

The Effect of Parenting Style on Children's Involvement in Cyber Crime

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Abstract

Children in particular have increased access to ICTs and, in recent decades, have tended to adopt these technologies from an early age, resulting in ICTs becoming thoroughly embedded in their lives. However, they have also been involved in cybercrime. This study aimed at investigating the attitude of parents as well as the effects of parentage on cybercrime among children in Abraka community, Delta State. The research design used for this study is the survey design, using simple random sampling method. A Likert scaled structured questionnaire was administered to 173 randomly selected parents in Abraka community. The reliability of the instrument was tested using Cronbach's alpha (α) for estimating the internal consistency of an instrument. The parenting style instrument has a reliability index of 0.70, while the parental involvement in child's internet has a reliability index of 0.86. The cybercrime instrument has a reliability index of 0.79. The data obtained from the questionnaire was collated and analyzed using the descriptive statistics and Pearson Product Moment Correlation. The Data were analyzed using statistical package for social sciences (SPSS) version 23. The results showed that the result obtained showed that most parents frown at the

cybercrime involvement of their children. Parents who are authoritarians, the mean score of cybercrimes is 1.63 indicating that most parents from these group will not tolerate cybercrimes. As for the parents that are authoritative, the mean score is 1.62 indicating that they have fewer children who are involved in cybercrimes. But for the permissive parent (1.54) and uninvolved parents (1.42), the mean scores for the cybercrime is low indicating that majority of the young ones involved in cybercrime may likely come from such home where they are either allowed to do whatever they want or the parents don't care at all how the child lives his/her life. There was a significant difference in the children involvement in cybercrime based on their parenting styles ($F(3, 153) = 4.216, p = 0.007$). Cybercrime involvement among children differ significantly between the Authoritarian and uninvolved parent ($0.21, p = 0.002$); was significant different between the authoritative and uninvolved parent ($0.21, p = 0.02$). The parents in Abraka, should be enlightened on the legal consequence of cyber-crime. Parents in the homes where authoritative, permissive and involvement parenting is practiced should be encouraged to be more committed to involvement in their children's use of internet.

Introduction

The Internet provides a source for repeated, long-term victimization of children, which can last for a very long time/ years, often without the awareness of the victim. The geographic location of a child is not a primary concern for those who execute cybercrimes using the Internet. Often times, the perpetrators of Cybercrime travel hundreds of miles to different states and countries to engage in sexual acts with children they met over the Internet (U.S. Department of

Justice, 2001). Most of the victims of Internet crimes, may not realize that they are victims, and do not disclose their victimization.

The use of the internet and mobile communications have become an undeniable part of the daily live for many people, particularly children (UNICEF, 2016). Computer integration occurs in various forms, ranging from internet, mobile phone, computer integrated manufacturing, e-technologies to many others (Katalinic, 2010). According to the data of a survey, 62% of older elementary school pupils and 84% of high school students were exposed to risks in cyberspace in 2012 (Popadic & Kuzmanovic, 2013). Thus, the Internet can be a potentially dangerous platform for children. Risks for children on the Internet are currently getting more diverse, and more frequent worldwide (Ljubojev et al., 2017). Ljubojev et al. (2017) also added that parents are the most important factor in education of children, and as such parents need to be aware of the children's behavior on the Internet, so they could ensure the its usage is no other than beneficial to their children.

Family dynamics often play a significant role in children's denial of a crime and their willingness to participate in the investigation and prosecution. A child's ability to acknowledge and accept the crime can be linked to family values, peer pressure, and feelings of guilt, shame, and embarrassment. Denial and recantation can be common among children who unwittingly participated in the crime. Because of these issues, the greatest challenges facing law enforcement agencies, and other related agencies are to identify the victims, protect their privacy, and serve them without further victimization (U.S. Department of Justice, 2001). Also, there are many dangers of excessive consumption of the internet. These include poor academic performance, increased family tension, and school dropouts; wild hobbies, psychological and physical health problems resulting from sleep deficiency and fatigue. The fact of the matter is that the internet has stabilized itself in this planet earth, and it is crucial as a parent to think about the ways of designing a better safety and limited harm risk to our children. It is wise as a parent to give our children a high priority plotting and stimulating the positive online opportunities for our children to have the chance to discover, create and envision online.

According to Adeniran (2008) youths in Nigeria, especially undergraduates and the unemployed have embraced the ICT inventions e.g. smart phones and global

telecasts, among others. Such that the Internet medium now takes majority of their days when compared to their other daily activities. This has significantly given birth to the emergence of a group of youths known as yahoo boys among the Nigerian youths, particularly in urban centers, and University communities in particular, such as Abraka, in Delta State. Unlike the traditional criminal groups, both sexes are involved in yahoo-yahoo acts, as its commonly called in Nigeria with varying specialized functions (Adeniran,2008).

According to Hassan, Lass and Makinde (2012), there are several types of cybercrimes prevalent in Nigerian; some of which include: Cyber-terrorism, identity theft fraud, drug trafficking deals, malware, cyber Stalking, spam, wiretapping/Illegal interception of telecommunication, logic bombs, and password sniffing. According to Longe et. al (2009), crime threatens social order and cybercrime is a subset of crime that is committed by use of computer technology, either alone or in conjunction with real-world acts and actors.

Parenting styles have been correlated with many other factors such as violent behaviour, bullying and internet usage, there is however paucity of information with regards to how parenting styles contribute to involvement in cybercrime. This is the research gap this present study intends to fill with particular focus on Abraka, a University community in the South South Nigeria.

Statement of the Problem

Cybercrime appears to be a common practice among some Nigerians especially undergraduates including those who live in south-south geopolitical zone of Nigeria. Such practice is associated with some obvious societal problems such as poverty. Moreover, the prevalence of cybercrime gives a country a bad image in the comity of nations. It also may threaten a nation's security and financial health. Students are now taking pleasure in defrauding public and private organizations as well as their fellow students at the expense of their academic pursuit. If this anomaly is left to continue, schools in Nigeria will become a place where criminals are groomed in order to defraud the school management and the society at large. This study is therefore set out to evaluate the attitude of parents and guardians towards the involvement of their children in cybercrime (Amini-Philips, 2018).

AIM/ Objectives

The aim of this study is to investigate the effects of parenting styles on children's involvement in cybercrime.

Research Questions

4. What is the attitude of parents towards cybercrime?
5. Which parenting style promotes cybercrime involvement of children?

Hypotheses

There is no significant difference in children's involvement in crime among the different parenting style.

Methodology

Research Design/ Sampling Technique

The research design used for this study is the survey design, using simple random sampling method.

Study Area

This study was carried out in Abraka community, in Ethiope East Local Government Area of Delta State. Abraka as a community is one of the 25 Urhobo kingdoms in Delta state, It is one of the main Urhobo clans. It is mostly known as a university town, as the main campus of the Delta State University located there. Abraka town is a favourite destination for domestic and international tourists. The Abraka beach is famous for its natural flowing spring water, and has sports recreational facilities for outdoor activities like canoeing, fishing, swimming, barbecue and picnicking. The main settlements of Avwraka (Abraka) today are :*Oria, Urhuagbesa, Umeghe, Oteri* and *Otorho-Avwraka (Avwraka Inland)*.

Population of the Study

The population of this study involved all parents residing in Abraka.

Sample size determination

The sample was calculated using the Cochran's sample size formula. The Cochran's formula allows one to calculate an ideal sample size given a desired

level of precision, desired confidence level, and the estimated proportion of the attribute present in the population.

The Cochran formula is:

$$n_0 = \frac{Z^2 pq}{e^2}$$

Where:

5. e is the desired level of precision (i.e. the [margin of error](#)),
6. p is the (estimated) proportion of the population which has the attribute in question, and in this case 87% i.e. 0.87.(Suleiman, 2019)
7. q is $1 - p$.

Hence

$$((1.96)^2 (0.87) (0.13)) / (0.05)^2 = 173.72.$$

The sample size to be used for this study is therefore 173 young adult/adolescent who may be involved in cybercrime and 20 parents who will be interviewed to determine their attitude towards their children involvement in cybercrime.

Research Instrument

The instruments used for this study was the attitude and involvement in cybercrime questionnaire. The attitude and involvement in cybercrime questionnaire comprise of four sub-scales. The Demographic variables, Cybercrime Involvement, Style of parenting, and the parent's involvement in the use of internet. The instrument used the Likert scale. The cybercrime involvement which is a 2-point scale was negative worded, hence a reversal in the scoring, such that those that agreed are scored 1 and disagreed are score 2. A four-point Likert scale was used he parenting style and parents' involvement in the use of internet. (4 is strongly agreed, 3 is agreed, 2 is disagreed and 1 is strongly disagreed).

Reliability of the Instrument

The reliability of the instrument was tested using Cronbach's alpha (α) for estimating the internal consistency of an instrument. The parenting style

instrument has a reliability index of 0.700, while the parental involvement in child's internet has a reliability index of 0.858. The cybercrime instrument has a reliability index of 0.799.

Method of Data Analysis

The data obtained from the questionnaire was collated and analyzed using the descriptive statistics and Pearson Product Moment Correlation. The Data were analyzed using statistical package for social sciences (SPSS) version 23.

Results

Table 1: shows the frequencies and percentages of the respondents in each of these categories.

Table 1: Demographic representation of Respondents

<i>category</i>	<i>Sub category</i>	<i>N (%)</i>
<i>Gender</i>	Male	95 (60.5)
	Female	62 (39.5)
<i>Educational Qualification</i>	None	37 (23.6)
	Primary	24 (15.3)
	Secondary	66 (42.0)
	Tertiary	30 (19.1)
<i>Religion</i>	Christian	150 (95.5)
	Muslims	4 (2.5)
	ATR	3 (1.9)

Table 1 shows that the majority of the respondents are male (60.5%) and on 39.5%v are females. While 66 (42%) of the respondents attained their secondary education, 19.1% had tertiary education, 15.3% only had primary education as their highest qualification and 23.6% did not obtain any form of formal education. Almost all the respondents are Christians, with only 2.5% being Muslims and 1.9% claims they are traditionalist.

Research Questions

Research Question One

What is the attitude of parents towards cybercrimes?

In determining the attitude of parents towards cybercrimes, the scores for parenting style and their involvement in their child's internet was correlated with the various cybercrimes listed that could be taking place in the community of the study. The result obtained is presented in Figure 1

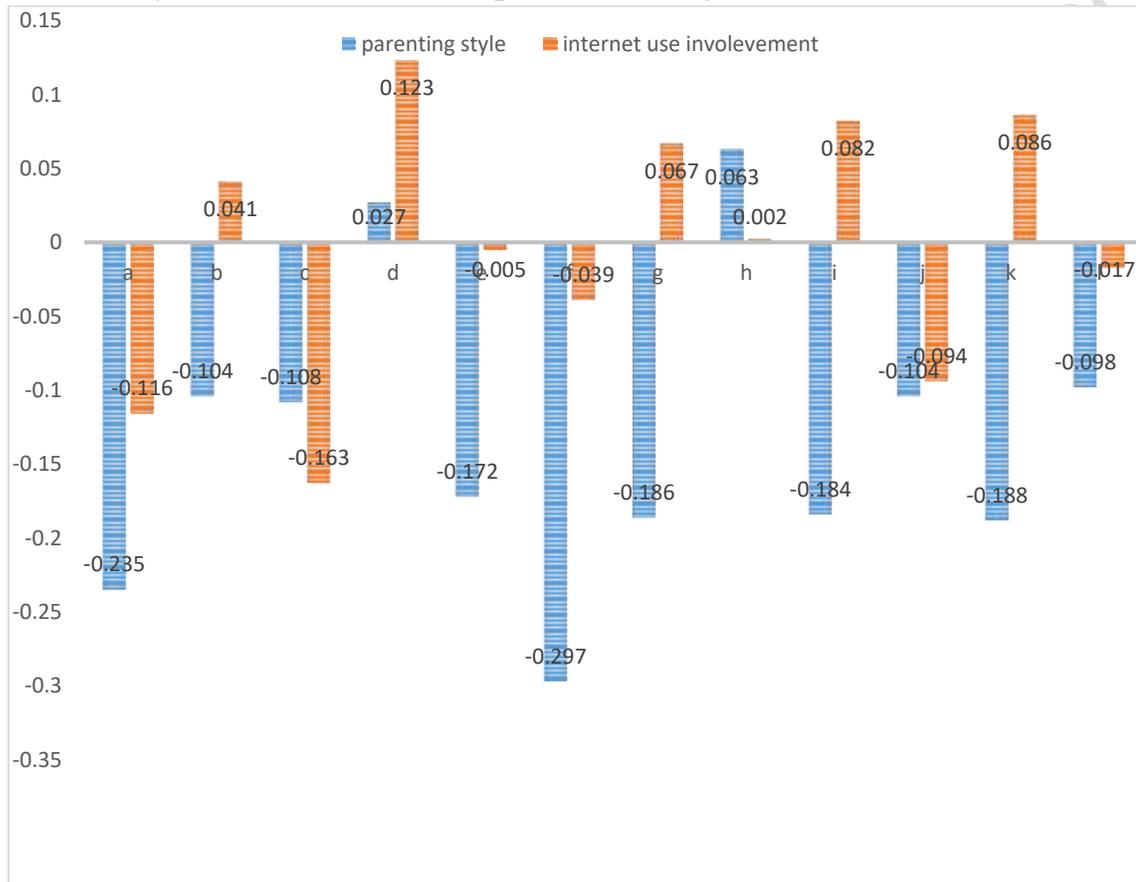


Fig 1: Attitude of parents towards cybercrimes

Fig. 1 shows that the attitude of parents towards cybercrime involvement of the children is a negative one. The result obtained shows that most parents frown at the cybercrime involvement of their children. It shows that for 419 popularly known as yahoo-yahoo in the study location, the attitude of parents was negative towards it (-0.235, -0.116). their attitude towards online trafficking (-0.104, 0.041), cyber stalking (-0.108, -0.163), Hack of organizational account (-0.172, -0.005), identity theft (-0.297, -0.039), encrypting of files using public keys (-

0.186, 0.067), Flotation of illegal business proposal (-0.184, 0.082), cybercrime with direct contact through phones (-0.104, -0.094), The use of remote administrative tool (-0.118, 0.086), and online child abuse materials (-0.098, -0.017).

Research Question Two

Which parenting style promotes cybercrime involvement of children?

In determining which parenting style promotes cybercrime involved the most, a descriptive statistic was conducted, using a benchmark of 1.5, with the mean of 1.5 and below as those involved in cybercrime, the result is presented in Table 2.

Table 2: Parenting styles and cybercrime involvement in children

<i>Parenting Style</i>	<i>Mean</i>	<i>N</i>	<i>Std. Deviation</i>
<i>Authoritarian</i>	1.63	59	0.23
<i>Authoritative</i>	1.62	55	0.24
<i>Permissive</i>	1.54	27	0.18
<i>Uninvolved</i>	1.42	16	0.24
<i>Total</i>	1.59	157	0.24

Table 2 shows that the mean scores of the cybercrimes in the based on the parenting styles. The result shows that for parents who are authoritarians, the mean score of cybercrimes is 1.63 indicating that most parents from these group will not tolerate cybercrimes. As for the parents that are authoritative, the mean score is 1.62 indicating that they have less children who are involved in cybercrimes. But for the permissive parent (1.54) and uninvolved parents (1.42), the mean scores for the cybercrime is low indicating that majority of the young ones involved in cybercrime may likely come from such home where they are either allowed to do whatever they want or the parents don't care at all how the child lives his/her life.

Testing of Hypotheses

Hypothesis One

There is no significant difference in children's involvement in crime among the different parenting style.

To test this hypothesis, a one-way ANOVA was conducted, the result is presented in Table 3

Table 3: Descriptive Statistics and Analysis of Variance of the difference in cybercrime involvement based on parenting style

	<i>N</i>	<i>Mean</i>	<i>Std. Deviation</i>	<i>F</i>	<i>df</i>	<i>sig</i>
<i>Authoritarian</i>	59	1.62	0.23			
<i>Authoritative</i>	55	1.62	0.24	4.22	3, 153	0.01
<i>Permissive</i>	27	1.54	0.18			
<i>Uninvolved</i>	16	1.41	0.23			
<i>Total</i>	157	1.58	0.23			

Table 3 shows that there is a significant difference in the children involvement in cybercrime based on their parenting styles ($F(3, 153) = 4.216, \rho = 0.007$). The null hypothesis Two is therefore rejected and the alternative holds true. The result therefore implies that there is a significant difference in children's involvement in cybercrimes based on their parenting style. Table 3 also shows the mean scores of cybercrimes involvement of the different parenting styles indicating that the permissive and uninvolved parents have their wards more in such cybercrimes.

To determine the difference, a post-hoc test was conducted, to see which of these parenting styles actually differ. The result is presented in Table 4

Table 4: Mean Difference Comparing the cybercrimes involvement of children based on their parenting style

	<i>(I) Parenting Style</i>	<i>(J) Parenting Style</i>	<i>Mean Difference (I-J)</i>	<i>Std. Error</i>	<i>Sig.</i>
<i>LSD</i>	Authoritarian	authoritative	0.01	0.04	0.892
		permissive	0.08	0.05	0.120
		Uninvolved	0.21*	0.07	0.002

authoritative	Authoritarian	-0.01	0.04	0.892
	Permissive	0.08	0.05	0.153
	Uninvolved	0.21*	0.07	0.002
permissive	Authoritarian	-0.08	0.05	0.120
	authoritative	-0.08	0.05	0.153
	Uninvolved	0.13	0.07	0.084
uninvolved	Authoritarian	-0.21*	0.07	0.002
	authoritative	-0.21*	0.07	0.002
	Permissive	-0.13	0.07	0.084

Table 4 shows that children's cybercrimes involvement does not significant differ between the authoritarian and authoritative parents (0.006, $\rho= 0.0892$), it does not also differ between the authoritarian and permissive parent (0.08, $\rho= 0.120$), but differ significantly between the Authoritarian and uninvolved parent (0.21, $\rho= 0.002$). Cybercrimes involvement was also not significant different between the authoritative and permissive parent (0.08, $\rho= 0.153$) but was significant different between the authoritative and uninvolved parent (0.21, $\rho=0.02$). There was no significant difference between the permissive and uninvolved parents as it concerns their children's involvement in cybercrimes (0.13, $\rho=0.084$).

Discussion

The result obtained from this study reveals that most parents frown at the cybercrime involvement of their children. Nadezda *et al.* (2017) report showed that cybercrime is frowned at by parents not only in Nigeria but also in different parts of the world. They also added that although most children are more advanced than their parents when it comes to using the internet, most parents still have the life experiences that can help protects their wards safe from cybercrimes. The finding of Popadic *et al.* (2016) also agreed with this study, were they found that 65% parents frowns at the use of mobile communication and internet facilities by children stating that these devices are dangerous and internet unsafe for children as it may lead them to become cybercrime perpetrators or victims of cybercrime.

The study also revealed that authoritarian parents will not tolerate cybercrimes. As for the parents that are authoritative, they have less children who are involved in cybercrimes. However, the majority of the young ones involved in

cybercrime may likely come from permissive and uninvolved parentage, where they are either allowed to do whatever they want or the parents don't care at all how the child lives his/her life. The finding also revealed that there was a significant difference in the children involvement in cybercrime based on their parenting styles ($p = 0.007$). The permissive and uninvolved parents have their wards more in such cybercrimes. The study also revealed that in the study location, authoritarian and authoritative parent had children that are less involved in cybercrime. Ihmeideh and Shawareb (2014) found that only the authoritarian parenting style was a significant predictor of children's Internet use, there was a significant relationship between the authoritative parental style and the Internet use of children. No relationship was however found between children's Internet use and other parenting styles (Ihmeideh and Shawareb, 2014).

Conclusion

Based on the findings in this study, it can be concluded that parents in Abraka, have a negative attitude towards cybercrime involvement of the children. It is obvious that parents in the study location are to a large extent involved in their children's internet usage. Most authoritarian parents will not tolerate cybercrimes. Authoritative parents have less children who are involved in cybercrimes. The majority of the children involved in cybercrime may likely come from permissive and uninvolved parentage homes where they are either allowed to do whatever they want or the parents don't care at all how the child lives his/her life. There was no significant relationship between parents' involvement in the use of internet and children involvement in cybercrime. There was a significant difference in the children involvement in cybercrime based on their parenting styles.

Recommendations

The parents in Abraka, should be enlightened on the legal consequence of cybercrime. Parents in the homes where authoritative, permissive and involvement parenting is practiced should be encouraged to be more committed to involvement in their children's use of internet. Since, the majority of the

children involved in cybercrime may likely come from permissive and uninvolved parentage.

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Appendix 1

Attitude of Parents towards their children involvement in cybercrime Questionnaire

Department of Intelligence and Security Studies,
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This questionnaire is designed to elicit information on parents' attitude towards children's involvement in cybercrime. Please, honestly fill in or tick (✓) in the appropriate box as it applies to you. The information will be treated confidentially as it will be used strictly for research purpose only.

Thanks

SECTION A: DEMOGRAPHIC VARIABLES OF RESPONDENTS

Gender: Male [] Female []

Age:

Educational Qualification: Primary [] Secondary [] Tertiary []

Religion: Christian [], Muslim [], Atheist [], ATR [], None []

SECTION B: Cybercrime involvement of children

The following cybercrime are prevalent in Abraka, please tick if you ward (s) is involved in any

		<i>Agreed</i>	<i>Disagreed</i>
1.	419 (yahoo-yahoo)		
2.	Online drug trafficking		
3.	Cyber stalking		
4.	Email hack		
5.	Hacking of organizational account		
6.	identity theft (this is the impersonation of somebody)		
7.	Encrypting of files using public-key		
8.	Online spam sending		
9.	Floatation of illegal business proposal (phishing)		
10.	Cybercrime with direct contact through phone (social engineering)		
11.	The use of remote administrative tools		
12.	Online child sexual abuse material		

SECTION C: Assessment of Parents' Attitude

Style of Parenting

<i>Items</i>	<i>SA</i>	<i>A</i>	<i>D</i>	<i>SD</i>
1				
	I want my child to follow my instructions because I am the authority to decide what to do or what not to do.			
2				
	I would like to be a friend, Philosopher and guide to my child.			
3				
	I am very soft with my child so that I cannot correct him/her at proper time by punishment.			
4				
	I do not have any demand or control on my child and I give total freedom.			
5				
	I have little patience to tolerate any misbehavior of my child or to listen to the excuses in any kind of mistakes.			
6				
	I used to understand the feelings of my child in any situation and always try to get the opinion of my child whenever I buy something for him/her.			
7				
	Whenever the child comes with low marks, I will not give any punishments rather I feel he/she will become better next time.			
8				
	As I am very sad and depressed, I cannot show much care and deep emotional tie up with my child.			
9				
	I strongly believe that my child's future is in my hand and so there is a strict time table for my child to follow			
10				
	Important decisions of the family are done together and I give full freedom to my child to share everything with me.			
11				
	I give valuable reward to my child for obeying me or behaving well.			
12				
	As I am very busy with my household and office duties, I get less time to involve my child's studies or to listen his/her needs and wishes.			

- 13 I have clear expectations regarding my child's behavior and I am not much bothered about the likings of my child regarding his/her future.
- 14 As I understand the strength and weakness of my child, I set some appropriate rules for him/her and give friendly corrections whenever necessary.
- 15 Though I have definite goal and planning about my child's future I cannot follow it strictly because of my leniency.
- 16 I have enough stress and strain myself and hence I cannot take care of my child's welfare.
- 17 I usually like to give physical punishment than giving advices to my child because I am sure he/she will not listen to it.
- 18 I will not force my child in any of his/her future career and I also help him/her to
- 19 As I was brought up by strictly disciplined parents, I am very liberal with my child.
- 20 I usually give more important to my own likes and wishes but not bother much about needs or misbehaviors of my child.
- 21 I believe that only through punishment a child can be corrected and I also do not like to give any financial freedom to my child.
- 22 Whenever my child fail to follow the time table given to him/her, I remind the consequences with a touch of love and affection.
- 23 I like to be a very affectionate parent towards my child and also I take the responsibility of my faulty parenting on my child.
- 24 As I am busy and get little time to care my child, he/she is quite free to move own way to take decisions.
- 25 The punishment I give to my child depends upon my mood.
- 26 My child talks with me out of being punished after he/she has done something wrong.
- 27 I always threaten my child with punishment but do not actually doing it because of my leniency.
- 28 As I am bounded with severe life problems, I ignore my child's misbehaviour and I have no idea about his/her life outside the home.
- 29 Whenever my child shows disobedience, I scold and criticise him/her with bursting anger.
- 30 Even though I am busy I have enough time to visit my child's school & to meet teachers to know his/her progress.
- 31 Because of excessive love and sympathy I have been showing towards my child, he/she has no self-discipline.
- 32 I never like to tell my child where I am going or why I am late.

Parental involvement with child's internet usage

In a scale of 1-4, where 4 (strongly agreed), 3 (agreed), 2 (disagree) and 1 (strongly disagree) describe your involvement in your child's internet usage

4 3 2 1

- 1 I limit the time spent with those technologies
- 2 I regularly monitor my child's web browsing history
- 3 I install antivirus program in my child's computer
- 4 I install firewall program in my child's computer to protect him/her from outside attacks
- 5 I ask my child to share passwords with me to check his/her accounts
- 6 I use parental control function of those communication technologies
- 7 I am connected with my child in social media to monitor him or her
- 8 I limit the time spent with those technologies
- 9 I regularly monitor my child's web browsing history

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