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Increasing Gadget Dependency and Adolescent Mental Health

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Introduction:

There is a rapid surge in gadget dependency amongst adolescents that flags concerns regarding their mental health. The inadvertent assimilation and integration of technology into daily lives engenders a rather complex confluence between gadget dependency and adolescent mental health.

The implications of the immersive tapestry of technology- smart phones, tablets, laptops, bluetooth etc- has curtailed the capacity of adolescents in navigating the intricacies and complexities of growth and development- cognitive, emotional, social and physical landscapes.

Adolescence is emblematic of the virtues of self-discovery, value and moral formation, personality development, rebellion, the strive for independence- which by itself can be rather overwhelming and tumultuous. Gadget dependency as a phenomenon sheds light on the reliance of the populace on electronic devices where extreme gadget dependency is termed addiction. What the endless abyss and allure the technology in reach has to offer is both impressive and alarming- the social media, the deceptive behavioral retention tactics employed by application and technology suppliers raise ethical questions with regards to whether we fall in the intersection of “I want to spend X hours of time on Y social media app” and “Oh hey! I can make you spend X hours on Y app.” or not. This integration of technology into our daily lives fails to address the ethical implication of the huge chunk of adolescent population that falls outside this region of said intersection, not satisfying either of the conditions.

This essay highlights the spectrum of escalating convergence of gadget dependency and poor adolescent mental health, positioning it as the focal issue in understanding, interpreting and communicating contemporaneous adolescent development experiences. It is imperative to understand this spectrum ranging all the way from innovation to insecurity in order to alter and streamline our lives toward better decision-making by developing a healthy equation between gadget reliance and adolescent mental health development. A structural study of factors attributing to unhealthy convergence outcomes, exploring the subjectivity and

generalizability of nuanced mental health implications and studying existing literature serves as a stepping stone in the right direction.

Literature Review:

A staggering 71% of the total adolescent population are online compared to 65.7% of the total population (1,2). The portion of the Adolescent population having access to Gadgets is even more. Some would be astonished whilst some would say they saw this coming upon the advent of the Technological Age. Increased gadget dependency or addiction can lead to mental health disequilibria like depression, anxiety, stress and degraded quality of sleep (3). Adolescent females are more prone to gadget dependency and are affected greatly by it while gadget dependency affects the vitality and mental health of the adolescent male population (4). Due to increased exposure in some aspect or the other for all sects of the population, the requirement for a tool for communication becomes necessary and phones cater to just that need while brands simultaneously invest heavily in Research and Development to increase accessibility and affordability. Adolescence is a unique and formative time period of the individual human. Mental health is an important factor that shapes an adolescent into a regulated, fully functional human being. Mental health imbalances and issues during adolescence go hand in hand with voluntary indulgence in risky behavioral activities into young adulthood and adulthood and lead to drug use, violent display of behavior, aggression and over-indulgence in sexual behaviors (5). Adolescents with impaired mental health in this formative stage tend to have lower life satisfaction and lead lives with poor health quality. Spectrums of response to mental health responses and reaction range all the way from internalization of issues till externalization of issues- both of which have grave impacts in shaping your adult personality and perspective towards life. Internalization of issues during adolescence leads one to grow into an adult who tends to respond to changes- psychological, physical, biological and societal- later than the general population in the same age gap. For example, they would be older during their first ever sexual intercourse compared to their peers and are more likely to have unplanned children. Externalization of these issues is attributed to adults with lower academic success, highly likely to be smokers and highly likely to have more sexual partners (6). Adolescent mental health and factors manifest into varying functional and dysfunctional degrees of thinking, feeling, moods, emotions, decision making, problem solving, daily functioning, regulation and social relatability in the grown adult (7).

Factors contributing to Gadget Dependency:

Gadget Dependency is attributed to a plethora of social, emotional and physical growth conditions. Multiple studies have been conducted, articles and journals have been written with empirical findings that have led to functional evidence behind this statement. Adolescent mental health is indeed of great importance on a lot of fronts. Economically, the future of our country depends on the current adolescent populace, they indeed are the future of our country. In a more micro perspective, it is imperative that their mental health is nurtured in a robust fashion, for it shapes the adult they become inside-out, the level of maturity and their transition into adulthood in all capacities. If we ought to visualize these factors as a series of concentric circles, they can broadly be categorized as:

A. Psychological and Cognitive Factors:

Mental vulnerability, unsatisfactory lifestyles that induce a disequilibrium in their bodily and mental systems and lack of self-regulation are some main factors that attribute to gadget dependency amongst the adolescent population. Studies show that there are causal relationships directly between loneliness and problematic gadget usage and indirectly between the same two variables through an extra induction of the need to escape reality (8). Apart from these, there exists a need to conform to social and peer pressure (of being part of the digital world)- end goal being, to fit in- this acts as a particularly driving force in the realm of technological intoxication. The enticing and immersive digital spaces, echo bubble social media platforms make the individual ironically feel a sense of control which is rather a diversion from the inability to assert the same level of regulation and control over their reality. Gadget Dependency in this case can be viewed as a negatively impacting coping mechanism providing recess from real stressors and triggers. Implications of such a coping mechanism include an inadequate sense of self and adversely impacts self-esteem and the process of identity formation.

B. Social and Environmental factors:

An individual during the period of adolescence is largely influenced by society, social and peer groups. The need to conform sets in to keep up with prevalent fads, trends and habits- technology majorly being at the root of it all. These factors play a rather pivotal role in the

varying incidences of gadget dependency. Parental involvement, influence and upbringing are immensely important factors that can affect the degrees of gadget dependency, so are friend groups who ironically have a glamorous life on social media which is driven by the need to stay connected at all times. The degree of incidence of all these factors can either exacerbate or mitigate gadgets from becoming a key requirement for social acceptance. Self regulation and the concept of boundaries come in clutch for such situations. The more a parent restricts an adolescent from using gadgets, the more they want to- the entire phase of adolescence is characterized by a baseline level of rebellion. Overly restrictive or over permissive boundaries and regulation mechanisms shall prove to have adverse impacts by inflating gadget dependency.

C. Cultural Factors:

Widely distributed subjectivity in the interpretation of culture induced due to the variety of generations present at any point in time proves to be a driving force for imbalance in the sense of self and a moral value system amongst adolescents who are evolving to identify with their peers, role models etc. Well the equation then gets directed to escapism, ultimately encouraging unhealthy gadget dependency.

There are cultures that prioritize integration of gadgets to boost the learning curve and to inculcate digital autonomy, independence and ethics whilst some cultures so vehemently despise technological integration- some even comparing it to the likes of evil. Different cultures lie within this spectrum, and the more technology is accepted as a part of cultural growth and development, the higher is the risk of increased gadget dependency amongst adolescents. The liberal social acceptance and celebration of digital culture symbolic of advancement may contribute to the normalization of unhealthy gadget use.

D. Technological Advancements:

The novelty of digital advancements itself is an incentive for greater gadget dependency rates. The perpetual cycle of innovation, research and development and exploration with the main goal of widening its consumer base- be it smartphones, laptops, speaker systems etc-

and the user behavior dependent algorithm of recent innovations prove to be inherently addictive with an array of instances providing a novel and dopamine inducing experience. The state of perpetual connection on a virtual plane facilitated by gadgets position adolescents with a need for constant social stimulation via tethered digital connectivity platforms that demands attention as well as deprives them of the ability to pay attention.

E. Paradigm shifts in Education systems and facilitators:

In the wake of the CoronaVirus Pandemic, the education system observed a rather significant transformation. Students were now being taught on an everyday basis- gadgets being facilitators. Even though this was an important driver in the integration and acceptance of gadgets, prior to this were the presence and integration of technology and gadgets in physical classroom infrastructures. These practices blur the boundaries between gadget use for educational and recreational or rejuvenation purposes- thus making it difficult for adolescents to detach from gadgets and inadvertently promoting unhealthy gadget reliance without proper checks in place to make sure boundaries were maintained.

Implications on Adolescent Mental Health:

In the limbo of adolescence- characterized by the exploration and influx of identity formation, value system formation and personality development - the consequences of unhealthy gadget reliance can be observed in both adolescence itself and unravel more adverse personality traits in adulthood. A simple analogy to Hem and Haw from the book “Who Moved My Cheese” helps understand the adverse impacts of securing safety zones with restrained resources and comfortable environments. This is the same as giving an adolescent a gadget such as a smartphone. He/She is going to sit with the gadget endlessly and inevitably due to the cheap dopamine rushes it can give that can be proven by the scroll through rates, lack of social interaction and decreased voluntary physical mobility rather than talking to his/her parents, going out and playing catch with friends or going out to enjoy the sunset because these dopamine rushes are a little more stable and slow unlike the cheap quick hits. The implications of attrition from real-world activities can broadly be characterized as:

A. Emotional and Psychological Well-Being:

The parasitic relationship between gadget dependency and reliance (Parasite) and mental well being (host) has always proven to be highly deprecating and adversely related. Increase in the

former can cause tensions in the forms of anxiety, depression and diminished sense of self-worth. The carefully curated digital personas ought to be maintained through all constancy, which stands to be a perfect justification from the adolescent's perspective. The idealized personifications in the digital realm contribute heavily to a distorted perception of self and exposes the adolescent to vulnerability not only in the psychological mindspace but also in the cyberspace. The continuum of notifications, constant connection, regular and on-time updates about everyone's lives keeps the adolescents on their toes- leading to oversharing which is also a grave concern due to their constant presence and details shared over the usage of every minute detail. The allure of the gadgets has instrumentalized the digital world as a realm from reality and into escapism. Though this mechanism of

coping provides temporary respite, long term unregulated usage leads to a sense of seeking refuge from the real-world. The blurring demarcation of the virtual and real worlds exacerbates the sense of detachment, delineating that exposed adolescents are highly susceptible to the hostile and detrimental effects of extensive and unregulated digital presence.

B. Cognitive Development:

Cognitive Development is the gateway for structural encoding, storage, decoding, processing and compartmentalization of memory and information and the inferiority in the development of higher order thinking skills can be observed (9). These components suffer a severe setback when gadget reliance goes unregulated. The attention span of a highly gadget dependent adolescent regresses from the mean attention span of an average individual adolescent.

This is attributed to the flooding notifications, the baseline requirement of constant connectivity, and the incessant demand for prowess in cognitive multitasking in such a scenario- giving you that quick dopamine hit- turning a blind eye to the perpetual distraction it proves to be. This setback takes a toll on the academic front as well, afterall, academic performance is a linchpin in the phase of adolescence. Technological integration into the education system and the academic sphere obscure the boundaries between educational and recreational purposes. The siren call of social media, proving to be virtual fringes, divert the deployment of cognitive abilities from the academic pursuits of an adolescent leading to compromised academic performances (10). Thus it's not just that the dispersed cognitive abilities outweigh the ironically simple distractions posed by gadgets but also that this

dependency permeates the prime fronts of intellectual growth and development crucial for maturation.

C. Social and Peer Interactions:

The effects of unhealthy dependency can be seen beyond just the technological and cognitive fronts. It extends into the social realm of an adolescent as well and manifests in the form of isolation, withdrawal from socialization, lack of communication and associated skills. The allure of the virtual world deems in-person engagements and interactions to be of low value and dopamine. The regressed exhibition of social interaction often compensated or even over compensated by virtue of digital exchanges resulting in diminished social skills amongst adolescents. When they choose digital communication over in-person engagement, they consciously or unconsciously deprive themselves of nuanced human interaction- affecting their level of empathy and sense of belonging. From this choice again stems a sense of detachment which furthers and exacerbates components of the vicious cycle of gadget dependence. There are profound ramifications to a gadget-centric environment like social alienation and loneliness.

The intricate web of psychological, cognitive, and social realms reveal the necessity for comprehensive interventions that transcend conventional boundaries, that we navigate and regulate the incidence of adoption of gadgets and technology keeping in mind that the implications on adolescent mental health is significant.

Feasible Intervention Strategies and Coping Mechanisms:

In the current scenario where there is a widespread permeability in the demarcation between the two realms of technology and reality it is imperative that we craft effective coping mechanisms and intervention strategies to mitigate the derailing impact such permeability has on adolescent mental health. Interventions must be tailored to cater the intersections of multifaceted dimensions, considering the dynamic interplay of emotional, cognitive and social factors.

Some strategies that can prove to be helpful are parental guidance, mental health support and initiative taken on the educational front to highlight the prominence of said demarcation.

Parental guidance occupies a pivotal role in intervention strategies by helping establish boundaries on gadget use, coupled with adopting open

lines of communication. This enables them to effectively mitigate gadget dependency. Methods used to do so may vary due to subjective schools of upbringing. Nevertheless, parental involvement is significant and extends beyond rule-setting into facilitating the adolescent to understand the implications of such unregulated choices and behaviors.

Mental health support and scaffolding emerges as the silent warrior in intervention strategies. Professionals in mental health develop strategies to address stressors and triggers associated with gadget dependency.

Incorporating therapeutic and redressal modalities that facilitate panoptic coping mechanisms becomes imperative, to empower adolescents with resilience, empathy and emotional regulation skills.

Cultivating digital literacy as part of educational initiatives assumes high relevance, encouraging adolescents to indulge with caution. Integrating comprehensive educational modules within the academic curriculum ensures that adolescents are equipped with the skills necessary to engage with technology responsibly. Beyond mere technical proficiency, such initiatives aim to inculcate a nuanced sense of the psychological ramifications associated with gadget dependency. These strategies not only mitigate the possibility of gadget dependency but mentally and consciously empowers an adolescent to make responsible decisions.

Conclusion:

In conclusion, gadget dependency can prove to have detrimental effects on various realms of both your professional and personal life, both as an adult and as an adolescent. It blinds you to perceptual limits and boundaries, fostering an overly permissive and lenient approach, driving up the probability of your sentiments either being overlooked or undervalued.

Increased gadget dependency has established an inverse relationship with academic performance, social interaction, sense of belonging and self,

self-esteem, confidence, peer interaction and is directly related to gullibility of personality, susceptibility to conform to social pressure and norms, readiness to be have a pretentious

front to fit in, social alienation and withdrawal and extreme detachment. Technology cannot be wiped out and

gadgets cannot be made extinct but what can be done is equip the future of the world with awareness, intervention strategies and coping mechanisms via digital literacy, parental involvement in establishing boundaries to protect sense of self and mental scaffolding to enable them to consciously regulate gadget dependency and reliance. A proactive approach to understanding the nuances of gadget dependency is imperative to cultivate a balanced and resilient adolescent populace for the future of the world.

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