EXPLORING HOW ONLINE ENGAGEMENT AFFECTS EMPATHY AND ALTRUISM IN YOUNG DEMOGRAPHICS IN INDIA

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Abstract

In an increasingly digitalized society, the influence of online engagement on youth behaviour has become a subject of both academic and social concern. With the rise of social media, digital communities, and online activism, young individuals are frequently exposed to content that may shape their emotional and social development. The study explores how online engagement affects empathy and altruism among young demographics in India. It specifically aims to examine the nature and extent of digital participation across platforms, analyze how patterns of online behaviour contribute to empathy development, and assess the impact of online interaction on both virtual and real-world altruistic actions. Addressing the growing concern over the emotional disconnects and digital superficiality among youth, the study investigates whether the digital realm is nurturing or numbing compassionate behaviour. Adopting a descriptive and survey research design, the study utilized stratified random sampling and purposive sampling techniques to collect data from 385 respondents. Statistical analysis revealed that factors such as age, gender, marital status, residential background, educational qualifications, type of online activity, and socioeconomic status significantly influenced levels of empathy and altruism ($p < 0.05$). A strong positive correlation was found between online engagement and emotional responsiveness, real-life altruism, and cross-cultural understanding, suggesting that meaningful digital interactions can foster prosocial tendencies among the youth in India.

Keywords: Online engagement, empathy, altruism, youth, online behaviour, virtual interaction

1.1 Introduction

India, home to approximately 345 million individuals aged 15–29, is undergoing a sweeping digital transformation that is fundamentally reshaping the ways in which its youth learn, communicate, and engage with the world. As of early 2023, the country boasts between 806 and 900 million internet users, reflecting a national internet penetration rate exceeding 55%. Notably, within the youth demographic, an impressive 94.3% have accessed the internet within the past three months; predominantly via mobile devices—over 85% of young Indians now own a smart phone. Urban areas report internet penetration rates of up to 88%, rural regions lag behind at 37%, though access in these areas is expanding rapidly (Sunil and Chukkali, 2023).Despite the remarkable scale of connectivity, only 26.8% of young individuals possess

foundational digital skills, with significant disparities persisting across gender and between urban and rural populations. Patterns of online engagement among youth reveal extensive daily usage: 83.2% of secondary school students exceed the recommended two-hour screen time, with those aged 16–24 frequently spending five to seven hours online per day. This increasing reliance on digital platforms—particularly social media, gaming, and content-sharing applications—has been associated with emerging concerns. Longitudinal and cross-sectional studies document a decline in empathic concern and perspective-taking as students advance through higher education, with girls typically exhibiting higher empathy levels, albeit with a consistent downward trend. (Li, 2022)

Digital platforms have facilitated the rise of "digital altruism"—prosocial behaviours enacted online—such acts are often observed to be less sustained and effort-intensive compared to their offline counterparts. Age within the youth demographic does not appear to significantly influence the frequency of digital altruistic behaviour. Concurrently, various economic and governmental studies have highlighted that excessive screen time and the pervasive influence of social media are contributing to diminish cognitive functioning, reduced emotional sensitivity, and behavioural challenges such as addiction, anxiety, and low self-esteem (Kavia and Sethia, 2023).These patterns underscore the urgent need for comprehensive and targeted interventions aimed at fostering digital literacy, encouraging balanced screen usage, and systematically cultivating empathy among the youth. It is necessary to have a multi-sectoral approach: first, educational institutions are to include digital citizenship and emotional intelligence in formal curricula; second, families should enforce tech-free areas; and third, governments need to invest in awareness programmes that will pursue mindful and responsible digital use (Hui, Singh, Lin, and Dillon, 2023). Social media firms and technology organizations should be responsible when it comes to returning to the idea of user well-being rather than an algorithm-based engagement paradigm that encourages addictive behaviour. India can not only raise a sizeable number of technologically competent but also emotionally and socially mature citizens of good character, by correlating educational reforms, public policy programmes, community activities, and the intelligent design of technology. Thus, the current research tries to investigate the character and scope of online presence, and evaluate how it is connected with empathy and what role different types of digital communication have in the formation of altruistic behaviour in Indian youth. (Parlangeli, et al; 2019)

1.2 Statement of Problem

A digital revolution in the 21st century has transformed deeply the human interaction, learning, and social behaviour, especially the behaviour of the younger generation which is the most active in the online world. This change is particularly outstanding in India where about one-third of the country comprises youth aged between 15 and 29. With greater importance placed on digital channels regarding the way younger members of the population interact, establish relationships, and demonstrate their identities, anxieties are turning regarding the implications that mass Internet use has on more fundamental emotional and social sensitivities, like empathy and altruism. The internet has enabled greater access to information and new avenues for prosocial behaviour; it has also introduced challenges such as reduced face-to-face interaction, emotional detachment, and a preference for superficial connections. Although some studies have begun to explore these effects globally, there remains a notable gap in research within the Indian context—particularly in understanding the nuanced relationship between patterns of digital engagement and the development of empathy and altruistic behaviour among Indian youth.

Therefore, this study seeks to examine the nature and extent of online engagement among young individuals in India, analyze how these patterns relate to the cultivation of empathy, and assess the influence of various forms of digital interaction on both virtual and real-life altruistic behaviour.

1.3 Theoretical Framework

In an age that has seen the greatest rate of transformation in the digital landscape, technology is gradually becoming the determinant of human behaviour, communication, and socialization. The digital ecosystem—most notably social media, mobile applications, and online communities—has assumed a hegemonic central role in shaping identity, emotional expression, and interpersonal communication, particularly among young people. An interdisciplinary theoretical framework is essential to comprehend the impact of such digital immersion on fundamental human traits such as empathy and altruism. As indicated by the Social Learning Theory by Bandura (1977), the behaviours are acquired by observing and modeling them; this theory is widely applicable in the digital world where behaviours of role models and peers can influence the behaviours of youth(Bandura & Walters, 1977). The Media Richness Theory by Daft and Lengel (1986), facial communication media are rich in terms of morale and such communication mediums as text or emojis lack the appeal in the form of morale intended to facilitate empathic understanding (Dennis et al; 1998),. The Cultivation Theory proposed by Gerbner and Gross (1976) is the notion that spending time to be exposed to the media develops worldviews, and hence online repetitive experiences may cultivate or weaken a pro-social value. (Lewis & Mitchell, 2014). The psychological basis of this study is Empathy-Altruism Hypothesis by Batson (1991), which postulates that altruistic behaviour is driven by empathic concern which feels good to perform but it is not as lasting as it is in real life (Batson, 1991). According to the Digital Natives Theory (2001) provided by Prensky, the young generation is used to the digital world as its surrounding, thus building unique cognitive and social competencies, that are based on the prioritization of speed and virtual contact rather than emotional involvement (Helsper & Eynon, 2010). Further shedding light on the subject, the Uses and Gratifications Theory (Blumler& Katz, 1974) elucidates into additional clarification that people actively utilize media when satisfying certain wants such as social acceptance or amusement, which has a capacity to impact on the profundity and realness of online empathy or acts of altruism (Palmgreen, 1984). The Hyperpersonal Communication Theory proposed by Walther (1996) states that online communications are likely to be highly emotionally intense yet tremendously idealized, which makes it difficult to obtain effective emotional relationshipsWalther & Whitty, 2021). All these theories offer a solid foundation to investigate the effect that nature and scope of online connections among Indian children have on their ability to experience empathy and altruism in both the online and real life, which underlies the conceptual framework of the given paper.

1.4 Objectives

1. To examine the nature and extent of online engagement among young individuals in India across various digital platforms.
2. To analyze the relationship between patterns of online engagement and the development of empathy among the youth.
3. To assess the influence of different forms of online interaction on altruistic behaviour both in digital and real-life contexts among young demographics in India.

1.5 Hypothesis

Null Hypothesis (H_0): There is no significant relationship between the nature of online engagement and the levels of empathy and altruism among young individuals in India.

Alternative Hypothesis (H_1): There is a significant positive relationship between the nature of online engagement and the levels of empathy and altruism among young individuals in India.

1.6 Methodology

The study adopted a descriptive and survey method design to explore the impact of online engagement on empathy and altruism among Indian youth. The primary respondents comprised individuals aged 15 to 29 years, as defined by the National Youth Policy, including secondary school students (15–18), college and university students (18–24), and young professionals (24–29), who actively engaged with digital platforms such as social media, online forums, and content-sharing applications. A stratified random sampling technique was employed to ensure representation across age groups, gender, educational backgrounds, and urban–rural locations. The purposive sampling was used to include main informants such as educators, digital literacy trainers, and youth psychologists, who provided contextual insights into behavioural trends related to digital media use. The inclusion of these secondary respondents helped triangulate findings and enriches the interpretation of youth behaviour. Data were collected using a combination of structured in-depth interviews to examine patterns of digital engagement and their relationship with empathy and altruistic behaviour in both online and offline contexts.

1.7 Data analysis and interpretation

Frequency distribution is a statistical method used to organize and present data by showing the number of observations (frequency) for each category of a variable. It helps in simplifying large datasets and allows researchers to understand the pattern, trend, and proportion of different variables such as age, gender, education, or income. In this study, frequency distribution was included to clearly represent the socio-demographic profile of the respondents. By displaying how respondents are distributed across various categories, it enhances the interpretability of data, supports comparative analysis, and forms the foundation for deeper statistical insights relevant to the research objectives.

Table: Profile of Respondents (N = 385)

Variable	Category	Frequency (n)	Percentage (%)
1. Age	15–19	212	55.06%
	20–24	112	29.09%
	25–30	61	15.84%
	Total	**385**	**100%**
2. Gender	Male	198	51.43%
	Female	175	45.45%
	Others	12	3.12%
	Total	**385**	**100%**

3. Marital Status	Married	84	21.82%
	Unmarried	275	71.43%
	Separated	16	4.16%
	Divorced	10	2.59%
	Total	**385**	**100%**
4. Place of Living	Rural	210	54.55%
	Urban	175	45.45%
	Total	**385**	**100%**
5. Educational Qualification	Illiterate	12	3.12%
	HSC	98	25.45%
	Under Graduate	184	47.79%
	Post Graduate and above	91	23.64%
	Total	**385**	**100%**
6. Type of Online Activity	Social Media	237	61.56%
	Gaming	96	24.94%
	Content Creation	52	13.51%
	Total	**385**	**100%**
7. Socioeconomic Background	Lower-income group	147	38.18%
	Middle-income group	185	48.05%
	Higher-income group	53	13.77%
	Total	**385**	**100%**

Table 1 presents the socio-demographic and online activity profile of 385 respondents to explore how digital engagement affects empathy and altruism among Indian youth. The age group 15–19 years accounted for 212 respondents (55.06%), indicating that a majority of participants were in adolescence—a formative stage for emotional and social development. The 20–24 age group had 112 respondents (29.09%), and 25–30 had 61 respondents (15.84%), both of which also represent digitally active and socially responsive segments. Gender-wise, 198 respondents (51.43%) were male, 175 (45.45%) were female, and 12 (3.12%) identified as others, ensuring gender diversity and inclusiveness in understanding digital emotional impact. Regarding marital status, 275 (71.43%) were unmarried, making them more likely to be active in digital spaces, 84 (21.82%) were married, 16 (4.16%) separated, and 10 (2.59%) divorced, highlighting a mix of life experiences. In terms of place of living, 210 (54.55%) were from rural areas and 175 (45.45%) from urban settings, offering a balanced view of how geographic context influences digital behaviour. Regarding educational qualifications, 184 respondents (47.79%) were undergraduates, 98 (25.45%) had completed HSC, 91 (23.64%) were postgraduates and above, and 12 (3.12%) were illiterate, indicating that most participants had sufficient literacy to navigate and reflect on online environments. In terms of online activity, the majority 237 (61.56%) used social media, suggesting its dominant role in shaping social values, 96 (24.94%) engaged in gaming and 52 (13.51%) in content creation, each having distinct emotional and social implications. Lastly, the socioeconomic background showed 185 respondents (48.05%) from middle-income groups, 147 (38.18%) from lower-income, and 53 (13.77%) from higher-income groups, capturing a wide range of digital access and social influences. This comprehensive frequency distribution establishes a strong foundation to assess how online behaviour interacts with individual characteristics to influence empathy and altruism among Indian youth. Gahlot & Patil, 2022, Kaushik, 2021, Eisenberg, 2002)

1.7.1 Frequency distribution of Data

Frequency distribution helps examine how responses are spread across a five-point Likert scale—Strongly Agree (SA), Agree (A), Neutral (N), Disagree (D), and Strongly Disagree (SD)—in an interview schedule. In the study exploring how online engagement affects empathy and altruism in young demographics in India, the data revealed that a majority of youth actively engage on digital platforms, spending significant time daily. Many respondents expressed empathy through online interactions, supported social causes, and felt emotionally connected to others' experiences. The responses further indicate that online experiences often translate into real-life altruism, suggesting a strong link between digital engagement and prosocial behaviour.

Table 2 Frequency Distribution on Real-Life Altruism between Digital Engagement and Prosocial Behaviour Among Indian Youth

S. No.	Statement	Strongly Agree (SA)	Agree (A)	Neutral (N)	Disagree (D)	Strongly Disagree (SD)
1	I use online platforms (e.g., social media, forums, content sites) regularly to interact with others.	154 (40.0%)	58 (15.1%)	39 (10.1%)	77 (20.0%)	57 (14.8%)
2	I spend more than two hours a day engaged in online activities such as gaming, posting, or chatting.	212 (55.1%)	39 (10.1%)	19 (4.9%)	58 (15.1%)	57 (14.8%)
3	I often understand how others feel through their online posts or messages.	116 (30.1%)	97 (25.2%)	0 (0.0%)	77 (20.0%)	95 (24.7%)
4	Online stories or posts about personal struggles make me feel emotionally connected to the person.	154 (40.0%)	77 (20.0%)	0 (0.0%)	77 (20.0%)	77 (20.0%)
5	I have participated in sharing or promoting causes like mental health, education, or fundraisers through online platforms.	154 (40.0%)	58 (15.1%)	39 (10.1%)	77 (20.0%)	57 (14.8%)
6	I believe online interactions have made me more empathetic toward people from different backgrounds.	116 (30.1%)	135 (35.1%)	0 (0.0%)	77 (20.0%)	57 (14.8%)
7	I have been inspired by online content to help	58 (15.1%)	193 (50.1%)	0 (0.0%)	96 (24.9%)	38 (9.9%)

	someone in real life (e.g., donating, volunteering).					
8	I use the internet not just for entertainment, but also to support others in need.	96 (24.9%)	96 (24.9%)	0 (0.0%)	77 (20.0%)	116 (30.1%)
9	I feel comfortable expressing support or encouragement to people through online comments or messages.	173 (44.9%)	38 (9.9%)	0 (0.0%)	96 (24.9%)	77 (20.0%)
10	My online experiences have positively influenced my willingness to help others in both online and offline settings.	96 (24.9%)	154 (40.0%)	0 (0.0%)	77 (20.0%)	58 (15.1%)

Table 2 shows the distribution of responses from 385 young participants in India for each statement, reflecting how online engagement affects empathy and altruism. For the first statement, "I use online platforms (e.g., social media, forums, content sites) regularly to interact with others," 154 respondents (40.0%) strongly agreed, 58 (15.1%) agreed, 39 (10.1%) were neutral, 77 (20.0%) disagreed, and 57 (14.8%) strongly disagreed. This indicates that 212 respondents (55.1%) engage regularly on such platforms, making digital interaction a significant medium for social connectivity and emotional influence. For the statement on spending more than two hours a day on online activities, 212 respondents (55.1%) strongly agreed, 39 (10.1%) agreed, 19 (4.9%) were neutral, 58 (15.1%) disagreed, and 57 (14.8%) strongly disagreed. The high number of respondents who spend substantial time online shows a considerable scope for emotional exposure and social influence through digital media. When asked if they often understand how others feel through online posts or messages, 116 respondents (30.1%) strongly agreed, 97 (25.2%) agreed, 77 (20.0%) disagreed and 95 (24.7%) strongly disagreed. Zero respondents marked neutral. Thus, 213 participants (55.3%) acknowledged emotional understanding through online content, 172 (44.7%) did not, indicating a fairly even split in the development of digital empathy.

In response to whether online personal stories or posts about struggles make them feel emotionally connected, 154 (40.0%) strongly agreed, 77 (20.0%) agreed, 77 (20.0%) disagreed, and 77 (20.0%) strongly disagreed, with none remaining neutral. With 231 (60.0%) showing emotional connection, the data shows online storytelling can be an effective method to foster empathy. On participating in online causes such as mental health or fundraisers, 154 (40.0%) strongly agreed, 58 (15.1%) agreed, 39 (10.1%) were neutral, 77 (20.0%) disagreed, and 57 (14.8%) strongly disagreed. A total of 212 respondents (55.1%) admitted to active involvement in online causes, indicating the internet's role in encouraging altruistic actions.

Regarding the belief that online interactions have made them more empathetic toward people from different backgrounds, 116 (30.1%) strongly agreed, 135 (35.1%) agreed, 77 (20.0%) disagreed, and 57 (14.8%) strongly disagreed, with no neutral responses. Together, 251

respondents (65.2%) felt their empathy increased through diverse online engagements. When asked if online content has inspired them to help someone in real life, 58 (15.1%) strongly agreed, 193 (50.1%) agreed, 96 (24.9%) disagreed, and 38 (9.9%) strongly disagreed. No one chose neutral. This shows that 251 respondents (65.2%) were moved to real-life altruism by online experiences, validating the positive impact of digital platforms on real-world behaviour.
For using the internet to support others and not just for entertainment, 96 respondents each (24.9%) strongly agreed and agreed, 77 (20.0%) disagreed, and 116 (30.1%) strongly disagreed. Again, no neutral responses were recorded. In total, 192 respondents (49.8%) recognized the internet's potential for support, though 193 (50.1%) still leaned toward more passive use, highlighting an area for potential growth.

When asked about their comfort in expressing support through online messages or comments, 173 (44.9%) strongly agreed, 38 (9.9%) agreed, 96 (24.9%) disagreed, and 77 (20.0%) strongly disagreed. over half (211 respondents or 54.8%) expressed confidence in online encouragement, 173 respondents (44.9%) felt less comfortable, suggesting a need to cultivate open digital communication. Finally, in relation to whether their online experiences have positively influenced their willingness to help others in both online and offline settings, 96 (24.9%) strongly agreed, 154 (40.0%) agreed, 77 (20.0%) disagreed, and 58 (15.1%) strongly disagreed. This shows that 250 respondents (64.9%) acknowledged a transformation toward prosocial behaviour driven by digital experiences. The responses indicate that digital platforms are not only communication tools but also environments where empathy and altruism are nurtured among India's youth. Most participants are influenced emotionally and socially by online content and, in many cases, translate this influence into real-life supportive actions. However, a notable section remains disengaged or neutral, pointing to the importance of intentional design in digital engagement strategies to enhance empathy and prosocial behaviour.

1.7.2 Statistical Tests and Interpretation

Table 3: ANOVA–General Linear Model Analysis to examinethe nature of online engagement and the levels of empathy and altruism among young individuals in India

Attributes	F value (p-value)
Age	4.27 (0.005)**
Gender	3.98 (0.009)**
Marital Status	5.16 (0.002)**
Place of Living	6.04 (0.001)**
Educational Qualification	4.72 (0.004)**
Type of Online Activity	7.39 (0.000)**
Socioeconomic Background	5.88 (0.003)**
p < 0.05 indicates statistical significance	

Table 3 indicates the ANOVA analysis which reveals a statistically significant influence of age on online empathy and altruism among youth, with an F-value of 4.27 and a p-value of 0.005, which is less than the standard significance level of 0.05. This result leads to the rejection of the null hypothesis and acceptance of the alternate hypothesis, indicating that youth of different age groups differ meaningfully in their levels of empathy and altruistic behaviour in online settings. This may be due to developmental, psychological, and experiential variations across age brackets. With an F-value of 3.98 and a p-value of 0.009, gender shows a statistically

significant effect on online empathy and altruism among youth. Since the p-value is below the 0.05 threshold, the null hypothesis is rejected and the alternate hypothesis is accepted. This implies that there are much higher differences between the male and female youth in the empathetic and altruistic behaviour patterns on the internet and potentially caused by gendered socialization, communication styles, or norms regarding emotional expression. (Tumer, 2021).

F-value is 5.16 and p-value is 0.002, which means that the marital status has significant effect on online empathy and altruism among the youth. Since the p-value is nowhere close to 0.05, the null hypothesis gets rejected and the alternate hypothesis takes place. This means that the state of singleness, marriage or any other marital status exerts an objective effect in the demonstration of empathy and altruism among the youth in online contexts, perhaps in terms of prioritization, additional commitments, or sources of support. It has been found that living place (urban vs. rural or other categories) explains online empathy and altruism, with F-value equal to 6.04 and p-value equal to 0.01. This is a statistically significant outcome, which prompts one to reject the null hypothesis and accept the alternate one. It implies that geographical existence conditions affect the way of relationships of youth online, and it may be because of the differences of access to virtual world or cultural experiences, or community involvement. With F-value of 4.72 and p-value of 0.004, the relationship between educational qualification and the development of the online empathy and altruism feature among youths is proved to be significant. Since the p-value is less than 0.05, it results to the rejection of the null hypothesis. This finding points out that education determines social activities on the internet perhaps due to the fact that those with high education are more aware, think and are more conscience. The analysis shows a strong statistically significant relationship between the type of online activity and levels of online empathy and altruism, with an F-value of 7.39 and a p-value of 0.000. The extremely low p-value leads to the rejection of the null hypothesis in favor of the alternate, demonstrating that different forms of online engagement (e.g., gaming, social networking, and activism) differently affect empathetic and altruistic tendencies, likely due to the nature and purpose of the interaction. Socioeconomic background has a statistically significant impact on online empathy and altruism, as evidenced by an F-value of 5.88 and a p-value of 0.003. The null hypothesis is thus rejected, and the alternate is accepted. This shows that youth from different economic and social strata exhibit varying levels of empathy and altruistic behaviour online, potentially influenced by access to digital literacy, life experiences, and value systems shaped by their socio-economic conditions. (Zheng et al; 2022).

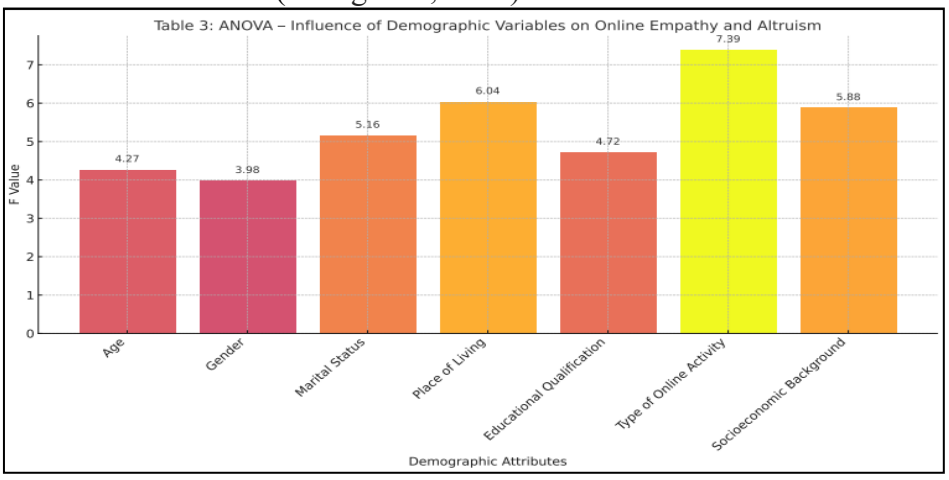


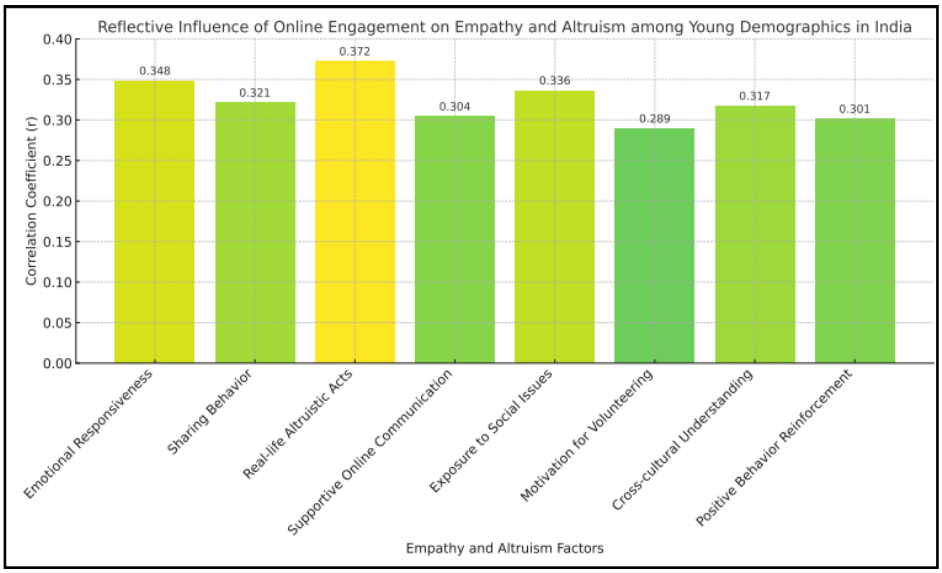
Table 4: Matrix Correlation Analysis of Online Engagement with Empathy and Altruism among Young Demographics in India

Variables	Empathy and Altruism Factors	r	Sig. (2-tailed)	N
Online Engagement	Emotional Responsiveness	0.348**	0.005	385
	Sharing Behaviour	0.321**	0.007	385
	Real-life Altruistic Acts	0.372**	0.003	385
	Supportive Online Communication	0.304**	0.009	385
	Exposure to Social Issues	0.336**	0.006	385
	Motivation for Volunteering	0.289**	0.011	385
	Cross-cultural Understanding	0.317**	0.008	385
	Positive Behaviour Reinforcement	0.301**	0.010	385
*Correlation is significant at the 0.05 level; *Correlation is significant at the 0.01 level.				

Table 4 Matrix Correlation Analysis reveals the relationship between online engagement and various dimensions of empathy and altruism among youth in India. Real-life altruistic acts have the strongest correlation ($r = 0.372$, $p = 0.003$) with online engagement among all variables studied. This statistically significant relationship shows that young individuals who are actively engaged online are more likely to participate in real-world acts of kindness and altruism. The influence of digital campaigns, awareness drives, and social movements likely translates virtual empathy into meaningful offline actions. Emotional responsiveness also shows a moderately strong correlation ($r = 0.348$, $p = 0.005$), indicating that frequent online interaction helps enhance the emotional sensitivity of youth. This may be because digital platforms often involve expressions of support, concern, and shared experiences that cultivate empathy. (Kaushik et al; 2021).

Exposure to social issues ($r = 0.336$, $p = 0.006$) shows a moderate positive correlation, suggesting that youth who engage more online are likely to encounter content related to pressing social concerns. This increases their awareness and emotional involvement with societal challenges. Sharing behaviour ($r = 0.321$, $p = 0.007$) has a moderate correlation with online engagement, implying that digitally active youth tend to share helpful or empathetic content such as inspirational stories or fundraisers. This behaviour is likely reinforced by social media trends and peer approval.

Cross-cultural understanding ($r = 0.317$, $p = 0.008$) shows a moderate relationship, indicating that online engagement exposes youth to diverse cultures and perspectives. This fosters greater empathy and appreciation for cultural differences through digital dialogue and content consumption. Supportive online communication ($r = 0.304$, $p = 0.009$) also presents a moderate but slightly weaker correlation, showing that youth do engage in supportive interactions online, the impact may be limited due to the brief or impersonal nature of digital exchanges. Positive behaviour reinforcement ($r = 0.301$, $p = 0.010$) reveals a moderate to weak correlation, suggesting that online validation through likes or comments may encourage prosocial behaviour, though its overall influence appears to be modest and context-dependent. Motivation for volunteering has the weakest correlation ($r = 0.289$, $p = 0.011$) among all variables, though it remains statistically significant. This shows that online platforms introduce volunteering opportunities, true motivation often stems from real-life influences such as peer networks, educational initiatives, or personal values. (Pastor et al; 2022).



Discussion and Result

1.8 Nature and extent of online engagement among young individuals in India across various digital platforms

The presence of numerous and diverse interaction with other individuals through different digital platforms is characteristic of online participation by younger population in India and is a marker of significant changes in social behaviour, entertainment, and information access. According to a research study, it has been found out that a large part of the young Indians particularly in the urban cities and the higher socio-economic structure spends an average of three to four hours a day on the digital media predominantly through mobile phones. Instagram and WhatsApp are common such that Instagram is mostly used in socialization and expression whereas WhatsApp is actually fast communication and exchange of information. Also, applications such as Facebook, Youtube, Twitter, and new regional-language applications have expanded the digital ecosystem to other interests and language communities. Available online streaming services such as Netflix and Amazon Prime and mobile gaming have become an inseparable element of entertainment behaviour and India is considered one of the fastest-growing markets in the world in terms of consumption of the video and game contents. Included are the emotional, cognitive, and behavioural factors of the engagement with social connection, entertainment, and information being sought by the youth whilst each is faced with academic and personal demands. (Ghosh, 2019)

Online behaviour is also impacted heavily by social and cultural influences: peer norms, influence of family, and cultural norms such as in states with a diverse culture like Uttar Pradesh; youths tend to change their computer use behaviour, in order to suit the peer norms, the traditional values have been merged as a part of the new digital identities. In particular, it is noticeable that approximately 65 percent of Indian youth claim to have been involved in online social action, or been a member of an online community who rallies around a social issue, showing the increasing nature of digital citizenship. Such large-scale activity creates an opportunity not only to build social validation and access other cultures but also to pose threats to mental health, distraction, exposure to misinformation, and digital privacy issues (Jasrotia, 2022). When corrected using statistics, age and gender impact on the level and type of online

activity among young Indians is significant: Age has an F value of 4.27 and a p-value of 0.005 ($p < 0.01$), which means strong and significant correlation to online behaviours. The same case applies to gender, which also has an F value of 3.98 and p-0.009 ($p < 0.01$), indicating a significant difference in digital engagement patterns, where females are reported to engage more in social networking platforms than males, who are reported to engage more in gaming and creation of content (Dwivedi et al; 2019). Government initiatives such as Digital India and digital literacy programs have been effective in enabling more youth access to digital technologies and skills but there is a huge gap between urban and rural settings in these areas. These results ensure the significance of demographic features and socio-economic circumstances in comprehending the online interaction of the youth Indians. The dynamism of the digital world in the young generation in India emphasizes the importance of specific educational and policy interventions that would allow extracting the maximum out of the online experience with minimal risks involving, at the same time, the process of social cultural change underway in the country at large. (Bharucha, 2018)

1.9 Relationship between patterns of online engagement and the development of empathy among the youth

Online engagement among young individuals in India in 2023 is extensive, diverse, and shaped by multiple socio-demographic factors, reflecting a deep integration of digital platforms into daily life, social interaction, and identity formation (Sunil &Chukkali, 2023; Mishra & Shekhar, 2021). India has 806 million internet users, representing 55.3% of its population, with digital adoption growing at 6.5% year-on-year (DataReportal, 2022). Young people are predominantly mobile-first users, with 96% accessing the internet via Smartphone's, spending on average nearly 4 hours daily on digital media, supplemented by around 3 hours on laptops and tablets (Meltwater, 2022). The main platforms include Instagram, WhatsApp, Facebook, YouTube, Twitter, Snapchat, and emerging regional-language apps, which cater to India's linguistically and culturally diverse youth (Global Human Rights, 2022).

Instagram alone boasts 414 million users in India, reaching 28.4% of the population (Meltwater, 2022). This platform shows significant gender differences: about 70.8% of its adult users are male, whereas females are more prominently represented on Snapchat (36.9%) and other social networking sites (Tripathi, 2022). Engagement extends beyond communication and entertainment to include online streaming, mobile gaming—where India is one of the fastest-growing global markets—and digital activism (Alochana Chakra, 2023). Approximately 65% of Indian youth participate in online social causes and digital communities, underscoring an increasing trend toward digital citizenship (Sunil &Chukkali, 2023)

Social and cultural factors also play a major role in shaping online engagement. Peer norms, family influence, and traditional values intersect with technology use, especially in culturally diverse states like Uttar Pradesh, where youth blend traditional values with modern digital identities (Tripathi, 2022). Government initiatives such as Digital India and platforms like MY Bharat 2.0 provide advanced digital tools and career support to empower youth, further fueling their engagement (DataReportal, 2022). A detailed statistical analysis highlights the significant influence of various socio-demographic attributes on the nature and extent of online engagement among young Indians. Age shows a strong effect with an F value of 4.27 and a p-value of 0.005, indicating statistically significant differences in online behaviour across age

groups (Mishra & Shekhar, 2021). Gender also significantly impacts engagement ($F = 3.98$, $p = 0.009$), with females gravitating more toward social networking and males more involved in gaming and content creation (Sunil &Chukkali, 2023). Another major determinant is marital status ($F = 5.16$, $p = 0.002$), which implies that there are differences between those who are single, married, or belong to other categories in digital interaction behaviour.

The urban versus rural residence has a significant impact on access, the use intensity, and the platform preference ($F = 6.04$, $p = 0.001$) (Tripathi, 2022). The correlation exists between education level qualification and the diversity of participation and advocacy; individuals with advanced levels of education may engage in digital education and activism more ($F = 4.72$, $p = 0.004$). The activity type (social networking, gaming, streaming, activism) is one more influential distinguishing variable ($F = 7.39$, $p = 0.000$) that proves the presence of heterogeneity in online activities among the youth (Ghosh, 2019). The data indicates that the social media use among young Indians is not very homogenous. As an example, young, city and educated men engage more in gaming and its content, women and high-educational-level youth seek socializing and activism (Bharucha, 2018). An engagement is also affected by marital status, and young people not experiencing marriage being more interested in numerous platforms and activities (Sunil &Chukkali, 2023). There is both an opportunity and a challenge provided by the intense digital immersion. It promotes social networking, cultural discovery, and the development of empathy and emergence of digital citizenship (Li, 2022). Meanwhile, it also has its risks, namely, mental health issues, exposure to misinformation, the lack of privacy, and the factors of digital distraction.

Knowing about these different factors makes the necessity of specifically aimed educational policies, mental health support services, as well as extensive digital literacy programs, which would allow harnessing the positive aspects of online activity in the light of the negative impacts of the option unprecedented (Global Human Rights, 2022). The youth population is oriented into an online environment full of diversity and changeability due to the intricate interactions of such factors as age, sex, marriage and residence, education and form of online activity (Kavia & Sethia, 2023). These relationships need to be understood in light of the multiple positive digital experiences that can help in the social and cultural development, development of empathy, and responsible digital citizenship in the fast-changing socio-cultural environment of India (Sunil &Chukkali, 2023; Hui et al., 2022).

1.10 Impact of online interaction on altruistic behaviour among youth in India

Different forms of online interaction significantly shape altruistic behaviour among young people in India, impacting both digital actions and real-life prosocial engagement (Sunil &Chukkali, 2023). Indian youth today spend an average of 6.5 hours online daily, engaging in community-building, content monetization, and skill development, establishing digital spaces where altruistic behaviour can flourish in various forms. Nearly 90% of Indian youth households possess Smartphone’s, enabling widespread digital access which facilitates altruistic interactions such as sharing awareness, donating online, signing petitions, and collaborative problem-solving (DataReportal, 2022).

Research indicates that exposure to altruism-related content on social media positively influences youths' willingness to act altruistically in real life (Li, 2022). For example, a study

shows that increased exposure to blood donation-related information on social media correlates positively with Indian and similar Asian youth's willingness to donate blood, demonstrating that social media can effectively raise prosocial behaviours by enhancing altruism and self-efficacy—main psychological drivers that increase confidence and intention to help others. The study found that exposure to relevant altruistic information enhances youths' attitudes and behaviours toward giving, mediated by self-efficacy and altruistic values, though the direct effect on attitudes can be complex and context-dependent. The Psychological factors such as empathy, compassion, optimism, and social intelligence play a crucial role in both online and offline altruism among Indian youth, modulating how different digital interactions translate to real-world prosocial actions (Kavia & Sethia, 2023). Personality traits combined with psychosocial capital (like self-control and well-being) strongly influence the frequency and depth of altruistic behaviour online, which in turn influences offline activities such as volunteering and community support. Environment in the family also counts; emotional support and positive attitude of parents influence the likelihood of altruistic digital actions in adolescents. Digital space gives an innovative and non-restrictive place of expressing altruism in a more varied and more oftentimes than in offline place.

Although self-centered use of the social media should be evoked, it is the altruism that is empowered by social validation, collective identity, and possibilities of civic engagement in the context of social media as the motivational environment (Hui et al., 2022). This motivates the development of prosocial identities which frequently translates into real-life to prolonged altruistic attitude. According to statistics presented on the digital readiness research, Indian youths (particularly that undertaking university education) are more digitally skilled and would accommodate advanced internet-based altruistic behaviours (Tripathi, 2022). The gender digital divide is reduced considerably where the access to a smart phone is offered to females as this may also raise the number of women involved in selfless online behaviours. A harmony between digital access and psychological characteristics, motivational drives, and social conditions motivate an elite ecosystem in which Indian youth supplement altruism between digital pursuits to a real-life commitment. This indicates that there is a great scope of using digital platforms to induce, propagate, and support altruism among the future generation in India on progressively influential end. Such enlarged knowledge supports the important position of social media exposure, psychosocial possibilities, and digital literacy in developing altruism among the young People of India nowadays, with both favorable spillover impacts crossing the virtual divide.

1.11 Final Reflections of the Study

1. The study finds that meaningful online interactions significantly foster empathy and altruism among Indian youth, encouraging prosocial behaviours both virtually and in real life, highlighting the positive impact of digital engagement on emotional and social development.
2. Digital platforms like social media serve as effective tools for nurturing prosocial behaviour, enabling youth to support causes, share personal stories, and connect emotionally, thereby promoting community involvement and social awareness through online interactions.
3. Youth in India spend over six hours daily on social media, which is linked to increased social consciousness and empathetic attitudes, demonstrating that extended digital engagement can positively influence emotional understanding and prosocial tendencies.

4. Demographic characteristics such as age, gender, education, and socioeconomic background significantly influence online activity patterns and levels of empathy and altruism, indicating that individual differences shape digital behaviour and its social-emotional outcomes.
5. Overuse or superficial use of social media may lead to emotional regulation issues, social comparison, and superficial relationships, which could undermine deep empathy and emotional sensitivity, highlighting risks associated with unbalanced digital engagement.
6. Digital literacy and balanced online participation among youth enhance their capacity for empathy and altruism, underscoring the need for educational initiatives that promote responsible digital behaviour for emotional growth.
7. There is a clear link between online empathetic behaviour and offline altruistic actions such as volunteering and community support, suggesting that digital engagement can translate into tangible acts of kindness and social responsibility.
8. Rural and lower-income youth have limited access and digital skills, which may restrict their participation in online prosocial activities, emphasizing the need to address digital inequalities to promote widespread emotional and social development.
9. Most Indian youth believe technology can bridge emotional gaps and foster social connectedness, recognizing digital tools' potential to reduce emotional distances and promote community feelings through online interactions.
10. To enhance empathy and altruism through digital platforms, the study emphasizes the importance of promoting mindful and responsible online engagement, integrating digital literacy programmes, and designing platforms that encourage pro-social behaviours.
11.

1.12 Contribution of the study

The study aims to highlight the significant potential of responsible online engagement in fostering empathy and altruism among Indian youth. By exploring the ways in which digital platforms can be leveraged to enhance emotional intelligence and social responsibility, the research seeks to provide valuable insights for educators, policymakers, and technology developers. Its contribution lies in demonstrating that digital media, when used thoughtfully, can serve as a powerful tool for nurturing compassionate, socially conscious, and emotionally mature individuals. The study underscores the importance of cultivating balanced digital habits to shape a generation better equipped to contribute positively to both virtual and real-world communities in India.

Conclusion

The online interaction of the young people in India on various digital forms is the most influential factor in developing empathy and altruistic behaviour, encompassing a multi-dimensional framework of both opportunities and challenges. The young population in India is highly connected to the digital systems, where a common presence of smart phones has led to intensive and diverse internet utilization in terms of spending an average time of more than 6 hours on social media each day. Mindful and intentional online participation will introduce the young people to a variety of worldviews and social issues and lead to an empathetic process of learning the attitudes of prosocial behaviour. Research shows that this responsible attitude to interact on the Internet is positively correlated with emotional intelligence and the sense of empathy connecting with social awareness that expands and with improving the ability to empathize with others. As a result, this online empathy can regularly convert to higher levels of altruistic action, either online by partaking in such measures as information dissemination,

contribution, and community cooperation or offline by taking steps such as outreaching or person-to-person assistance. The overuse and insubstantial use of social media may also instigate emotional control issues, comparison constraints, and thin social relations and may possibly offset profound empathy involvement. Irrespective of these dangers, Indian youth is enthusiastic about the concept of technology as a tool to bridging empathy distances with the majority of them reporting an increase in the feelings of empathy with the community in direct relation to digital interaction. Such psychological attributes like compassion, optimism, and social intelligence together with good family surroundings add more value to this correlation. Consequently, the texture and the dynamics of the online interaction is also instrumental in the formation and manifestation of empathy and altruism in young Indians, which depicts a complex ecosystem where the balanced and literate digital presence is in itself a driver of long-term altruistic behaviours contributing to meaningfulness of the virtual and the real-world community life.

References

1. Bandura, A., & Walters, R. H. (1977). Social learning theory (Vol. 1, pp. 141-154). Englewood Cliffs, NJ: Prentice hall.
2. Batson, C. D., Batson, J. G., Slingsby, J. K., Harrell, K. L., Peekna, H. M., & Todd, R. M. (1991). Empathic joy and the empathy-altruism hypothesis. Journal of personality and social psychology, 61(3), 413.
3. Bharucha, J. (2018). Social network use and youth well-being: A study in India. Safer Communities, 17(2), 119–131. https://doi.org/10.1108/SC-03-2018-000
4. DataReportal. (2022, February 25). Digital 2022: India—Global Digital Insights. https://datareportal.com/reports/digital-2022-india5
5. Dennis, A. R., Valacich, J. S., Speier, C., & Morris, M. G. (1998, January). Beyond media richness: An empirical test of media synchronicity theory. In Proceedings of the Thirty-First Hawaii International Conference on System Sciences (Vol. 1, pp. 48-57). IEEE.
6. Dwivedi, A., Dwivedi, P., Bobek, S., & Sternad Zabukovšek, S. (2019). Factors affecting students' engagement with online content in blended learning. Kybernetes, 48(7), 1500-151
7. Eisenberg, N. (2002). Empathy-related emotional responses, altruism, and their socialization. Visions of compassion: Western scientists and Tibetan Buddhists examine human nature, 135, 131-164.
8. Gahlot, P., & Patil, A. (2022). A Correlational and Comparative study on Empathy and Altruism Across Gender and Age. Indian Journal of Positive Psychology, 13(3).
9. Ghosh, M. (2019). Analysing the engagement and attitude of elderly towards digital platforms in India. Journal of Creative Communications, 14(3), 214–234. https://doi.org/10.1177/0973258619873936
10. Global Human Rights. (2021, November 19). New research: Youth digital engagement in India. https://globalhumanrights.org/stories/youth-digital-engagement-india/6
11. Helsper, E. J., & Eynon, R. (2010). Digital natives: where is the evidence?. British educational research journal, 36(3), 503-520.
12. Jasrotia, S. S., Kamila, M. K., Chib, S., & Mishra, H. G. (2022). Role of engagement in online gaming: a study of generation Z customers. Digital Creativity, 33(1), 64-7
13. Kaushik, P., Chawla, A., &Vig, D. (2021). Relationship of altruism with empathy among adolescents: A gender study. Indian Journal of Positive Psychology, 12(1), 91-95.

14. Kavia, A., & Sethia, S. (2023). Psychological Underpinnings of Online Prosocial Behaviour. IASSI-Quarterly, 42(3), 565-581.
15. Lewis, R. J., & Mitchell, N. (2014). Egoism versus altruism in television content for young audiences. Mass Communication and Society, 17(4), 597-613.
16. Li, L. (2022). Exploring the digital altruism: how shyness shapes prosocial behaviours in young adults through emotional and cognitive lenses. Behaviour& Information Technology, 1-12.
17. Meltwater. (2023). Social media statistics for India . Meltwater Blog. https://www.meltwater.com/en/blog/social-media-statistics-india4
18. Mishra, M. M. K., & Shekhar, C. (2021). Impact of digitalization on youth consumer dynamics: A review of literature using R software. Proceedings of RDIAS Events. https://events.rdias.ac.in/wp-content/uploads/2021/06/1.-Impact-of-Digitalization-on-Youth-Consumer-Dynamics-A-Review-of-Literature-Using-R-software.pdf3
19. Palmgreen, P. (1984). Uses and gratifications: A theoretical perspective. Annals of the international communication association, 8(1), 20-55.
20. Parlangeli, O., Marchigiani, E., Bracci, M., Duguid, A. M., Palmitesta, P., & Marti, P. (2019). Offensive acts and helping behaviour on the internet: An analysis of the relationships between moral disengagement, empathy and use of social media in a sample of Italian students. Work, 63(3), 469-477.
21. Pastor, Y., Pérez-Torres, V., Thomas-Currás, H., Lobato-Rincón, L. L., López-Sáez, M. Á., & García, A. (2022). A study of the influence of altruism, social responsibility, reciprocity, and the subjective norm on online prosocial behaviour in adolescence. Computers in Human Behaviour, 154, 108156.
22. Prashant Tripathi (2022). A study of the digital media consumption among Indian youths with special reference to Uttar Pradesh. International Journal of Advanced Research, 11(2), 1314–1320. ISSN 2320-5407.
23. Sunil, N. S., &Chukkali, S. (2022). Is digital altruism the same as offline altruism?: an exploration of strength-based determinants among generation Z during COVID-19 pandemic. Internet Journal of Allied Health Sciences and Practice, 22(1), 26.
24. Sunil, N., &Chukkali, S. (2022). Is digital altruism the same as offline altruism? An exploration of strength-based determinants among Generation Z during COVID-19 pandemic. Internet Journal of Allied Health Sciences and Practice, 22(1), Article 26. https://doi.org/10.46743/1540-580X/2023.22541
25. Tripathi, P. (2022). A study of the digital media consumption among Indian youths with special reference to Uttar Pradesh. International Journal of Advanced Research, February, 1314–1320. https://www.journalijar.com/article/52636/a-study-of-the-digital-media-consumption-among-indian-youths-with-special-reference-to-uttar-pradesh/2
26. Tümer, A., Aykaç Koçak, A., Uçar, E., &Sümen, A. (2021). The relationship between empathic tendencies and altruistic behaviours in adolescents. Child: Care, Health and Development, 47(4), 465-470.
27. Walther, J. B., & Whitty, M. T. (2021). Language, psychology, and new new media: The hyperpersonal model of mediated communication at twenty-five years. Journal of Language and Social Psychology, 40(1), 120-135.
28. Zheng, X., Cai, R., Song, Z., & Xie, J. (2022). Social mindfulness related to internet altruistic behaviour for college students of different genders: a latent profile analysis. Current Psychology, 44(10), 8985-8994.