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### MOTHERS' PERCEPTION ON CHILDREN USAGE OF ELECTRONIC DEVICES AND IMPACTS ON CHILDREN'S SOCIAL DEVELOPMENT: A QUALITATIVE STUDY

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#### Abstract

The current study provided qualitative analysis of Mothers' Perception on Children usage of Electronic Devices and Impacts on Children's Social Development. The research questions in current study were how do mothers perceive the role of electronic devices usage on the social development of children? How do mothers perceive advantages of electronic devices' usage? How do mothers perceive disadvantages of electronic devices' usage? The objective of current study was to explore Mothers' Perception on Children usage of Electronic devices and to know the influence of electronic devices usage on children's social development. Thematic Analysis was used as an analytical tool. Mothers reported that their kids learned different languages without any official classes with the help of interacting social networking. Social media networking devices seemed to be powerful tools for a child's educational purpose, and children's social interactions were also improved but spending more time using electronic device may affect their health. Moreover, our findings suggest that children could not sustain their attention on studies properly due to electronic devices and their physical activity also decreased.

#### Keywords

Electronic Devices, F Social Development, Perception, Social Networking, Physical Activity



## 1. Introduction

Three major goals of parenting practice has been shared around the world which are safety ensuring children's health, preparing children for life as productive adults, and transmitting cultural values. In a healthy development of child and parent relationship a high-quality interaction is critical. Imagine that you are a new parent. Your responsibility is to take care of a child and give your best to provide your child every facility of life. Besides providing a child the basic necessities of life such as food, shelter, education, etc., you cannot restrain him from using the electronic devices. Technology through electronic devices has become commonplace around the world. Researches show that relationships between young children and technology vary. They can be positive, valuable, negative, threatening, or restrictive, and educational, also (Chiong & Shuler 2010). Electronic devices are incorporated into each domain of life whether it is school, job, entertainment, education etc. Parents are required to get an understanding about the significance of technology and its influence on child's social development (Marinelli, 2017). The present study purports to find out the mothers' perception about children usage of electronic devices (age range 09-12 years) how this usage may affect their children. It is important to know because mothers should be aware regarding what is best for their child's upbringing and how to keep them happy and healthy. There is no specific guideline given by government of UK to the parents for their children using daily screen-viewing duration (National physical

activity, 2015). Whereas government of Australian and Canadian has given guidelines according to them 2 and 5 years of age children should use screen viewing 1 hour per day (Department of Health 2011). (Plowman *et al.*, 2012) investigated that technology can be helpful in four main categories of learning that include increasing knowledge, skills, understanding of world, enhancing nature of learning, and helping to gain knowledge in understanding role of technology in their study on young children. For the present study, the term "technology" and "electronics" are defined as devices with screen such as smart phones, iPads, and laptops, tablets, and computers. This definition does not include television and educational technological devices such as Leapfrog (Marinelli, 2017). Technology and electronics such as smart phones, tablets, and mobile phones are easily and instinctively usable by young children's because it provide instant communication, an attraction that appeals to children and adults (Radesky, Schumacher Zuckerman 2015). Pragmatic languages researches suggested that non-literal language comprehension take place between the age of 6 and 10 years, during which time children are beginning to learn literacy skills and may also start using communication technology (Valkenburg & Piotrowski, 2017). Researchers investigated that computer-mediated communication has developed new strategies and behaviors (Walther, 2007; Greenfield & Subrahmanyam, 2003). There is high level of cognitive awareness related to practical skills, social communication skills and increased in

language by using technology in communication. There is a need to do more researches to find out the relationship between other information gathering tools such as game playing, internet, smart phone as there is need to find which electronic media use is considered more beneficial for cognitive skills in children (Valkenburg & Piotrowski, 2017)

## 2. Literature Review

(Bentley *et al.*, 2016) conducted interviews of 26 mothers who had children of two-four years to explore views of mothers about their pre-school child's screen viewing behaviors. Results revealed different possible reasons for allowing kids to use mobile phones. One of the most important reasons reported was that to prevent their pre-school children from engaging in disruptive behaviors. Mothers also let their pre-school kids' smart phones as a reward if their pre-school children exhibit good behaviors. Few of the mothers reported that effective usage of electronic devices such as smart phones and laptops is the need of our children; we cannot refrain children from using these devices. A majority of the participants emphasized the importance of some necessary rules about using these devices as these devices are not helpful in the effective language development of pre-school children. (Cillero & Jago, 2011) found relations among socio-cultural, environmental, age and screen viewing behaviors in Spanish children. Primary and secondary school children and their parents from diverse economic back ground participated. Students completed self-administered questionnaires at school which assessed their screen viewing

behaviors while their parents filled demographic form. It was found that secondary school group had more TV sets and they are more engaged in other screen viewing activities than primary school group. Parents of secondary school group watched more TV than primary school group. It was also found that boys are more engaged in playing video games than girls. It was suggested that if parents and their children view TV at same time, their communication can be enhanced. (McCloskey *et al.*, 2018) found the parents' perception of low-income families about mobile phone usage among pre-school children. It was a descriptive and cross-sectional study. Surveys were distributed to 192 parents from high-income families and low-income families. Results revealed that highly educated parents suggested other activities than screen-viewing devices. They reported that they cannot use co-technology devices because it is better for their children to use such devices on their own and explore different things. Most of the participants reported their comforts with mobile phones and other technology devices because free apps can be downloaded. It was also found that those children use technology devices more frequently whose parents use these devices frequently. These findings are supported by Social Learning Theory presented by Albert Bandura and, according to his theory children learn, observe and model behavior of their parents. So, children frequently use digital media devices. A similar study conducted by (Nikken & Schols, 2015) explored the importance of parents' guidance

in using the media devices of young children. An online survey was distributed among parents living in Netherlands and 896 filled surveys were collected. It was found that parents' attitudes about using media devices have a great influence on media usage of children. Those parents who have positive attitudes about these devices usually encouraged and helped their children in exploring new things while those parents who have negative attitude about usage of media devices usually restricted their children. It was also found that although age is a very important factor in using these devices for learning purpose but those children who have more access to these devices have more media skills than those who do not have more frequent access to these devices. Moreover, parents who frequently use these devices; their children prefer to use them in a more frequent manner. These findings are supported by Vygotsky's Socio-cultural theory (1978). According to this theory, children learn from the social agents i.e., parents, educational institutes, new technology etc. as community plays a vital role in learning. (Shin & Li, 2017) conducted a study on parental mediation on children who use digital technology and it was conducted on Singapore pollution. Their aim was to explore parental mindfulness on their children usage of technology and factors that are linked with it. They conducted a survey on 557 parents. Their main focus was on parental mediation that involves three basic forms: restrictive, active and monitoring. In active they asked parents about what kind of guidance was used to help or monitor their

child on technology usage. In restrictive they asked what kind of strategies they use to control their child from using less digital technology. Results showed that parents use simple strategies to manage their child routine of usage digital technology and findings showed that their strategies were sources of parent child interaction; these strategies were talking with children what kind of content should be share on internet and exploring the reasons of usage technology as good or bad and low popular strategy among parents was to recommend the worthy digital content and restrictive intervention strategy was to limit the duration children spent in using devices and allowing them to use after they have done their work such as homework. Low concern strategy also involved limiting the children from sharing their personal information and communication online. (Genc, 2014) conducted a study on parents view of their children using mobile technology. They conducted interviews with 85 parents of preschool children and age of their children was 3 to 6 years open ended questions were asked about how they perceive usage of smart phone in positive or negative ways from parents and they were also asked about their duration of using smart phone. Results showed that mostly children use smart phone for watching cartons or playing games. Parents were concerned as it was not used for educational purpose and they thought about time consuming in a wrong way. They reported smart phones as negative impacts on their children. High usages of smart phones can cause mental and physical problems for

their children, and they have concerns that their children will be introverted and will have isolated lives and that they will be affected by harmful radiation cause by electronic devices. Results also indicated that parents who have positive view about mobile devices described benefits that involved improvement in children' cognitive and motor skills knowledge of technology and improvement in their memory. (Badri *et al.*, 2017) conducted the study on usage of social media, digital devices in school children, understanding and involvement of their parents in Abu Dhabi. Aim of the study was to explore the young children usage of devices and they want to understand the reason of joining and not joining social media. They explored the understanding of parents on such activities for which they selected 31,000 children of private and public schools. Results showed that out of 31,109 only 28,517 students stated that they have access to internet connection at home and different methods of using internet was reported that involved laptop, tablet, computer and mobile phones on an average students spend 5.2 hours on using these devices. Children stated that they use social networking only to be in touch with their family members' social networking, including Kik, WhatsApp, and Facebook messenger. Many children reported that their parents know about their online networking activities and their parents were in their friend list.

### 3. Objective of the Study

- To examine mothers' perceptions of their children's (aged 9-12 years) usage of electronic devices such as

smartphones, laptops, and tablets.

- To investigate the impact of excessive use of electronic devices on children's physical activity, including their preference for outdoor games like running, sliding, and playground play.
- To assess how the use of electronic devices affects children's social development, behavior, and overall well-being as perceived by their mothers.
- To explore the role of mothers in managing or regulating their children's use of electronic devices.
- First Author is a mother of 3-years old son; 'I daily struggle trying to stop him from using smart phone as he spends 4-5 hours daily in using smart phone. Due to this fact, I want to know the influence of smart phone's usage on his social development.

Children learn through what they observe from their surrounding as social cognitive theory (Bandura, 1999) stated that individuals learn from their social interaction, environment and media influences. This may affect child development in positive or negative way. Parents are concern about their child development due to strong parent child relationship and more involvement which is linked with parenting self-efficacy (Blevins, 2001). Children in contemporary society have different environments than their parents did as children. Today's children are more immersed in digital devices, leading to altered social interactions and play patterns, which impact their development compared to the

experiences of previous generations. There is difference in socialization processes of both children and parents (Blevins, 2001)). When parents limit their children's access to mobile devices, the children may feel unable to grasp the realities of living in the digital age. (Jessen & Sørensen, 2013). Parents are concerned about their children developing unhealthy addictions and poor social skills. (Mossberger, Tolbert, & McNeal, 2008). In an advanced culture, where technology plays a central role in communication, education, and development, parents recognize the importance of their children adopting mobile devices to stay connected and competitive. However, due to conflicting information in the media about the potential benefits and risks, such as addiction and social skill issues, parents remain concerned about how much and in what ways their children should use mobile technology (Chaudron, 2015).

#### **4. Research Questions**

- How do mothers perceive the role of electronic devices usage on the social development of children?
- How do mothers perceive advantages of electronic devices' usage?
- How do mothers perceive disadvantages of electronic devices' usage?

#### **5. Methodology**

The current research was aimed to investigate an in-depth study of mothers' perceptions about the usage of electronic devices and how these devices impact their social development. Therefore, qualitative research design was used.

##### *5.1 Selection and Access to the Participant*

Current study was conducted in the Lahore City. We used the purposive sampling strategy to select the participants. Mothers of children, age 9-12-years, were selected as their children used the electronic devices on a regular basis.

##### *5.2 Inclusion Criteria*

- Mothers with children ages 9-12 years
- Child must have the access of electronic devices.
- Mothers typically spend the most time with their children. For this reason, a housewife was selected as a sample for the study.
- Children can belong to at least one socio-economic class where their parents can afford electronic devices.

##### *5.3 Research Tool*

Semi-structured interview was conducted. Total 14 open-ended questions covered in that interview. In interview guide, questions were in English but later on they were translated into Urdu for the sake of conducting the interview. Due to open-ended questions, researcher used the probing wherever required. Participants showed their keen interest and responded to all the questions in a cooperative way. When interview was conducted, it was transcribed on the same day so no information can be missed.

##### *5.4 Preparation of Interview Guide*

At first, an interview guide was prepared, aligned with the research questions. To do so, researchers consulted relevant literature on children's use of electronic devices, its impact on development, and parental perceptions. After preparation of initial draft of interview

guide, pilot study on the selected sample was administered. Review of initial draft of the interview guide was done by project supervisor. After incorporating the required changes, interview guide was finalized. Finally, researcher administered the interview guide on the different sample.

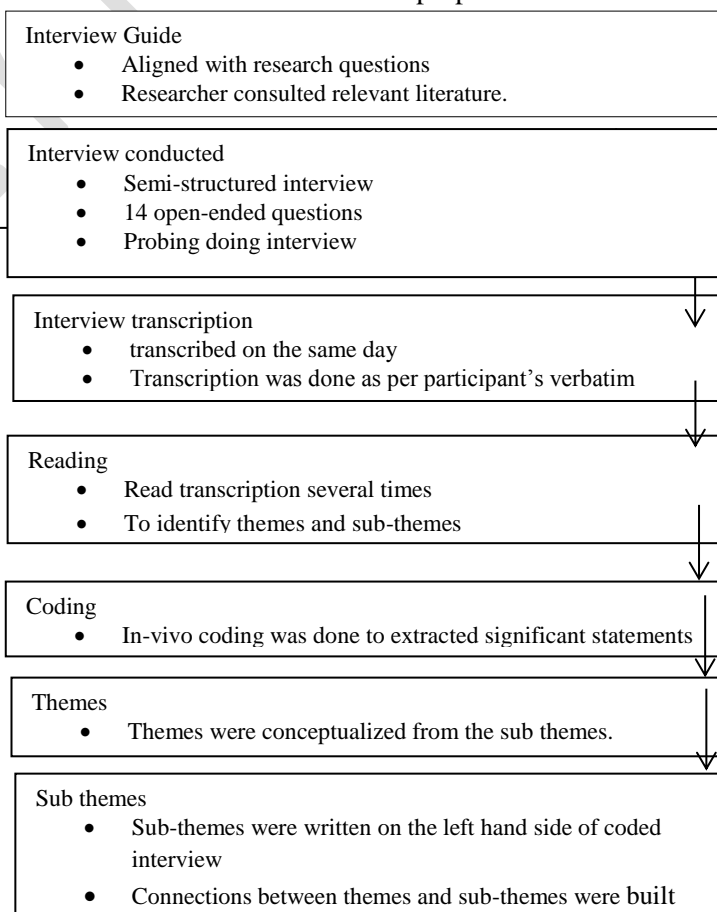
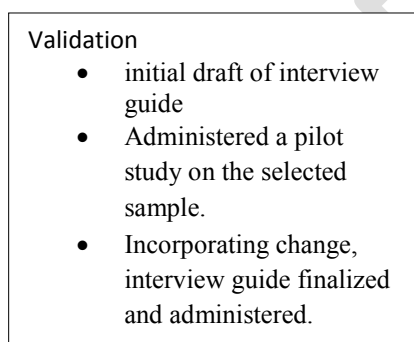
### 5.5 Data Analysis

Inductive Thematic Analysis was used as an analytical tool. We engaged to know about mothers' perceptions regarding electronic devices usage so we used this analysis. Interview transcription was done at first level then in-vivo coding was done. After that, sub-themes emerged from the interview data and themes were conceptualized.

### 5.6 Ethical Considerations

Below mentioned ethical guidelines were kept in consideration while administering the interview guide:

- At first, informed consent was taken from the participants in whom it was told that they can refuse if they do not want to take part in the study. Participants were willing to take part in the study.
- Participants were told about the purpose of study. It was told to the participants that our group wants to know the mothers' perception about the usage of electronic devices on social development of a child. As author one is also a mother of 3-years old child so this was the main reason of interest in this phenomenon.
- Participants were assured that provided information would remain confidential and it would be used only for the educational purpose.



**Figure1:** Process of Investigation

### 5.7 Preparation of Interview Guide

It was prepared aligned with research questions.

### 5.8 Validation of Interview Guide

- An initial draft of interview guide was prepared and administered a pilot study on the selected sample.
- Initial draft of the interview guide was reviewed from supervisor.
- After incorporating the required changes, interview guide was finalized. Finally, researcher administered the interview guide on the selected sample.

### 5.9 Interview Conduct

- Semi-structured interview was conducted.
- Total 14 open-ended questions covered in that interview. In interview guide, questions were in English but later on they were translated into Urdu for the sake of conducting the interview.
- Due to open-ended questions, researcher used the probing wherever required. When interviews were conducted, it was transcribed on the same day so no information can be missed.

### 5.10 Interview Transcription

- When interviews were conducted, it was transcribed on the same day so no information can be missed.

- Transcription was done as per participant's verbatim

### 5.11 Reading

- Transcription was read for several times to identify themes and sub-themes emerged from the interview data.

### 5.12 Coding

- In-vivo coding was done and extracted significant statements from the interview data.

### 5.13 Themes and Sub-themes

- Sub-themes were written on the left hand side of coded interview.
- Themes were conceptualized from the sub-themes
- Connections between themes and sub-themes were built



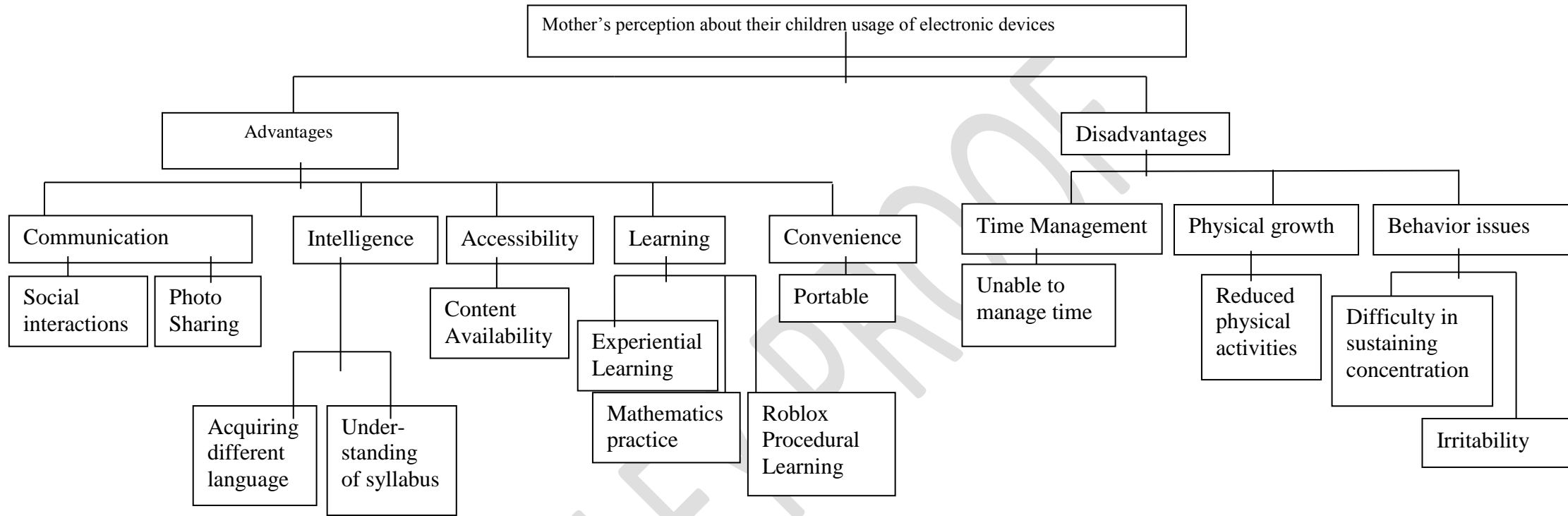


Figure 2: Themes and Sub-themes connection map

With reference to the above connection discussed below:  
map/chart, themes and sub-themes are

**Table 1: Findings**

Themes	Sub-Themes	Significant Statements
<b>Communication</b>	<ul style="list-style-type: none"> <li>• Social Interaction</li> </ul>	<ul style="list-style-type: none"> <li>• Mothers told that we interact with our family friends through electronic media i.e., whatsapp, Skype. They told that their kids have a whatsapp group with their old and new school friends.</li> <li>• Mothers told that their kids sometimes shared their photos i.e., their birthday party via whatsapp with their friends.</li> </ul>
	<ul style="list-style-type: none"> <li>• Photo-sharing</li> </ul>	
<b>Intelligence</b>	<ul style="list-style-type: none"> <li>• Acquiring different languages/Linguistics Intelligence</li> </ul>	<ul style="list-style-type: none"> <li>• Mothers told that their kids like very much the 'black pink group'. This group comprised of four members and they sing in Korean, Japanese and Hong Kong languages. In order to understand what the singers sing in this group, kids learnt these three languages and now they are able to speak these languages as well. It all becomes possible due to the social media.</li> <li>• Mothers told that kids watched a movie on 'Charlie and Chocolate Factory'. With the help of movie, they can easily recall all the characters of the movies and their roles</li> </ul>
	<ul style="list-style-type: none"> <li>• True understanding of the syllabus content/Improved Comprehension</li> </ul>	

as well. Although this novel has not completely taught in her class till now but they are able to retrieve each and every details of the novels. It is possible only due to this social media.

### **Accessibility**

- Content Availability

- Mothers told that there are huge and different kinds of games and reading stuff is available on internet. Kids can easily download the video games from YouTube and play as well.

### **Behavioral Issues**

- Difficulty in sustaining concentration

- Mothers told that their kids sometimes could not sustain their concentration on studies in a proper manner. It is due to this fact that they want to complete their home work as early as possible and engage in using iPhone so they can play games, listening songs and etc.

- Irritability

- Mothers told that sometimes kids do not listen what they are saying to them. Kids totally ignore our words. It is because they engage in playing video games and there are different levels which they have to complete say level 01, level 02 and level 03. They do not want to lose any level so when we

**Physical Growth**

- Reduced Physical Activities

mothers call them, they show some irritable behavior and do not listen us due to these devices.

- Mothers told that there is one of the major drawbacks of these devices that they inhibit a child's physical activity. It seems that a child become addict of these devices. They added that physical growth is equally important as of mental growth. Due to this fact, we parents frequently arrange physical activities such as going to the park, bicycling, football for our daughter. Moreover, kids' schools have different kinds of clubs such as football, basketball clubs in which they play and engage in these physical activities in a true sense.

**Learning**

- Experiential Learning

- Mothers told that kids' teachers give them different projects and experiments. They get guidance from these devices. Moreover, they get a proper understanding of science subject due to tutorials available in YouTube.

- Mathematics practice exercises

- Mothers told that we parents use a website based on mental math. We first understand the

		required steps to solve a sum/problem and then teach our child.
	<ul style="list-style-type: none"><li>• Roblox</li></ul>	<ul style="list-style-type: none"><li>• Mothers told that kids learnt 'roblox' game and how to solve six-sider of the roblox only because of tutorials available on YouTube otherwise we parents do not even know about the Roblox.</li></ul>
	<ul style="list-style-type: none"><li>• Procedural Learning</li></ul>	<ul style="list-style-type: none"><li>• Mothers told that kids learnt skate boating from the electronic media. When they were too young, they were very curious of how to use skate boating. Then, kids watched different tutorial available on YouTube which tell steps of using skate boating. Now, they has 3 to 4 kinds of different skate boats and they can easily use them only because of the social media.</li></ul>
<b>Convenience</b>	<ul style="list-style-type: none"><li>• Portable</li></ul>	<ul style="list-style-type: none"><li>• Mothers told that their kids use the iPhone in the most frequent manner. They said as it is easily portable that's why they uses this electronic device in a more frequent manner as compared to any other devices such as laptop, desktop computer and etc.</li></ul>
<b>Time Management</b>	<ul style="list-style-type: none"><li>• Usage Restriction</li></ul>	<ul style="list-style-type: none"><li>• Mothers told that we parents put efforts to set rules so they can reduce</li></ul>

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their time spending on these electronic devices but we cannot refrain them from using these devices. They shared their experiences that there are other parents like us who are very worried about how to monitor their child's behavior; so they spend less time on these devices. So, they also request from me that you as a researcher must explore the proper time management strategies related to these devices which are applicable as well.

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(Addressi & Pachet, 2005) suggest that social networking proves beneficial for children to learn certain skills easily. Children explore many things from media and start learning them by observation. As in our finding, mothers reported that their kids learn different languages without any official classes with the help of interacting social networking. And this is the one biggest and cheapest way of learning that to some extent media social networking devices seem powerful tool for educational purpose too. But spending more time on using electronic device may affect their health. Similarly, media helps young children understand various phenomena and enhances their skills. (Adigwe & Ifeanyi, 2012). Nevertheless learning is a process that individual learn day by day and through videos or behaviors; children imitating them and

adopted behaviors. Because according to Albert Bandura, children learn through observation in social context. So mothers should keep on eye that they are learning something effective that will helpful to them. (Calvert *et al.*, 2005) posited that media interactive technology helps children to focus on learning through different styles and help them to easily get exposure to many things. On the other side Adigwe & Ifeanyi (2012) confirmed that individuals learn many things through media, such as enhanced logical thinking and writing skills. It is also observed that electronic devices, when used as a tool, enhances children's creativity, social development, and learning cultures through media. Findings are consistent with the current study as our participants' children learnt

different languages and games through electronic media.

## 6. Discussion

The purpose of this study was to learn about the mothers' perception of children's usage of electronic devices and their impacts on children's social development. Albert Bandura's Social Learning Theory (1999) postulated that individuals learn behavior in social content. Individual learns behavior by perceiving or observing others in environment. Children learn different behavior while observing other like our interviewees' kids learnt different languages even though their native language was just "Urdu" but they learnt other languages by observing and imitating other. The content of media help children to observe multiple things and that is the key attribute of learning whether they show on video games, drama serial or television which provide them opportunity to learn through observation. Children start imitating the same behavior which they learn from social media as Bandura's theory posits that children learn behavior through imitating, modeling and observation. But on the other side, excessive use of electronic devices ruin their social interaction as a physical realm using technology like sedentary can be dangerous it can lead to addiction, obesity and high health risks (Plowman *et al.*, 2012). Nevertheless, children get exposure of different things in young age that make them more intelligent in their academic as well as personal lives. According to Vygotsky theory (1978), individuals' learning is basically a social process. Individuals develop their

relationship by interacting with others in different group settings. Children morale increase through interacting with social world with the help of social media but they are going out of touch with their parents and also from physical activities. Central idea of Vygotsky's theory was that children develop their relationship through social interaction. In the digital era, children use to spend their most time on electronic media and that's how, they are interacting with so many people and socialize with others. In the present era the cellular phone is the most using tool that is the main source of connection between children and social world. It helps children to make their own social identity through electronic media because it strengthens the social competence in their personality as reported by the mothers; their kids are able to interact socially and their social interaction has improved. According to the Schramm model of communication (1971), states in his model that communication is based on two components; one is sender and second one is receiver. Social interaction basically depends upon the feedback which comes from others. Social communication through electronic media is different from interaction with people through physical realm. According to this model, children develop their own identity while communicating with their social circle. Children make number of friends through electronic media but in reality, they have less interaction who is sitting next to them and in reality they are left alone and have no one around when they need them most as everyone now a days is busy in making relationship

through social media and has less communication or have forgotten communication in reality. It is postulated that electronic devices connecting children to others on media but on the other side, it weakens the development of social competencies so the mothers should make some plan to organize their time and spend more time with their kids to develop social competencies as well as arrange some physical outdoor games for them and they should arrange gathering for social interaction. Research participants arranged physical and social activities for their children. Moreover, their kids also engaged in many sports such as basketball in school so direct communication between kids and their peer group is possible. (I have revised the discussion) Actually discussion is based on our findings. It is clearly mentioned in the results section that usage of electronic devices have both advantages and disadvantages, you may view the provided table and flow chart.

## **7. Recommendation**

This research infers that children have many benefits, along with risk, when interacting with media. Children are getting isolated from their parents and siblings, and they like to spend their most time on media. Recommendations are presented for mothers whose children use electronic devices, internet, games, and social media.

1. Children are anxiously waiting to use their devices and that's why they don't even concentrate on their studies so mothers should make some conditional plan to give their

children electronic devices that will help them to use in limited time.

2. Mothers should spend more time with their children to develop social competencies. Children use to interact to social world through social media instead of physical realm. So mothers should evaluate these behaviors and spend as much time with them to listen their stories.

3. As we all know, mothers have hectic routine because they have to manage multi tasks but they don't forget that their children need their time and attention. Mothers should be set free time for their children to play with them so they will have a strong parental bond and secure relationship.

4. Mothers should be aware that physical activities are very essential for children development. So mothers should be planning some physical outdoor activities for their kids that will develop social competence as well as sense of achievement.

5. Mostly mothers' give electronic devices to their kids because they are busy in tasks and it impacts on kids are very bad. So they use to indulge their kids in some effective activity; they can give book for coloring or reading or mothers can give them some brainstorming games like puzzles, blocks etc.

## **8. Implications of the Study**

The current study was helpful to understand a mothers' perceptions regarding positive and negative effects of electronic devices' usage on a child and her social development. It is assumed in our society that electronic devices have usually bad impact on child's learning, social interaction and communication but



current study revealed very interesting findings. Moreover, it also gives us the future direction to conduct a research which would really helpful for parents of school going children of how to regulate the usage time of electronic devices.

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