study of School Psychology.
- [8]. Boulton, M. J., Don, J., & Boulton, L. (2011). Predicting children's liking of school from their peer relationships. *Social Psychology of Education*, 14, 489-501. <http://doi.org/dcgkvw>
- Cohen, J., Cohen, P., West, S. G., & Aiken, L. S. (2003). *Applied multiple regression/correlation analysis for the behavioral sciences* (3rd ed.). Mahwah, NJ: Erlbaum.
- [9]. Bronfenbrenner, U. (1977). Toward an experimental psychology of human development. *American Psychologist*, 32, 513-532.
- [10]. Bukowski, W. M. and Hoza, B. (1989). Popularity and Friendship: Issues in Theory, Measurement, and Outcomes. In T. J. Berndt and G. W. Ladd (Eds.), *Peer Relationships in Child Development*. New York: Wiley.
- [11]. Cattell, R.B., Sealy, A.P. & Sweeney, A.B. (1966). What can personality and motivation source trait measurements add to the prediction of school achievement? *British Journal of Educational Psychology*, 36, 280-295.
- [12]. Chen, X., Hastings, P. D., Rubin, K. H., Chen, H., Cen, G., & Stewart, S. L. (1998). Child-rearing attitudes and behavioral inhibition in Chinese and Canadian toddlers: A cross-cultural study. *Developmental Psychology*, 34(4), 677-686. <https://doi.org/10.1037/0012-1649.34.4.677>.
- [13]. Christina J. Groark, Steven M. Eidelman, Susan Maude, Louise Kaczmarek, set editor, *Early Childhood Intervention: Shaping the Future for Children with Special Needs and their families, Volume 1 contemporary policy and practices landscape*, P101-112.
- [14]. Coie, J. D., & Dodge, K. A. (1988). Multiple sources of data on social behavior and social status in the school: A cross-age comparison. *Child Development*, 59(3), 815-829. <https://doi.org/10.2307/1130578>
- [15]. Connor, C. M., Morrison, F. J., & Slominski, L. (2006). Preschool instruction and children's emergent literacy growth. *Journal of Educational Psychology*, 98(4), 665-689.
- [16]. Cronbach, L. J. (1989). Construct validation after thirty years. In R. L. Linn (Ed.), *Intelligence: Measurement, theory, and public policy: Proceedings of a symposium in honor of Lloyd G. Humphreys* (p. 147-171). University of Illinois Press.
- [17]. Darling, Nancy & Steinberg, Laurence. (1993). Parenting Style as Context: An Integrative Model. *Psychological Bulletin*. 113. 487-496. 10.1037/0033-2909.113.3.487.
- [18]. David Achanfu Yeboah, Enhancing Transition from Early Childhood Phase to Primary Education: Evidence from the research literature, *Early Years, An International Research Journal*, Volume 22, 2002 - Issue 1, Pages 51-68.
- [19]. Eisenberg, N., Shepard, S.A., Fabes, R.A., Murphy, B.C. and Guthrie, I.K. (1998), Shyness and Children's Emotionality, Regulation, and Coping: Contemporaneous, Longitudinal, and Across-Context Relations. *Child Development*, 69:767-790. doi:10.1111/j.1467-8624.1998.tb06242.x.
- [20]. Eyia, K. E., & Bader, L. A. (1993). Relationships Among Need Achievement Themes and Ethnic and Gender Identities in Elementary Literature Series. *Reading Horizons: A Journal of Literacy and Language Arts*, 33(3).
- [21]. Fletcher, J. 1997. "Connect Redfern". In *Evaluating School Community Linked Services: politics, problems and possibilities*, 39-42. Sydney: Australian Centre for Equity through Education.
- [22]. Frantz, K. M. T., Erath, S. A., & Flanagan, K. S. (2012). Can socially adept friends protect peer-victimized early adolescents against lower academic competence? *Journal of Applied Developmental Psychology*, 33(1), 24-30. <https://doi.org/10.1016/j.appdev.2011.09.002>.
- [23]. Frones, Ivar. (1997). The Transformation of Childhood: Children and Families in Postwar Norway. *Acta Sociologica - ACTA SOCIOL.* 40. 17-30. 10.1177/000169939704000102.
- [24]. Furrer, C., & Skinner, E. (2003). Sense of relatedness as a factor in children's academic engagement and performance. *Journal of Educational Psychology*, 95(1), 148-162. <https://doi.org/10.1037/0022-0663.95.1.148>
- [25]. G.W. Ladd, (1999), Peer relationships and social competence during early and middle childhood, *Annual Review of Psychology*, 50, pp. 333-359.
- [26]. Gallardo, Laura & Barrasa, Angel & Guevara-Viejo, Fabricio. (2016). Positive peer relationships and academic achievement across early and midadolescence. *Social Behavior and Personality: an international journal*. 44. 1637-1648. 10.2224/sbp.2016.44.10.1637.
- [27]. Gifford-Smith, M. E., & Brownell, C. A. (2003). Childhood peer relationships: Social acceptance, friendships, and peer networks. *Journal of School Psychology*, 41(4), 235-284. [https://doi.org/10.1016/S0022-4405\(03\)00048-7](https://doi.org/10.1016/S0022-4405(03)00048-7).
- [28]. Grolnick, W. S., & Ryan, R. M. (1989). Parent styles associated with children's self-regulation and competence in school. *Journal of Educational Psychology*, 81(2), 143-154. <https://doi.org/10.1037/0022-0663.81.2.143>.

- [29]. Hamre, B. K., & Pianta, R. C. (2001). Early teacher-child relationships and the trajectory of children's school outcomes through eighth grade. *Child Development*, 72(2), 625-638. doi:10.1111/cdev.2001.72.issue-2.
- [30]. Harackiewicz, J. M., Barron, K. E., Carter, S. M., Lehto, A. T., & Elliot, A. J. (1997). Predictors and consequences of achievement goals in the college classroom: Maintaining interest and making the grade. *Journal of Personality and Social Psychology*, 73(6), 1284-1295. <https://doi.org/10.1037/0022-3514.73.6.1284>.
- [31]. Hay, Dale & Payne, Alexandra & Chadwick, Andrea. (2004). Peer relations in childhood. *Journal of child psychology and psychiatry, and allied disciplines*. 45. 84-108. 10.1046/j.0021-9630.2003.00308.x.
- [32]. Helen Ch. Carida, Planning and implementing an educational programme for the smooth transition from kindergarten to primary school: the Greek project in all-day kindergartens, *The Curriculum Journal*, Volume 22, 2011-Issue 1: International Perspectives on Curriculum and Pedagogy, Pages 77-92.
- [33]. Hilary Fabian, Aline-Wendy Dunlop, Transitions in the Early Years: Debating Continuity and Progression for young children in early education, P53-58.
- [34]. Hogsnes, H.D. (2015). Children's experiences of continuity in the transition from kindergarten to school: The potential reliance on books as boundary objects. *International Journal of Transitions in Childhood*. Vol. 8, 3-13.
- [35]. Howard P, Raine L, Jones S. Days and nights on the Internet: the impact of a diffusing technology. *American Behavioral Scientist* 2001; 45:383-404.
- [36]. Jackson LA, von Eye A, Biocca FA, et al. (2006) Children's home Internet use: predictors and psychological, social and academic consequences. In Kraut R, Brynin M, Kiesler S, eds. *Computers, phones and the Internet: domesticating information technology*. New York: Oxford University Press, pp.145-67.
- [37]. Jackson LA. (2008) Adolescents and the Internet. In Romer D, Jamieson P, eds. *The changing portrayal of American youth in popular media*. Annenberg Public Policy Center at the University of Pennsylvania. New York: Oxford University Press, pp. 377-410.
- [38]. Jeffrey D. Long & Anthony D. Pellegrini (2003) Studying Change in Dominance and Bullying with Linear Mixed Models, *School Psychology Review*, 32:3, 401-417, DOI: 10.1080/02796015.2003.12086208.
- [39]. Karla Correia & Alexandra Marques-Pinto (2016) Adaptation in the transition to school: perspectives of parents, preschool and primary school teachers, *Educational Research*, 58:3, 247-264, DOI: 10.1080/00131881.2016.1200255.
- [40]. Kathryn R. Wentzel & Deborah E. Watkins (2002) Peer Relationships and Collaborative Learning as Contexts for Academic Enablers, *School Psychology Review*, 31:3, 366-377, DOI: 10.1080/02796015.2002.12086161.
- [41]. Khankhani Zadeh H, Bagheri S, 2012. Effectiveness of Verbal self-learning in improving the social adjustment of students with learning disabilities. *Journal of Learning Disabilities*. 21: 43-52.
- [42]. Kirschner, P.A. and Karpinski, A.C. (2010) Facebook and Academic Performance. *Computers in Human Behavior*, 26, 1237-1245. <https://doi.org/10.1016/j.chb.2010.03.024>.
- [43]. Kirschner, Paul & Karpinski, Aryn. (2010). Facebook (R) and academic performance. *Computers in Human Behavior*. 26. 1237-1245. 10.1016/j.chb.2010.03.024.
- [44]. Lakhani, P.K., Jain, K., & Chandel, P.K. (2017). School Adjustment, Motivation and Academic Achievement among Students.
- [45]. Lazzari, A. M. (1991). *The transition sourcebook: A practical guide for early intervention programs*. Tucson, AZ: Communication Skill Builders.
- [46]. Lazzari, A. M., & Kilgo, J. L. (1989). Practical methods for supporting parents in early transitions. *Teaching Exceptional Children*, 40-43.
- [47]. Lewin, K. (1931). Environmental forces in child behavior and development. In *A Handbook of Child Psychology* (p. 94-127). Clark Univ. Press.
- [48]. Li, Y., Lerner, J.V. & Lerner, R.M. Personal and Ecological Assets and Academic Competence in Early Adolescence: The Mediating Role of School Engagement. *J Youth Adolescence* 39, 801 - 815 (2010). <https://doi.org/10.1007/s10964-010-9535-4>.
- [49]. Margetts, K. (2000). Indicators of Children's Adjustment to the first year of schooling. *Journal of Australian Research in Early Childhood Education*. Vol 7, 1, 20-30.
- [50]. Margetts, Kay. (2009). Early transition and adjustment and children's adjustment after six years of schooling. *European Early Childhood Education Research Journal*. 17. 309-324. 10.1080/13502930903101511.
- [51]. Maudry, M., & Nekula, M. (1939). Social relations between children of the same age during the first two years of life. *Journal of Genetic Psychology*, 54, 193-215.
- [52]. Maunder, Rachel & Monks, Claire. (2018). Friendships in middle childhood: Links to peer and school identification, and general self-worth. *British Journal of Developmental Psychology*. 37. 10.1111/bjdp.12268.
- [53]. Maunder, Rachel & Monks, Claire. (2018). Friendships in middle childhood: Links to peer and school identification, and general self-worth. *British Journal of Developmental Psychology*. 37. 10.1111/bjdp.12268.
- [54]. Meisels, S. J., & Atkins-Burnett, S. (2000). The elements of early childhood assessment. In J. P. Shonkoff & S. J. Meisels (Eds.), *Handbook of early childhood intervention* (pp. 231-257). New York, NY, US: Cambridge University Press.
- [55]. Patti M. Valkenburg, Marina Krmar, Allerd L. Peeters & Nies M. Marseille (1999) Developing a scale to assess three styles of television mediation: "Instructive mediation", "restrictive mediation," and "social covieing", *Journal of Broadcasting & Electronic Media*, 43:1, 52-66, DOI: 10.1080/08838159909364474.
- [56]. Perry, K. E., & Weinstein, R. S. (1998). The social context of early schooling and children's school adjustment. *Educational Psychologist*, 33(4), 177-194. https://doi.org/10.1207/s15326985ep3304_3.
- [57]. Petriwskyy, Anne, Thorpe, Karen J., & Tayler, Collette P. (2005) Trends in construction of transition to school in three western regions 1990-2004. *International Journal of Early Years Education*, 13(1), pp. 55-69. Trends in construction of transition to school in three western regions 1990-2004.

- [58]. Piaget, J. (1962). *Play, dreams, and imitation in childhood*. New York: Norton.
- [59]. Pianta, R. C. (1994). Patterns of relationship between children and kindergarten teachers. *Journal of School Psychology, 32*(1), 15-31. doi:10.1016/0022-4405(94)90026-4.
- [60]. Pianta, R. C. (2006). Schools, schooling, and developmental psychopathology. In D. Cicchetti(Ed.), *Handbook of Developmental psychopathology, Vol. 2* (pp. 494-529). New York: John Wiley & Sons.
- [61]. Pianta, R. C., & Harbers, K. (1996). Observing mother and child behavior in a problem solving situation at school entry: Relations with academic achievement. *Journal of School Psychology, 34*, 221-224.
- [62]. Pianta, R. C., & Walsh, D. J. (1996). *High-risk children in schools: Constructing sustaining relationships*. New York: Routledge.
- [63]. Pianta, Robert C; Walsh, Daniel J. Applying the construct of resilience in schools: Cautions from a developmental systems perspective ,*School Psychology Review; 1998,Vol.27,No.3,PP.407-417*.
- [64]. Raboteg-Savic, Z., & Sakic, M. (2014). Relations of parenting styles and friendship quality to selfesteem,life-satisfaction and happiness in adolescents.*Applied Research in Quality of Life,9,749-765*. <https://doi.org/10.1007/s11482-013-9268-0>.
- [65]. Ramey, S. L. & Ramey, C. T. (1994). The transition to school. *Phi Delta Kappan,76* (3), 194-198.
- [66]. Ramey, S.L. & Ramey, C.T. (1998). *The Transition to School: Opportunities and Challenges for Children, Families, Educators, and Communities*. *The Elementary School Journal, Vol. 98* (4), 293-295.
- [67]. Rimm-Kaufman, S. E. (1996). *Infant predictors of kindergarten behavior: The contribution of inhibited and uninhibited temperament types*. Unpublished doctoral dissertation, Harvard University.
- [68]. Rimm-Kaufman, S. E., & Pianta, R. C. (1999). Patterns of family-school contact in preschool and kindergarten. *School Psychology Review, 28*(3), 426-438.
- [69]. Rosalind, Charlesworth & Craig H. Hart, ...el, 1993, Measuring the developmental appropriateness of kindergarten teachers' beliefs and practices, *Early Childhood Research Quarterly, Volume 8, Issue 3, 255-276*.
- [70]. Rous, B. S., & Hallam, R. A. (2006). *Tools for transition in early childhood: A step-by-step guide for agencies, teachers, and families*. Baltimore, MD: Paul Brookes.
- [71]. Rous, B. S., & Hallam, R. A. (2012). Transition services for young children with disabilities: Research and future directions. *Topics in Early Childhood Special Education, 31*, 232-240.
- [72]. Rubin, Kenneth & Bowker, Julie & McDonald, Kristina & Menzer, Melissa. (2013). *Peer Relationships in Childhood*.
- [73]. Sabongui, A. G., Bukowski, W. M., & Newcomb, A. F. (1998). The peer ecology of popularity: The network embeddedness of a child's friend predicts the child's subsequent popularity. In W. M. Bukowski & A. H. Cillessen (Eds.), *New directions for child development, No. 80. Sociometry then and now: Building on six decades of measuring children's experiences with the peer group* (p. 83-91). Jossey-Bass.
- [74]. Sakyi, K.S., Surkan, P.J., Fombonne, E. et al. (2015), Childhood friendships and psychological difficulties in young adulthood: an 18-year follow-up study. *Eur Child Adolesc Psychiatry 24*, 815-826(2015). <https://doi.org/10.1007/s00787-014-0626-8>.
- [75]. Sharon E. Rosenkoetter, Kathy T. Whaley, The Evolution of Transition Policy for Young Children with Special Needs and Their Families: Past, Present, and Future ,*Topics in Early Childhood Special Education, Volume: 21 issue: 1, page(s): 3-15 Issue published: January 1, 200*.
- [76]. Sherry, J.L. (2004), Flow and Media Enjoyment. *Communication Theory, 14*: 328-347. doi:10.1111/j.1468-2885.2004.tb00318.x.
- [77]. Slaten, C., Ferguson, J., Allen, K., Brodrick, D., & Waters, L. (2016). School Belonging: A Review of the History, Current Trends, and Future Directions. *The Educational and Developmental Psychologist, 33*(1), 1-15. doi:10.1017/edp.2016.6.
- [78]. Sy, S. R. , & Schulenberg, J. E. (2003). Developmental transitions across the lifespan. In J. G. Miller , R. M. Lerner , L. B. Schiamberg , & P. M. Anderson (Eds.), *Human ecology: An encyclopedia of children, families, communities, and environments*. Denver, CO: ABC-Clío .
- [79]. Uguroglu, Margaret E., and Herbert J. Walberg. "Motivation and Achievement: A Quantitative Synthesis." *American Educational Research Journal 16*, no. 4 (1979): 375-89. Accessed February 7, 2020. www.jstor.org/stable/1162831.
- [80]. Vygotsky, Lev S. 1967. "Play and Its Role in the Mental Development of the Child." *Soviet Psychology 5*:6-18.
- [81]. Wachs, T.D., & Chart, A. (1985). Specificity of environmental action as seen in physical and social environmental correlates of three aspects of twelve-month infants' communication performance. *Child Development, 57*, 1464-1474.
- [82]. Wartella E, Caplovitz AG, Lee P. Internet use and well-being in adolescence. *Journal of Social Issues, 2004;58*:75-90.
- [83]. Wentzel, Kathryn R., 1999, Social-motivational processes and interpersonal relationships: Implications for understanding motivation at school. *Journal of Educational Psychology, Vol 91*(1), 76-97.
- [84]. Wigfield, A., & Eccles, J. S. (1992). The development of achievement task values: A theoretical analysis. *Developmental Review, 12*(3), 265-310. [https://doi.org/10.1016/0273-2297\(92\)90011-P](https://doi.org/10.1016/0273-2297(92)90011-P).