Reviewing the Impact of Digital Addiction on Youth Behaviour: A Study

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With growing reliance in technology in the era of digital interconnectedness understanding and reshaping future generation is the call of the hour. The study focuses the influence of digital dependency on the behavioural attributes of young population aligning of digital transformation & psychological wellbeing. A structured questionnaire applying quantitative, cross-sectional method and sequential mediation projects technology addiction affecting young consumer dynamics and behaviour. The findings of the study highlights that balanced equilibrium between digital participation and wellbeing will emerge as a potent driver of social transformation that best configures people-planet-profit in coming days.

Keywords: Addiction, Youth, Digital, Wellbeing, Technology

1. Introduction

Technology has emerged as a part and parcel of life and contemporary society. The use of technology in day-to-day life has revolutionised life, livelihood and living. The rapid advancement of digital transformation in the post pandemic era has resulted easy accessibility of internet usage collaborating games recreation, education, learning, business encompassing wide boundaries of work and personal life. In recent years new technologies have expanded diverse benefits for learners in terms of their education, socialisation, communication and academic performance. In the age of digital inter connectedness, the impact of electronic technologies bridges traditional and non-digital services extending great benefits of present young population. Present aspirants of knowledge system have evolved as "digital natives of the technology age" underscoring undeniable benefits, accelerated workflows and growing profitability curves in the rapidly evolving technology landscape. Amidst, digitalisation in global hemisphere the pros. and cons. of technology centric learning needs attention and priority. Harmonising, youth enthusiasm and technological strategies is a matter of deep understanding and concern of millennial learners. The is with which technology has grassed the minds of young student with digital gadgets like Smartphone, Tables, laptops has paved the beginning of digital era and integral part of student education and learning.

Digitalization is vital and inevitable in young learner future prospect interlinking appreciation of digital practices and finding creative solutions for the challenges in the digital age. The young aspirants in the age of ICT and digitalization are ready to adapt eccentric learning in day-to-day life and living. In the 21st century millennium for many young students' technology pervades all aspects and diverse opportunities in their living agenda. With the rising waves of technology, the internet and new media is increasingly interwoven fostering new opportunities to stay connected and recreate innovative skills. Despite the complexities of the socio-political landscapes, the digital skill policy for young people is yet to emerge for youths in the present digital world. Along with the opportunities afforded by the technology young people often encounter inappropriate phishing activities at greater risks of self-harm. At this backdrop, reconceptualizing young people experience of the digital world is the call of the hour. Perspectives of young people in the digitalized world in learning platform need to be addressed with broader understanding embracing networking and wellness in the changing paradigm of critical digital literacy.

Need of the Study

The involvement of technology into every aspect of the modern education system has created a complex bond between digital interaction and an individual's wellbeing. In the post-pandemic period, the dependence on digital devices, online learning platforms and social media has become indispensable for young learners. This is gradually reshaping the educational ecosystem and our socialization pattern. On the other side of the coin, this constant usage of digital devices also raises serious concerns regarding psychological health, emotional quotient, and personal-social balance. This has now become the utmost

necessity to understand how social media exposure influences an individual's emotional and behavioural state, especially in a developing nation like India where technological efficiency in education is prioritised rather than emotional well-being.

The study is needed to assess how digital transformation can be in harmony with mental wellbeing by means of responsible online behaviour. Focusing on the dimensions of technology and wellbeing, this research aims to explore ways to promote digital literacy, effects of social media and ethical use of technology among youth. These insights will be useful to further study upon by educators, policymakers, and parents in developing a balanced edu-ecosystem that uses technology as a boon for holistic growth rather than a bane of mental distress and addiction.

2. Literature Review

2.1 Uncovering the Roots of Technological Addiction among Adolescence: An Insight

In the pretext of post-pandemic era, the usage of Internet has skyrocketed in all over the world. Many studies found that the technology addiction among adolescents have increased manifold after the pandemic. It can be interpreted that screen usage has impacted the mental health of teenagers, especially during the pandemic when they were isolated from the real world and the only escape was the digital world behind their screens. An isolation from the society engages them with their mobile or computer devices to such extent that social anxiety, depression, over-stimulation of dopamine, lack of social empathy, have become common among the teenagers. Technological addiction among adolescence increases when the dark patterns of social media and device usage go unchecked. Dark patterns are the unethical nature of designs like constant notifications, over-saturated colour tones, and easy reward system that manipulate users into actions they did not intend to do. These patterns exploit adolescence psychology to increase user engagement, store personal data, or encourage specific spending habits. Regarding spending habits, the exponential increase of online games and betting apps have sent teenagers down the rabbit hole of spending real money for game tokens which can be used as a status symbol among themselves. This phenomenon further solidifies the argument that technological addiction is more complex to understand and to be dealt with caution. Although the studies have pointed out that device ownership and family income has also shaped the results.

New technologies have grasped daily lives of youths and generation of the present era. With the emergence of smartphones, the interconnectedness of technology has overpowered every human activity, viz., messaging, playing games, recreation, listening to music, watching movies and many more. With due recognition of the immense benefits of socialization, communication and academic pursuits technology is knocking at the minds of every growing adolescence in present times. Youth behaviour has transformed to eccentric behaviour-based addiction in the activities like eating sleeping studying or chatting giving rise to technology addicts. The school going students are confronting conflicts amidst diverge ways of internet use instant messaging online gaming social networking and computer activities. Mind focus is deviated; enthusiasm is diminishing interest is slagging, all adverse behavioural restlessness sprouts in the mind of adolescence youths due to technology addiction in day-to-day life. The class rooms of young minds are transformed to chatbots cyber centric smart classes internet induced learning platform, all engulfed with eccentric environment. The new communication technologies are imbibed in the minds of the adolescence giving rise to the feelings of stress loneliness and depression, impacting negative effect in human behaviour.

2.2 Aligning Social Technology and Physiological Wellbeing: An Outlook

The internet world is gradually keeping mark on every sphere of human living. Quite few years back computers and tools were treated as assistant mechanism for science, engineering and business. In the early 2020s and in the post pandemic phase the notion and motion of technological sphere have revolutionized human life and living. Internet acting as a social mediator in one hand creating inter-connectedness and on the other keeping cutoff promises from genuine social relationship. In broader prospective it is argued internet needs to better social relationship freeing people from geographical constrains and joining human minds with communication, convenience and comfort ability.

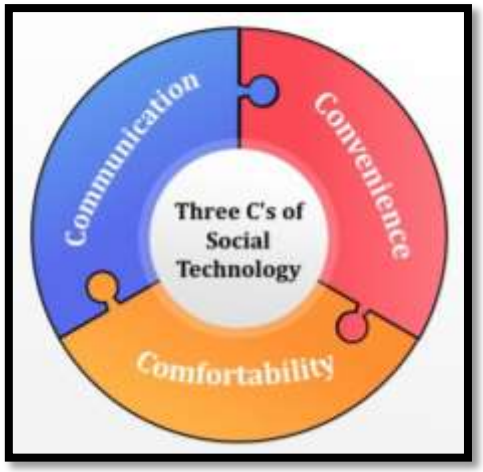

Figure1 *Three C's of Social Technology (Authors Creation)*

Primarily technological mediums like internet or World Wide Web provide avenues of social amenities including entertainment, education, information and communication. The very aspect of interpersonal communication has broadened social interactions and relationship keeping behind traditional-social norms. Significantly strong personal tie-up backed with technology creates a comfortable proximity for learning, playing, betraying and remembering. The potent resource of face-to-face relationship has transformed into on-line relationship signifying qualitative aspects and social environment of human behavior. On the contrary of the strong foundation of body, soul and mind being replaced by week relationship encircled with array or likes and dislikes in present times. The physiological crux of human wellbeing needs reevaluation and reassessment were validity of week relationship and insignificant ties provide narrow focus and stressful condition in young minds predominantly. For, building better social and physiological outcome the agenda for creating pool of new group and on-line mixtures doesn't substantially support close community and true relationship of family and friends. Furthermore, research reveals that young friendship doesn't exist on online platform only increases people social participation with illusionary physiological satisfaction. The era predominantly influenced through digital inter connectedness must examine the casual relationship between people liking and choices created through internet platform resulting to undesirable consequences of unsuccessful social involvement. Bridge-waying corrective and regulatory measures mostly for young generation needs attention and priority as social involvement and physiological wellbeing are interconnected each other. For fruitful and balanced physiological wellbeing, the adverse elements of physiological wellbeing can be projected in the given figure.

Figure 2 *Elements of Physiological Wellbeing (Authors Creation)*

Until the technology evolves to be more beneficial the real essence of physiological wellbeing needs careful attention and priority to make life more realistic and fruitful in true sense of the term.

2.3 Rebuilding a Healthy Balance between Digital transformation and Mental Wellbeing: An Insight

In the fast pace and interconnected world technological advancement has emerged multifaceted and consciously evolving. The impact of technology has become an indispensable component in human lives with profound impact in shaping global connectivity. Schools to learning platform, classrooms to online, books to educational software have transformed knowledge and learning with a personalized getup with new avenues of storytelling and creativity. With the rapid progression of digitalization and digital technologies has resulted towards facing issues like cyberbullying, unrealistic comparison, diminished self-esteem and pressure leading to depression. Understanding the complex interplay between digital transformation and wellbeing the technological landscape needs to address key concerns to harmonize a holistic balance between life and living. The digital world being both beneficial and harmful influences. Research reveals that continuous use of digital technology surely asserts risk factor predominantly for the young generation inclined in intensive screen time sharing. Nonetheless digital technology is offering an unprecedented, unexpected, and uncontrolled environment creating mental hazards and weakening cognitive skills. The digital addiction mostly identified in social media platform is the prime contributor to the youth mental health psyche. Various studies proclaiming necessity of balancing the benefits and risks of digital transformation supports both the positive and negative impacts on the mental wellbeing of the individual. Harnessing the benefits of digital technology on one hand, and safeguarding mental health of increasingly digitalized ecosphere on the other hand required a balanced digital usage with the passage of time. In order to aware and reorient human mind setup towards digital dependency can be revitalized in the given figure.

Nowadays it is undeniable to restrict digital usage and digital devices has stepped in almost every part of human life. For a prospective and sustainable future, the goal to build a balanced relationship between technology and human wellbeing is the call of the hour. Prioritizing emotional quotient and regulating indiscriminate digital habits paves the way towards healthy life and living that creates more mental space rejuvenation for a preferred future.

Figure 3 *Elements of Revitalisation of Digital Awarness (Authors Creation*)

2.4 Impact of Digitalization on Youth Behavior and Attitude: A Digital Ecosystem Study

India is stepping forward towards one of the fastest growing economies globally. The very core of the Indian economy is predominantly driven by young consumers with an age group of 16 to 34 years. The paradox of digitalization programmed young minds to make their own digital moves in present times. In the pathway towards shaping the digital world the holistic perspective of understanding young minds regardless of gender, social, and cultural backgrounds need intensive awareness and fundamental learning. Providing access for all at one hand creates a positive and flexible learning environment with open learning situations and on the contrary the organizational culture of young generation faces dilemma, conflicts and uncertainty in digital environment. The potent question of intervening young people's views and opinions while formulating digital policy and practices should essentially align digital rights with actual realization of digital platform. At this backdrop the very purpose to measure young people's digital relationship with attitude and behaviour is quite pertinent amidst moderation effects of the prolonged use of technology. Nevertheless, substituting awareness against addiction, adapting psychological well-being in place of stressful behaviour, and determining ecological balance while eliminating adverse technological outcome — are the essential digital drives of the present era. The narrative of digital innovation and technological makeover intensifies the popular concept "You can be the next one..." mesmerizes young minds, brain and behaviour with an overwhelming impact of youth well-being. On the roadway towards digital literacy the illusion of excitement and sheer fun of technology exhibits illusionary platform of online nuisance "advocating isolation and disregarding personal social and cultural relationships in young population life and living. With the rapidly increasing use of digital media the question of developing skill resilience and expertise need to be promoted for long term effectiveness of digital transformation with regulatory and tolerant use of social network. In a digital sphere young participation is a predestined phenomenon and ethical reasoning with due prioritization of lifelong digital learning will create new possibilities for youth enhancement, self-development, self-expression and identity formation in the digital space of coming era.

Research Gap

A wide range of literature has explored technological addiction, online behaviour and the impact of digital media on youth on one hand, and the education sector, digital learning and youth psychology on the other hand. But there is a critical gap in understanding about how these fields interact with each other in the backdrop of India and other South Asian countries.

The existing studies report technology as the source of knowledge and academic growth or the source of depression and anxiety, but very rarely do they shed light on the multidimensional nature of technology which nurtures and challenges young minds. The literatures have mainly focused on the pros of digitalization, such as free access to knowledge, multiple learning opportunities, and better social communication, but they often overlook the cons like emotional and psychological toll it takes on young minds due to their constant digital engagement.

Furthermore, a large section of the studies available are based out of western countries, where access to Internet and technology is different from developing nations like India. The social and cultural context of the developed nations is also significantly contrasting than that of India. This creates a research gap in understanding how the social cultural and educational background influence the relationship between youth and technology in the Indian context.

Another notable gap in research lies in the absence of a certain framework that ties educational practices in developing nations with digital literacy and psychological well-being of youths. It is certain that many studies have explored the areas separately, there is a gap that connects them in a single perspective, addressing how technology can be a two-edged sword, both beneficial but disruptive for a young mind.

Objectives of the Study

Primary Objectives: To examine the effect of Technology Addiction among School-Going Students on adolescent attitudes, behaviour, and youth consumer dynamics, considering the mediating roles of Digital Transformation & Mental Wellbeing, Work-Life Balance & Wellbeing, and Social Technology & Psychological Wellbeing.

Secondary Objectives: Based on the primary objectives, the secondary objectives are as follows-

1. To assess the direct impact of technology addiction on each mediator.
2. To evaluate the mediating effects of Digital Transformation & Mental Wellbeing, Work-Life Balance & Wellbeing, Social Technology & Psychological Wellbeing in the relationship between technology addiction and Adolescent Attitude & Behaviour as well as on Youth Consumer Dynamics
3. To understand the sequential mediation of multiple wellbeing constructs in shaping behavioural and consumer outcomes.

Hypothesis Formulation

Based on the above research objectives, the following hypothesis are formulated

H1: Technology Addiction among School-Going Students has a significant positive effect on Technology Addiction towards Adolescent Attitude and Behaviour.

H2: Technology Addiction among School-Going Students has a significant positive effect on Digitalization on Youth Consumer Dynamics.

H3: Digital Transformation and Mental Wellbeing mediates the relationship between Technology Addiction among School-Going Students and Technology Addiction towards Adolescent Attitude and Behaviour.

H4: Digital Transformation and Mental Wellbeing mediates the relationship between Technology Addiction among School-Going Students and Digitalization on Youth Consumer Dynamics.

H5: Digital Transformation and Mental Wellbeing and Technological Change on Work-Life Balance and Wellbeing sequentially mediate the effect of Technology Addiction among School-Going Students on Technology Addiction towards Adolescent Attitude and Behaviour.

H6: Digital Transformation and Mental Wellbeing and Technological Change on Work-Life Balance and Wellbeing sequentially mediate the effect of Technology Addiction among School-Going Students on Digitalization on Youth Consumer Dynamics.

H7: Digital Transformation and Mental Wellbeing, Technological Change on Work-Life Balance and Wellbeing, and Social Technology and Psychological Wellbeing sequentially mediate the relationship between Technology Addiction among School-Going Students and Technology Addiction towards Adolescent Attitude and Behaviour.

H8: Digital Transformation and Mental Wellbeing, Technological Change on Work-Life Balance and Wellbeing, and Social Technology and Psychological Wellbeing sequentially mediate the relationship between Technology Addiction among School-Going Students and Digitalization on Youth Consumer Dynamics.

3. Research Methodology

This study adopts a quantitative, cross-sectional research design to examine the impact of technology addiction among school-going students on adolescent behaviour and youth consumer dynamics, with digital transformation, work-life balance, and psychological wellbeing as mediating variables. The design allows testing of hypothesized relationships among variables using regression and mediation analysis. The target population includes school-going students aged 12–18 years. A purposive sampling technique was employed to select participants actively engaged with digital platforms. A total of 120 respondents participated, ensuring adequate statistical power for multiple regression and mediation analysis. Data were collected by a structured questionnaire based on a 5-point Likert scale (1 = Strongly Disagree to 5 = Strongly Agree).

Variable Description

Table 1 *Variables Details*

Type	Variable	Justification / Conceptual Role
Independent Variable	Technology Addiction among School-Going Students	Core predictor — represents the extent of excessive or compulsive technology use that may drive changes in mental, behavioural, and social wellbeing.
Mediating Variable	Digital Transformation and Mental Wellbeing	Reflects how digital exposure influences psychological balance; may mediate between addiction and other wellbeing/behavioural outcomes.
	Technological Change on Work-Life Balance and Wellbeing	Captures lifestyle and balance impacts — can act as a bridge between addiction and psychological/social outcomes.
	Social Technology and Psychological Wellbeing	Reflects social media and tech use impact on mental state; could also mediate between addiction and behavioural/consumer outcomes.
Dependent Variable	Technology Addiction Towards Adolescent Attitude and Behaviour	Represents the behavioural and attitudinal outcomes of technology addiction and associated wellbeing factors.
	Digitalization on Youth Consumer Dynamics	Reflects changes in youth consumption patterns due to digital exposure and addiction — final outcome variable in the model.

Source: *Researchers' Conceptualization*

Reliability Results

Table 2 displays the reliability of the constructs measured through Cronbach's Alpha.

Table 2 *Reliability Statistics*

Construct	No. of Items	Cronbach's Alpha (α)
Technology Addiction among School-Going Students	6	0.86
Digital Transformation and Mental Wellbeing	5	0.82
Technological Change on Work-Life Balance and Wellbeing	5	0.79
Social Technology and Psychological Wellbeing	6	0.88
Technology Addiction Towards Adolescent Attitude and Behaviour	5	0.84
Digitalization on Youth Consumer Dynamics	6	0.89

Source: *Researchers' Computation*

Interpretation: All constructs exhibit acceptable reliability, with α values ranging from 0.79 to 0.89, indicating consistent measurement across items. This ensures that the scales used for each construct are internally consistent and the data collected is robust enough for further statistical analyses like correlation and regression.

Results of Descriptive statistics

Table 3 provides the descriptive statistics for all constructs, including mean, standard deviation, skewness, and kurtosis.

Table 3 *Results of Descriptive Statistics*

Construct	Mean	SD	Skewness	Kurtosis
Technology Addiction among School-Going Students	3.78	0.74	-0.26	-0.48
Digital Transformation and Mental Wellbeing	3.91	0.68	-0.31	-0.22
Technological Change on Work-Life Balance and Wellbeing	3.62	0.81	-0.19	-0.43
Social Technology and Psychological Wellbeing	3.88	0.65	-0.24	-0.29
Technology Addiction Towards Adolescent Attitude and Behaviour	3.74	0.72	-0.27	-0.36
Digitalization on Youth Consumer Dynamics	3.95	0.70	-0.35	-0.25

Source: *Researchers' Computation*

Interpretation: The mean values range from 3.62 to 3.95, which are above the midpoint of 3, indicating moderate to high levels of agreement among respondents regarding technology addiction and its impacts. The skewness and kurtosis values are within ±1, suggesting that the data distribution is approximately normal. This supports the appropriateness of using parametric tests, such as regression, in subsequent analyses.

Correlation Analysis

Table 4 shows the bivariate correlations among all variables.

Table 4 *Correlation Matrix*

Variable	1	2	3	4	5	6
1. Technology Addiction	1					
2. Digital Transformation & Mental Wellbeing	0.61**	1				
3. Work-Life Balance & Wellbeing	0.58**	0.55**	1			
4. Psychological Wellbeing	0.64**	0.60**	0.57**	1		
5. Adolescent Attitude & Behaviour	0.52**	0.54**	0.50**	0.66**	1	
6. Youth Consumer Dynamics	0.55**	0.58**	0.53**	0.69**	0.70**	1

Note: *** Significant at 5%*

Source: *Researchers' Computation*

Interpretation: All correlations are positive and significant at $p < 0.01$, ranging from 0.50 to 0.70. Notably, Technology Addiction correlates strongly with the mediators and dependent variables, indicating meaningful associations between excessive technology use and psychological, social, and behavioural outcomes. These significant correlations also provide initial support for the potential mediating effects of the wellbeing constructs in the sequential mediation model.

Regression Results for Sequential Mediation Paths

Table 5 examines the first mediation path where Technology Addiction predicts Adolescent Attitude & Behaviour through Digital Transformation & Mental Wellbeing.

Table 5 *Path Results showing the Effect of Technology Addiction on Adolescent Attitude & Behaviour through Digital Transformation & Mental Wellbeing*

Dependent Variable	Predictor	β	t	Sig.
Adolescent Attitude & Behaviour	Technology Addiction	0.610	8.42	0.000***
	Digital Transformation & Mental Wellbeing	0.423	4.73	0.000***

Note: *** *Significant at 1%*

Interpretation: The direct effect of Technology Addiction on Adolescent Attitude & Behaviour is strong ($\beta = 0.610$, $p < 0.001$), and the mediator Digital Transformation & Mental Wellbeing also significantly predicts Adolescent Attitude & Behaviour ($\beta = 0.423$, $p < 0.001$). This indicates that digital transformation and mental wellbeing partially mediate the relationship between technology addiction and adolescent behaviour, highlighting that excessive technology use affects adolescent attitudes both directly and via changes in mental wellbeing.

Table 6 reports the effects of Technology Addiction on Youth Consumer Dynamics through Digital Transformation & Mental Wellbeing.

Table 6 *Path Results showing the Effect of Technology Addiction on Youth Consumer Dynamics through Digital Transformation & Mental Wellbeing*

Dependent Variable	Predictor	β	t	Sig.
Youth Consumer Dynamics	Technology Addiction	0.128	2.00	0.047**
	Digital Transformation & Mental Wellbeing	0.378	4.40	0.000***

Note: *** *Significant at 1%*, ** *Significant at 5%*

Interpretation: The direct effect of the Technology Addiction is smaller ($\beta = 0.128$, $p < 0.05$) compared to Adolescent Attitude & Behaviour, while the mediator Digital Transformation & Mental Wellbeing remains significant ($\beta = 0.378$, $p < 0.001$). This suggests that technology addiction primarily influences youth consumer behaviour indirectly via digital transformation and mental wellbeing, emphasizing the importance of psychological adaptation in shaping consumption patterns.

Table 7 investigates the sequential mediation of Digital Transformation & Mental Wellbeing and Work-Life Balance & Wellbeing in predicting Adolescent Attitude & Behaviour.

Table 7 *Path Results showing the Effect of Technology Addiction on Adolescent Attitude & Behaviour through Digital Transformation & Mental Wellbeing and Work-Life Balance & Wellbeing*

Dependent Variable	Predictor	β	t	Sig.
Adolescent Attitude & Behaviour	Technology Addiction	0.209	2.40	0.018**
	Digital Transformation & Mental Wellbeing	0.314	3.44	0.001***
	Work-Life Balance & Wellbeing	0.182	2.14	0.035**

Note: *** *Significant at 1%*, ** *Significant at 5%*

Interpretation: Technology Addiction's direct effect decreases ($\beta = 0.209$, $p < 0.05$) after including Work-Life Balance & Wellbeing. Both mediators are significant, with Digital Transformation & Mental Wellbeing $\beta = 0.314$ and Work-Life Balance & Wellbeing $\beta = 0.182$, indicating that work-life balance further explains adolescent attitudes beyond digital transformation. This confirms that the relationship between technology addiction and adolescent behaviour is influenced by multiple dimensions of wellbeing.

Table 8 presents the sequential mediation effects on Youth Consumer Dynamics.

Table 8 *Path Results showing the Effect of Technology Addiction on Youth Consumer Dynamics through Digital Transformation & Mental Wellbeing and Work-Life Balance & Wellbeing*

Dependent Variable	Predictor	β	t	Sig.
Youth Consumer Dynamics	Technology Addiction	0.112	1.98	0.049**
	Digital Transformation & Mental Wellbeing	0.193	2.85	0.005***
	Work-Life Balance & Wellbeing	0.130	2.05	0.043**

Note: *** *Significant at 1%*, ** *Significant at 5%*

Interpretation: Technology Addiction's direct effect is $\beta = 0.112$, $p < 0.05$, while both Digital Transformation & Mental Wellbeing ($\beta = 0.193$, $p < 0.01$) and Work-Life Balance & Wellbeing ($\beta = 0.130$, $p < 0.05$) significantly influence youth consumer dynamics. The findings show that technology addiction affects consumption behaviour indirectly through improvements or disruptions in digital transformation and work-life balance, highlighting the indirect pathways in behavioural outcomes.

Table 9 evaluates the full sequential mediation model, including Digital Transformation & Mental Wellbeing, Work-Life Balance & Wellbeing, and Psychological Wellbeing for Adolescent Attitude & Behaviour.

Table 9 *Path Results showing the Effect of Technology Addiction on Adolescent Attitude & Behaviour through Digital Transformation & Mental Wellbeing, Work-Life Balance & Wellbeing and Psychological Wellbeing*

Dependent Variable	Predictor	β	t	Sig.
Adolescent Attitude & Behaviour	Technology Addiction	0.209	2.40	0.018**
	Digital Transformation & Mental Wellbeing	0.314	3.44	0.001***
	Work-Life Balance & Wellbeing	0.182	2.14	0.035**
	Psychological Wellbeing	0.455	4.59	0.000***

Note: **** Significant at 1%, ** Significant at 5%*

Interpretation: Technology Addiction remains significant ($\beta = 0.209$, $p < 0.05$), while all three mediators are also significant: Digital Transformation & Mental Wellbeing $\beta = 0.314$, Work-Life Balance & Wellbeing $\beta = 0.182$, and Psychological Wellbeing $\beta = 0.455$. This shows that psychological wellbeing strongly mediates the effect of technology addiction on adolescent attitudes, indicating a cumulative mediation effect where digital, lifestyle, and psychological factors jointly explain behavioural outcomes.

Table 10 examines the full sequential mediation for Youth Consumer Dynamics.

Table 10 *Path Results showing the Effect of Technology Addiction on Youth Consumer Dynamics through Digital Transformation & Mental Wellbeing, Work-Life Balance & Wellbeing and Psychological Wellbeing*

Dependent Variable	Predictor	β	t	Sig.
Youth Consumer Dynamics	Technology Addiction	0.128	2.10	0.037**
	Digital Transformation & Mental Wellbeing	0.192	3.12	0.002***
	Work-Life Balance & Wellbeing	0.115	2.01	0.046**
	Psychological Wellbeing	0.329	4.45	0.000***

Note: **** Significant at 1%, ** Significant at 5%*

Interpretation: Technology Addiction's direct effect is $\beta = 0.128$, $p < 0.05$, while Digital Transformation & Mental Wellbeing ($\beta = 0.192$), Work-Life Balance & Wellbeing ($\beta = 0.115$), and Psychological Wellbeing ($\beta = 0.329$) are all significant. The results indicate that youth consumer dynamics are significantly influenced by the combined mediating effects of mental, lifestyle, and psychological wellbeing, demonstrating that the impact of technology addiction on consumer behaviour is largely indirect and mediated through multiple wellbeing constructs.

4. Implications and Concluding Remarks

In recent years, the proliferation of smartphone and internet access among adolescents has raised increasing concern regarding behavioural addiction and its impact on mental health. In the Indian context, multiple studies indicate that a substantial proportion of adolescents exhibit signs of problematic or "addictive" use of digital devices, and that such patterns are significantly associated with poor psychological outcomes.

In India, for example, a cross-sectional observational study among 496 adolescents aged 16 to 19 found that 83.9 % reported smartphone use and 37 % met the criteria for smartphone addiction using the Smartphone Addiction Scale. Another district-wide cluster survey of 1,729 school-going adolescents of mean age 13 years found that 10.69 % met the criteria for "technology addiction" which includes smartphone, gaming and television use and specifically, phone addiction was estimated at 8.91%. A more recent study conducted in Gujarat among 560 adolescents aged 15–19 in 2023 reported a prevalence of smartphone addiction of 64.6 %. These variations in prevalence reflect differences in sampling frames, instruments and cut-off thresholds, yet they consistently demonstrate that a non-trivial proportion, often ranging from 10 % to over 60 % of Indian adolescents fall into high-risk categories for digital behavioural addiction.

The mental-health statistics are similarly alarming. For instance, the Gujarat study found that smartphone addiction was strongly associated with severe stress. Another Indian study reported that among those classified with smartphone addiction, 77.2 % experienced depression compared to 35.4 % among non-addicted peers.

The evidence from the West reinforces these associations, research work from the United States shows that patterns of addictive screen use (social media, mobile phones, video game use) in adolescence were linked to around twice to three times higher risk of suicidal tendencies and behaviour, emphasising that the compulsive nature of use may be the critical risk factor.

In Asia generally, reviews indicate that problematic internet use is frequently associated with psychological distress, depression, anxiety, sleep problems and poorer academic performance.

From a public health perspective, teenagers in India and South Asia often have to battle on two fronts, viz., greater exposure to digital devices for education and growth, while lesser to no digital literacy and treatment for behavioural addictions. The underlying factors such as rapid digital spread, least digital literacy, and stigma about mental health multiplies the risk of psychological well-being.

In conclusion, the evidence from India and other South Asian countries indicates that smartphone and digital addiction is a significant concern among adolescents. The strong association of digital overuse with depression, anxiety, stress, low sleep,

and even suicidal tendencies, the focus on digital wellbeing should be the priority. At the policy level, government, school, and parents should impose strong regulations regarding device access, usage patterns, and screen time restriction and mental health service providers should also find ways to deal with this new kind of "Gen-Alpha" psychological behaviours and provide targeted support for adolescents showing early signs of compulsive usage.

5. Bibliography

1. Amudhan, S., Prakasha, H., Mahapatra, P., Burma, A. D., Mishra, V., Sharma, M. K., & Rao, G. N. (2020). Technology addiction among school-going adolescents in India: epidemiological analysis from a cluster survey for strengthening adolescent health programs at district level. *Journal of Public Health*, *44*(2), 286–295. https://doi.org/10.1093/pubmed/fdaa257
2. Aoki, K., & Downes, E. J. (2003). An analysis of young people's use of and attitudes toward cell phones. *Telematics and Informatics*, *20*(4), 349–364. https://doi.org/10.1016/s0736-5853(03)00018-2
3. Ayyagari, N., Grover, N., & Purvis, N. (2011). Technostress: Technological antecedents and implications. *MIS Quarterly*, *35*(4), 831. https://doi.org/10.2307/41409963
4. Bessière, K., Kiesler, S., Kraut, R., & Boneva, B. S. (2008). EFFECTS OF INTERNET USE AND SOCIAL RESOURCES ON CHANGES IN DEPRESSION. *Information Communication & Society*, *11*(1), 47–70. https://doi.org/10.1080/13691180701858851
5. Bossert, P. J. (1999). Book review: Growing Up Digital: The Rise of the Net Generation. *NASSP Bulletin*, *83*(607), 86–88. https://doi.org/10.1177/019263659908360714
6. Cai, Z., Fan, X., & Du, J. (2016). Gender and attitudes toward technology use: A meta-analysis. *Computers & Education*, *105*, 1–13. https://doi.org/10.1016/j.compedu.2016.11.003
7. Chand, P., Bandawar, M., & Narasimha, V. (2018). Use of digital technology in addiction disorders. *Indian Journal of Psychiatry*, *60*(8), 534. https://doi.org/10.4103/psychiatry.indianjpsychiatry_21_18
8. Cotterell, J. (2013). Social networks in youth and adolescence. In *Routledge eBooks*. https://doi.org/10.4324/9780203007488
9. Davies, T. (2016). Mind change: How digital technologies are leaving their mark on our brains. *New Media & Society*, *18*(9), 2139–2141. https://doi.org/10.1177/1461444816652614
10. Dienlin, T., & Johannes, N. (2020). The impact of digital technology use on adolescent well-being. *Dialogues in Clinical Neuroscience*, *22*(2), 135–142. https://doi.org/10.31887/dcns.2020.22.2/tdienlin
11. Eastin, M. S. (2005). Teen Internet use: Relating social perceptions and cognitive models to behavior. *Cyber Psychology & Behavior*, *8*(1), 62–75. https://doi.org/10.1089/cpb.2005.8.62
12. Ferraro, G., Caci, B., D'Amico, A., & Di Blasi, M. (2007). Internet Addiction Disorder: an Italian study. *Cyber Psychology & Behavior*, *10*(2), 170–175. https://doi.org/10.1089/cpb.2006.9972
13. Floros, G., & Siomos, K. (2013). The relationship between optimal parenting, Internet addiction and motives for social networking in adolescence. *Psychiatry Research*, *209*(3), 529–534. https://doi.org/10.1016/j.psychres.2013.01.010
14. Girela-Serrano, B. M., Spiers, A. D. V., Ruotong, L., Gangadia, S., Toledano, M. B., & Di Simplicio, M. (2022). Impact of mobile phones and wireless devices use on children and adolescents' mental health: a systematic review. *European Child & Adolescent Psychiatry*, *33*(6), 1621–1651. https://doi.org/10.1007/s00787-022-02012-8
15. Griffiths, M. D. (2013). Social Networking Addiction: Emerging themes and issues. *Journal of Addiction Research & Therapy*, *04*(05). https://doi.org/10.4172/2155-6105.1000e118
16. Huang, C. (2010). Internet Use and Psychological Well-being: A Meta-Analysis. *Cyber psychology Behavior and Social Networking*, *13*(3), 241–249. https://doi.org/10.1089/cyber.2009.0217
17. Khalaf, A. M., Alubied, A. A., Khalaf, A. M., & Rifaey, A. A. (2023). The Impact of social media on the mental health of adolescents and young Adults: a systematic review. *Cureus*. https://doi.org/10.7759/cureus.42990
18. Kross, E., Verduyn, P., Demiralp, E., Park, J., Lee, D. S., Lin, N., Shablack, H., Jonides, J., & Ybarra, O. (2013). Facebook use predicts declines in Subjective Well-Being in young adults. *PLoS ONE*, *8*(8), e69841. https://doi.org/10.1371/journal.pone.0069841
19. Paiman, N., & Fauzi, M. A. (2023). Exploring determinants of social media addiction in higher education through the integrated lenses of technology acceptance model (TAM) and usage habit. *Journal of Applied Research in Higher Education*, *16*(3), 776–803. https://doi.org/10.1108/jarhe-03-2023-0114
20. Salanova, M., Llorens, S., & Cifre, E. (2012). The dark side of technologies: Technostress among users of information and communication technologies. *International Journal of Psychology*, *48*(3), 422–436. https://doi.org/10.1080/00207594.2012.680460
21. Simsek, E., & Sali, J. B. (2014, September 1). *The role of internet addiction and social media membership on university students' psychological capital*. https://dergipark.org.tr/en/pub/cet/issue/25737/271512#article_cite
22. Song, I., Larose, R., Eastin, M. S., & Lin, C. A. (2004). Internet gratifications and Internet Addiction: On the uses and Abuses of New media. *CyberPsychology & Behavior*, *7*(4), 384–394. https://doi.org/10.1089/cpb.2004.7.384
23. Turel, N., Serenko, N., & Giles, N. (2011). Integrating Technology Addiction and Use: An Empirical investigation of Online auction users. *MIS Quarterly*, *35*(4), 1043. https://doi.org/10.2307/41409972
24. Upadhyaya, P., & Vrinda, N. (2020). Impact of technostress on academic productivity of university students. *Education and Information Technologies*, *26*(2), 1647–1664. https://doi.org/10.1007/s10639-020-10319-9.