

Transitioning from Digital Monitoring to Digital Self-care among adolescents

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Abstract- *In the present time, digital monitoring has become a staple among parents concerned about the digital usage of their children. A witnessing of the ever-increasing number of devices has been observed in the recent times ranging from portable music players to the modern smartphones, the latest and most dynamic entrants in the list being smart devices from home, smart robots and wearables. With a humongous increase in this number of devices owned by and employed in action by adolescents simultaneously, there tends to arise concern for the digitally well-equipped adolescent among parents. Enter digital monitoring which has helped to significantly tone down the intensity of the worries thus in picture. However, digital monitoring in its approach seeks to control and not remediate upon various prevalent issues like screen time, app and recreational usage, app based activity and other such parameters. Time being, digital monitoring has asserted its place as one of the rightful strategies to monitor and maintain safer digital space for adolescents. On the contrary such form of monitoring in specific cases is an act of unauthorised spying or digital abuse thereby at times tampering with the rights of adolescents and children.*

The paper aims at analysing the need of digital self care among adolescents. It also examines the lack of a well-devised and carefully curated plan for allowing adolescents to transition from digital monitoring to digital self-care. The paper encompasses the idea that this proponent of digital self-care need not directly be a function of the formal school curriculum but a cumulative imbibing of the school, parents, other students, device manufacturers and the society together. The paper thus critiques upon digital monitoring as a concept redundant or irrelevant to the adolescent age group having already equipped themselves with ample workarounds to bypass monitoring checks and prescribed app usage regulations. Therefore, it lays down the need for a responsibility oriented, participatory and democratically advanced approach to meet the needs of the superior strategies of digital self-care while keeping their adult counterparts on a readily available standby so as to facilitate them as and when the need to do so is demanded or felt.

The approach considered herein is qualitative. Under qualitative study, the case study approach has been used to understand digital monitoring and critique upon it thereby enlisting its shortcomings, further needs and scope of improvement and the inevitable need of

transitioning towards a more participatory endeavour of digital self-care from the rather governing or directing notion of digital monitoring.

Keywords: Digital Monitoring, Digital Mentoring, Digital Self-care, Cyber wellness, Digital Awareness

Introduction

Digital monitoring among adolescents is the practice of monitoring digital, internet and/or cyber behaviour in adolescents usually regulated by parents, guardians or school organisations to keep in check safety measures regarding digital usage. Digital mentoring on the other hand is an approach to develop mutually beneficial digital learning and/or usage environments for tools and technologies on the basis of a mentor-mentee approach. The advancements, rise and improvements in technology over the recent decade has also led to an impact on the duration of usage of devices. Adolescent media consumption and usage duration has rapidly become a subject of concern for parents, educational institutions and organisations alike.

Adolescents occupy a place as one of the targeted consumer bases for online platforms, forums, social networks and other service providers. Content tailor-made so as to suit their viewing patterns is created to take maximum advantage of the end-consumer and this is an evident feature of not only corporates or organisations but individual creators and developers too. With the eventual rise in the number of electronic gadgets used daily, there is a need for some standard or regulatory measure to ensure the well-being of the users. Now that the smartphone is not the only smart gadget around, digital monitoring needs to expand its horizons of reach especially with the evident rise of wearables, consoles, fitness trackers, VR/AR devices and also other smart devices such as lights, television and even speakers! As a reason of all this, the amount of time spent on devices has witnessed a boom.

Parenting in the present progressive age of technology has thus an added responsibility of averting digital dangers from children and adolescents. Threats evolving each day thus add to the burden of better digital management presenting more complex challenges with time. There is also a direct competition between parents and the internet as to who is being looked up by them for resolution of problems. Smartphones and other digital devices have moved on from being domestic to devices necessary for educational activities making these devices mandatory to interact to for most of the day making parental or guardian supervision impossible to be available throughout their time of usage. Possible dangers being explicit content, malicious websites, theft, cyberbullying and others. Even physical harms like problems in vision due to blue light pose risks for adolescents.

Objectives

- 1.) To understand the present practices, applications and services concerned with digital monitoring.
- 2.) To examine the present practices related to digital monitoring.

- 3.) To analyse the user interface, features and functions of select default digital monitoring applications.
- 4.) To determine features and advancements required related to digital monitoring.
- 5.) To distinguish digital self-care and digital well-being as evolving measures for digital monitoring.

Methods and Procedures

The present study is a qualitative case study present implementations of digital monitoring further highlighting concerns pertaining digital monitoring and parental controls especially with regard to default applications on two popular operation systems for mobile/portable devices viz. Android, Windows and iOS. It aims at breaking down the prevalent practices regarding digital monitoring through data collected herein is from the policies, present practices, articles and reviewer responses related to along with a detailed understanding of the concept of screen time, digital wellbeing and parental controls with real time usage and a key emphasis on user interface, functionality and ethical concerns.

Default applications for digital monitoring: A review

Talking of the two most popular Operating systems on mobile devices (*Mobile Operating System Market Share Worldwide | Statcounter Global Stats*, n.d.), the digital monitoring especially usage monitoring services are limited to two individual applications, viz. Digital Wellbeing(*Digital Wellbeing*, n.d.) on Android and Screen Time(*Use Screen Time on Your iPhone, iPad, or iPod Touch*, 2022) on iOS. Both these applications offer similar functionality in tracking daily usage of various applications; however, these usage statistics are limited to that very single device and not on the basis of the user account which is being logged in. Moreover, these digital monitoring features lack the interconnection of accounts and cross-OS and cross-platform screen time statistical data. The loophole thus exists and the usage data maybe more inaccurate for users with multiple devices with multiple OS.

Furthermore, usage and self-care alerts are limited to Night Light (“Implementing Night Light,” n.d.) Features for usage in low light conditions and high earphone volume overlay in most devices. Parental controls too are accessible from both devices, i.e. the child and the parent’s and can be turned on and off. Google’s Family Link (*Family Link From Google - Family Safety and Parental Control Tools*, n.d.) provides basic level parental control features but the functionality is limited to location tracking and usage statistics. There is hardly any visible emphasis on AI-based site/content filtering; even sites banned by regulatory authorities find access through workarounds. Content and word filtering are also easy to bypass. There is also less scope for a single device to be used in controlled timings and or multiple users based on role like parents and children. Instant notification service for malicious content is scarcely available. There is a lack of provision for monitoring multi-device time through a single account or other possible approach.

For a note, the Digital well-being app on Android allows users to hide the app from the drawer despite being installed is in fact an evident sign of how digital monitoring is side-lined by a majority of consumers and this practice thoroughly backed by manufacturers or developers.

Transitioning from screen time to digital/gadget time

With rapidly increasing number of gadgets/devices especially those that fall in the “smart” labels, there has arisen a need for a more comprehensive transition away from the word “screen time” to “digital/gadget time”. With the rise of the wearable and smart devices market, the chunk of device time has significantly gone higher but the means or strategies to monitor this usage are scarce.

Moreover, household smart enabled devices like switches, multi-coloured bulbs, smart bulbs, voice-assistant enabled speakers too occupy a share in the digital time...time management and monitoring strategies for which are also absent. Television too accounts for a considerable share in screen time, statistics of which are monitored individually and not in combination with total device time. Moreover, the use of the proximity sensor is limited to answering phone calls while solutions can be brought in to use it as a measure for safe distance from screen. Gadget/Device time thus differs significantly from the present concept of screen time by inculcating the usage of other devices under a single umbrella.

Need for a more comprehensive outlook towards digital monitoring

A more comprehensive and all-encompassing term would help individuals themselves and also other mentors to maintain a track of digital usage along with adaptive needs for transitioning as per one's allotted time to platforms. One can simply keep track of one's own daily interaction with technological devices through a newer approach towards digital mentoring. This will not only make users aware of their daily usage pattern but also help them improve or inculcate room for other tasks in their routine.

Digital self-care

Digital self-care can be the way towards eliminating the loopholes witnessed in digital monitoring. It may be a sequential approach towards making users aware of their device usage, especially with regard to the pattern and help them control or change if the need to do so is felt. It shall also help to regulate functions of digital interaction segregated in content consumption, shopping, social media and other such labels.

Moreover, work can be done towards small exercises of making users aware of banned apps and activities. Netiquette, thus, can be developed and not forced. In-app training and software -based learning can not only significantly increase awareness but at the same time also reduce the need for a formal procedure of education regarding netiquettes, practices and pertinent issues also enabling developers to inculcate timely updates and newer additions to definitions over time.

Monitoring adolescent digital usage through participation and not prescription

Freedom is one key characteristic that adolescents strive to cherish. The digital monitoring approach for adolescents thus needs to be based on basic pillars like awareness, responsibility and participation rather than strict tracking. A participatory approach for adolescents shall enable them to understand their own digital usage and how it compares against others in their social group. The lesson to be learned regarding digital responsibility should be based in practice and not lecture enabling adolescents simultaneously enquire and understand the need for the process.

While stringent monitoring and location tracking seem like things of the past that can easily be overcome through workarounds, a shared shoulder of digital responsibility will considerably ease the burden off from parents and educational institutions while also allowing them to simultaneously guide when the need to do so is felt. Software based alternatives like the popup window currently available for earphone volume can be applied to other possible areas like malicious site access, banking and screen time applications. In case of these popups feel too intrusive, a notification based or notification badge based service can serve the function.

Finally, an in-app based reward mechanism or competitive approach if employed among adolescent social groups for safe measures of usage, will considerably work better while also allowing them a sense of winning feeling and rejoicing their sense of digital responsibility. Badges, coupons and rewards can be a quick way of imparting knowledge of digital responsibility.

Elimination of the notion of formality from the process

Whenever training comes into play, there is an underlined sense of formality attached to the process which needs to be foregone. Newer implementations based on AI, software, statistical data and reward mechanism will eliminate the need for a formal procedure of training by imbining learning with play instead.

Lack of sandbox environments applications for digital self-care training

One of the most evident shortcomings in the present approach towards digital monitoring is the lack of purposefully created sandbox environments to make adolescent users understand the risks of inappropriate digital behaviour. One cannot be afraid unless the intensity of the threat is felt personally and thus sandbox environments configured specifically for training against digital malpractices can serve the immediate need of the hour.

Sandbox environments provided through apps and dummy credentials too can pave a way forward for experiencing the actual intensity of the threat awaiting them especially when concerned with adolescent users and their digital interactions with malicious content, apps, websites and unsafe handling of banking and/or other such sensitive information. Sandbox environment applications can help adolescents interact with and understand the working mechanism of threats posed due to unsafe digital behaviour. They can also be used to explain the working and targeting mechanism of phishing, spam, viruses and other malicious codes.

Advanced sandbox environments can enable adolescents run potentially dangerous files in safe systems for testing purposes.

Intelligent devices and better software-based and statistical approaches for inculcating digital self-care

Major problems pertaining to digital monitoring can be overcome through intelligent devices and comprehensive monitoring. Software advancements can serve better purposes like facilitating advancements in individual application data and user-based labels for usage. Moreover, comparative and global/local statistics can help adolescents understand their usage patterns in comparison to local communities and global usage.

The OS Battle: Apple, Microsoft and Google

The stakeholders in digital monitoring does not only include end-users but also corporations specifically those that fall in the domain of operating systems manufacturers. American giants Apple, Microsoft and Google occupy the highest proportion in this regard with Apple responsible for iOS and Mac OS, Microsoft for Windows and Google for Android and Chrome OS.

While Apple has been able to implement to some extent, the concept of a comprehensive screen time primarily due to its bent towards establishing an ecosystem of simultaneously connected devices, both Microsoft and Google have failed to deliver in this regard. Microsoft does provide an additional for Android but not being the default one for the purpose, it limits itself becoming a choice for geeks. Android manages to keep better records but these are limited to the device on the app is logged on and not from other devices.

Ethical and privacy issues surrounding digital monitoring

Data protection, privacy and usage for advertisements pose huge questions to digital tracking. Moreover, parental control features pose a question over the freedom of adolescents who understand privacy and do not want to be nagged at for every click or move. Certainly, concerns arise when advertising corporations are bound to have huge data about online behaviour, usage statistics and app usage. Stringent policy frameworks and regulatory policies need to be brought in to keep power in check so as to allow maximum data storage on local devices and limiting the amount of data allowed to be used for advertising. Moreover, periodical accountability and quarterly or annual reports can be rendered in the public domain, similar to practices which are regulated presently too to avoid them from exploiting user data.

Conclusion

Thus, digital self-care strategies for adolescents will enable them to become their own care-takers while avoiding formality of the process thereby being equally responsible for their usage. Seriousness on part of all stakeholders including adolescents, other users, parents, governments, manufacturers and independent researchers is required alike to make digital self-care for the present generation a reality and not merely a tracking and analytics approach.

The following points, if considered, will help to significantly heighten digital self-care as a distinct strategy from the currently prevalent passive digital monitoring towards a more active and continuous approach to regulate digital usage.

- 1.) The need for a universal night light/blue light management instead of manufacturer-based implementation of the feature.
- 2.) A comprehensively upgraded definition transition from screen time to gadget/device time.
- 3.) Moving away from monitoring to a participatory approach for adolescents to digitally manage their own selves and promote digital self-care.
- 4.) Digital Wellbeing apps not for sake but towards a more practical approach for limiting screen and app usage timings.
- 5.) Understanding hazards of too much or inappropriate usage of devices on the basis of physical damages.
- 6.) Notification or popup based global, local statistical data figure warnings along
- 7.) Daily and timely periodical reports for digital monitoring and device time for users to understand their own usage statistics.
- 8.) Inculcation of reward mechanisms for adolescent digital monitoring and competitive approach towards digital time management.
- 9.) Software and AI enhancements for digital monitoring to strengthen implementation of digital wellbeing in true sense.
- 10.) AI enhancements for suggesting better individual measures for improving digital interaction, usage pattern and screen time.
- 11.) Consideration of usage recommendations of global regulatory bodies at the software level itself to prompt users regarding their usage.

References

- Associated Press. (2019, April 24). *UN recommends no screen time for babies, only 1 hour for kids under 5*. PBS NewsHour. Retrieved November 2, 2022, from <https://www.pbs.org/newshour/health/un-recommends-no-screen-time-for-babies-only-1-hour-for-kids-under-5>
- Blokdyk, G. (2021). *Digital Experience Monitoring A Complete Guide*. 5STARCook.
- Cipriani, J. (2022, February 7). *Apple's Screen Time feature saves parents from being the "bad guy."* CNET. Retrieved November 2, 2022, from <https://www.cnet.com/tech/services-and-software/apples-screen-time-feature-saves-parents-from-being-the-bad-guy/>
- Digital Wellbeing*. (n.d.). Android. Retrieved November 2, 2022, from https://www.android.com/intl/en_in/digital-wellbeing/

- Family Link from Google - Family Safety and Parental Control Tools.* (n.d.).
<https://families.google/familylink/>
- Implementing night light. (n.d.). *Android Open Source Project.*
<https://source.android.com/docs/core/display/night-light>
- Khan, M., Wantlin, K., Patel, Z., Glassman, E., and Maess, P. (2021). Changing Computer-Usage Behaviors: What Users Want, Use, and Experience. *Asian CHI Symposium 2021.*
<https://doi.org/10.1145/3429360.3468180>
- Miles, S. (2022, February 9). *What is Apple Screen Time and how does it work?* Pocket-lint. Retrieved November 2, 2022, from <https://www.pocket-lint.com/apps/news/apple/144733-what-is-apple-screen-time-and-how-does-it-work>
- Mobile Operating System Market Share Worldwide | Statcounter Global Stats.* (n.d.). StatCounter Global Stats. <https://gs.statcounter.com/os-market-share/mobile/worldwide>
- NCBI - *WWW Error Blocked Diagnostic.* (n.d.). Retrieved November 2, 2022, from <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6214874/>
- Oswald, T. K. (2020, September 4). *Psychological impacts of “screen time” and “green time” for children and adolescents: A systematic scoping review.* PLOS ONE. Retrieved November 2, 2022, from <https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0237725>
- Stiglic, N. (2019, January 1). *Effects of screentime on the health and well-being of children and adolescents: a systematic review of reviews.* BMJ Open. Retrieved November 2, 2022, from <https://bmjopen.bmj.com/content/9/1/e023191>
- Under-fives’ daily screen time should be kept to 60 minutes only, warns WHO.* (2019, April 27). UN News. Retrieved November 2, 2022, from <https://news.un.org/en/story/2019/04/1037201>
- Use Screen Time on your iPhone, iPad, or iPod touch.* (2022, September 12). Apple Support. Retrieved June 21, 2023, from <https://support.apple.com/en-in/HT208982>
- What is Digital Mentoring | IGI Global.* (n.d.). Retrieved November 2, 2022, from <https://www.igi-global.com/dictionary/digital-mentoring-via-emerging-technologies/51328>
- Wikipedia contributors. (2022, October 21). *Screen time.* Wikipedia. Retrieved November 2, 2022, from https://en.m.wikipedia.org/wiki/Screen_time