

NOURISHING CYBER SECURITY MEASURES AMONG PROCREATOR IN ARBA MINCH, ETHIOPIA

Azath M.⁹ Balakumar S¹⁰

ABSTRACT

This research is used for analyzing the awareness among the cyber security parental to safeguards their children. Nowadays young people are often called digital natives since they live in a time with digital gadgets. Just because they seem to be techno-savvy, they are not following safe practices.

The challenge for parents is that it can be hard to coach their children if they do not fully understand today's online threats and safeguards. Our aim is to aid parents on their security and good cyber ethics to safeguards their children.

The result of this study should have enlarged scrutiny via hinted through cyber security safeguard in order to organize the aspects that impinge protection toward their family. Being cautious about cyber security at early stage could help parents to defend their children.

KEYWORDS

Safeguards, Monitoring, Digital, Techno-Savvy etc.

I. INTRODUCTION

At Present in Ethiopia, Information Network Security Agency (INSA) a national-level safety awareness campaign is deploying immediate administrative organizations, to implement the country's information security laws and policies [1].

Here the moral intermediate considering support nearby the administrative agencies do eminently vital in order to accretion proficiency famously together with the ambition society, specifically pupil and guardian. Elegant Internet of Things (IoT), most end user activities are dependent on internet communication in several sorts. There are various merits and demerits of using internet. Therefore, one should be aware of it by understanding its demerits properly. People who do not have good intentions they only intend to harass, harm, and engage themselves in cyber bullying activities also utilize internet.

By using Internet, guardians must remain conscious about fine cyber ethics directed toward look after their minors and others. Internet users have the appropriate rights to utilize Internet securely and to set their own limits. Every individual must be smart, liable and safeguard themselves and their children by monitoring them both online and in real life. Getting slight knowledge about their children what they endure accomplishment on the Internet frame warning since the proficiency around cyber security risks is hushed lesser among guardians. Meanwhile lure shows that, 1 among 25 Ethiopian guardians maybe familiar with their children are seeking from the Online. Elegant countless process, guardians are illiterate of their youths baseless connection as well as expose toward incorrect on the Internet [5], supervise their children towards the risk of Internet.

⁹ Assistant Professor, Faculty of Computer and Software Engineering, Institute of Technology, Arba Minch University, Arba Minch, Ethiopia, azathhussain@gmail.com

¹⁰ Assistant Professor, Faculty of Electrical and Computer Engineering, Institute of Technology, Arba Minch University, Arba Minch, Ethiopia, balakumar25dec@gmail.com

Due to educational pressure amid youths, online grants how the appearance like harmful items definite along disgusting contented, cyber bullying, habit, online frauds, along with secret knowledge outflow along youth's journey in online community. The above-mentioned safeguard risks endure forenamed towards more and more complicated along with significantly worsen against lifetime [6].

Technical knowledge as well as the uncertainty related upon persistently enlarges, although a small amount of holdings call the identical. During incredible enormous move onwards, plenty of citizens remain progressive towards the need of usage also a limited figure of society remain moving towards detecting practice of exploitation. Meanwhile the exploitation resolves the dealings also found in their removal, rather community or scientific. Although safeguard authority conspire toward the society to control securing their expertness, execute the culprits. In this real world, safeguard risks desire to remain a lifetime.

II. METHODOLOGY

a. General Approach

This research uses quantitative approaches adapted from the investigation of 202 Ethiopian families. This investigation was conducted among the quantity of respondents consisting of parents throughout Arba Minch, Ethiopia.

Table-A: Research Phases

S. No.	Phases	Motion	Result
1	Preliminary Study	To diagnose the obstacles of Cyber Security	Problem Statement
		To identify the purpose of this study	Research Objectives
		To identify the scope of this study	Scope of the investigation
		To study different research papers	Literature review of existing systems
		Designing System	Aim to study the tools
2	Research Feasibility	Verify the research tools	Reliable tools
3	Research Study	Survey conducted through offline	Data collection from respondents
4	Conclusion	Final Thesis	Final Results

Sources: Authors Compilation

b. Preparation of Questionnaires

This study consists of seven elementary closed-ended questioning around caring armor on online safety measures bullying with adults. The researchers delivered a brief explanation regarding the research to the Ethiopian parents/guardian about the objectives and threats of digital gadgets.

Few questions from this same section have been used in Scale method, where the answers are obtained as: a = Strong Disagree, b = Disagree, c = Neutral, d = Agree and e = Strongly Agree. A single questioning here bring their desire towards answering 0 = Yes or 1 = Not Ok, since addition of items are required by accused toward choose through design the lean of agreeing responses.

c. Sampling

202 Ethiopian parents/guardians combine the simple samplings of a suitable investigation proceeds towards, and express the right equal of correctness and strength in place of the benefit of the study.

III. KEY FINDINGS AND DISCUSSION

The ultimate aim of here exercise stays towards study the smooth of caring readiness regarding online safety fear towards their adults through Arba Minch, Ethiopia. Nearly 500 questionnaires were circulated near the defendants;

among them merely 202 questionnaires remained completed and handover to the concerned investigators. Here measureable facts composed, stayed examined from side to side by Statistical Package for the Social Sciences statistical software.

a. Awareness Program

When the Awareness Program was conducted in Arba Minch, Almost 202 respondents were attended. Those respondents are the parents and guarding of the children. They were so curious with our program, which was hosted by our research team members. Those guardians were raised many questions regarding internet and online threats.

Guardians feel so normalcy by our program. During that program, we collected secondary data through questionnaires almost 202 respondents responds accurately about their children's mentality and their own interest with online threats and mechanisms.

In Africa, especially peoples from Ethiopia are indulging themselves with e-gadgets and government of Ethiopia also creates awareness among the youths and their citizens.

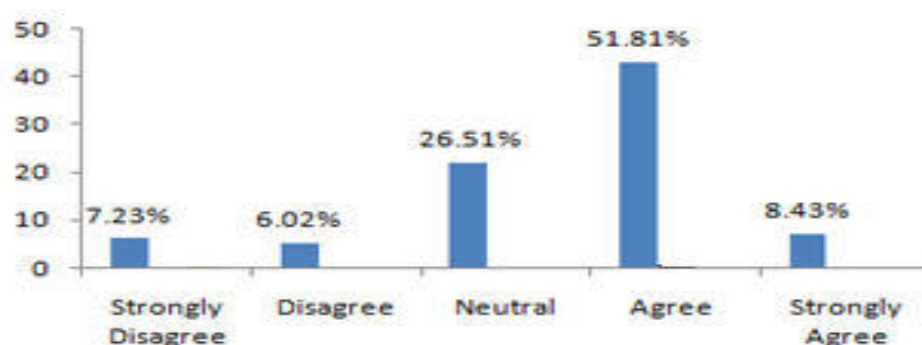
In Ethiopia, INSA organization plays an important role to their citizens to create a massive growth in the aspects of Internet and their usages. Also the researchers demonstrate several impacts of internet and usages of Internet to the respondents.

During that period the researchers circulate the questionnaires to each defendants who ever participated on that occasion. From that the following results shows the results of the defendants, only 83 (41.09%) retain as a guest in training program in the domain of internet risks and the resting of 119 (58.91%) were not as a guest in any internet related training programs.

Amid 83 participants, 50 (60.24%) respondents were fulfilled through the training program on online risks programs. The remaining 22 (26.51%) respondents were recorded as lesser fulfilled through the program results. During this time 11 (13.25%) recorded as entire displeasure.

It is clear that even though several programs were conducted by Government of Ethiopia, private organizations and by our team researchers its astound that only few parents were aware of online threats and impacts. Almost 60% respondents agree that their children may face online threats.

Figure-A: Response of Gratification Facing Online Risks Training Program



Sources: Authors Compilation

b. Situational Alertness Level on Cyber Security

Table-B: Cyber Security Safeguard Alertness

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
	%	%	%	%	%
Are you not familiar of internet risks.	5.94	8.91	9.90	55.94	19.31
Are you not familiar of your children is watching through online.	1.49	2.48	17.33	67.31	11.39
Did you notice your children aware of your internet.	0.99	2.48	15.84	62.87	17.82
I don't realize the complications in using internet.	2.48	3.96	12.38	57.43	23.75
I am a mentor for my children to use their digital gadgets.	35.64	30.20	9.41	15.84	8.91

Sources: Authors Compilation

A detailed study was conducted in the aspect of Arba Minch, Ethiopia as a concern with their children perspectives. It is evident from the respondents statement stated that from the above Table B, 75.25% respondents have reported that they are not aware of their online threats'. Here, it is a huge gap between the parents and internet usages.

Almost 75% of guardians/parents stated that they are aware of internet, it means that most of the parents had never used internet in their daily routines. This circumstance will create a huge loss for the development of nations and upcoming generations might get more loss. Among them, only few 24.75% respondents are aware of cyber threats.

Gradually 78.7% of respondents are not familiar with their children's are accessing though internet. Here attend of why few Ethiopian guardians are not able to audit the child's action on internet, as well as advising supports, explaining towards the internet usage and let them access in society. The remaining of 21.3% of respondents who have limited information about cyber security challenges, hardly monitor their pupil.

80.69% of respondents are very aware of their child's use of Internet. 81.18% concerned peoples are acknowledged with the troublesome interest to restrict the youths towards online usage, because parents assumed internet is complicated. However, 18.84% respondents disagree with the face that they are not aware of the complications in using internet.

A total of 24.75% of parents have reported to be habituated during the e-gadgets usage though online, specifically towards the togetherness of children. Even though there is some awareness among parents in provisions about online usages in their family. Still parents lack with technology, so it becomes hard for parents and children to go hand in hand. Therefore, the researchers found that there is a gap with internet and users.

IV. LIMITATIONS OF THE RESEARCH

Data gathered for inspecting is applicable only to few parents in Arba Minch, Ethiopia. This study does not consider all the Ethiopian parents, but only very few.

V. CONCLUSION

From the above survey, it is clear that matching of online risks training programs in the midst of guardians remained very less. Significance rest against towards the loss of governmental or non-governmental agencies particularized awareness training meetings, finite reports are inadequate training programs around Ethiopia towards online risks. It is the duty of the authorities and NGOs to provide inspiring awareness to parents regarding Cyber threats. Several study offer valuable insights about cyber security into the existing knowledge of parents in Ethiopia. It is expected that by applying this study be used to analyze the safety measure of cyber security towards the promotion of training

programs for guardian's alertness. The researchers concluded that several training or awareness programs have to be conducted for the guardian's alertness, so that they could be excellent mentors for their children. It is clear that special care has to be care by the mentors since internet is sometimes acting as a threat for younger generations in many aspects.

VI. RECOMMENDATIONS

In the case of Ethiopia, there is a substantial initiation towards the proceeding of safeguarding cyber security amid institution children and parents. Few guidance considering towards the domestic strategy upgrade cyber security in the society are:

- Organize domestic institution plans, which inspects to what degree the cyber security being consigning towards the upgrading measures of safeguard trainings to every children, teachers and parents.
- Safeguard every national IT strategies should be enforced with regular monitoring and assessment.
- Cater schools with a clear cybersecurity protocol through Ethiopia Information Network Security Agency (INSA).
- Contribute awareness program to every supervisors and parents about cybersecurity awareness and Protocols.
- Assure and aware the domestic peoples about the awareness of cyber security.

REFERENCES

Ethiopia: INSA Issues Cybersecurity Standards - *allAfrica.com*. (n.d.). Retrieved August 9, 2020, from <https://allafrica.com/stories/201702230448.html>.

Review on Cyber Security Situational Awareness among Parents. (n.d.). Retrieved August 9, 2020, from <https://www.irjet.net/archives/V6/i11/IRJET-V6I1196.pdf>

Byrne, S., Katz, S. J., Lee, T., Linz, D., & McIlrath, M. (2013). Peers, Predators, and Porn: Predicting Parental Underestimation of Children's Risky Online Experiences. *Journal of Computer-Mediated Communication*, 19(2), 215-231. doi:10.1111/jcc4.12040.

Yulianto, J. E. (2017). *Studi Komparatif Identitas Nasional Pada Remaja Generasi Z Ditinjau Dari Intensitas Penggunaan Internet*. *Humanitas*, 13(2), 149. doi:10.26555/humanitas.v13i2.6070

Sorensen, B. (2019, July 02). *How Does Technology Affect Family Communication?* Retrieved August 09, 2020, from <https://oureverydaylife.com/how-does-technology-affect-family-communication-5831363.html>.

Explorasi Hubungan antara Personaliti Islamik dan Gaya ... (n.d.). Retrieved August 9, 2020, from http://www.ukm.my/ijit/wp-content/uploads/2016/01/IJIT-Vol-4-Dec-2013_6_48-57.pdf.

Hubungan Antara Gaya Keibubapaan Dengan Penggunaan ... (n.d.). Retrieved August 9, 2020, from <http://gmjme.upm.edu.my/UPLOAD/8482f317b9f706911995fb7447155534.pdf>

Wendy O'BRIEN | PhD, MPubInt Law, MEval | Deakin ... (n.d.). Retrieved August 9, 2020, from https://www.researchgate.net/profile/Wendy_Obrien6.

Ahmad, N., Mokhtar, U., Fauzi, W., Othman, Z., Yeop, Y., & Abdullah, S. (1970, January 01). *Cyber Security Situational Awareness among Parents: Semantic Scholar*. Retrieved August 09, 2020, from <https://www.semanticscholar.org/paper/Cyber-Security-Situational-Awareness-among-Parents-AhmadMokhtar/f897ae42344b7f41b0ef9f4892950d1f90a669da>
