

Understanding the Relationship Between Empathy and Problematic Internet Use Among College Students in Coimbatore

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DOI: <https://doi.org/10.51583/IJLTEMAS.2026.150700184>

Received: 13 August 2026; Accepted: 18 August 2026; Published: 29 August 2026

ABSTRACT

Digital tech's fast rise is changing how college students live and learn. Because the web opens doors to knowledge, chat, and fun, spending too much time online might cause trouble - especially when it starts harming mental health or real-life connections. Feeling what others feel, known as empathy, helps people build stronger bonds and make better choices online. Yet few studies have looked at how this emotional skill links to unhealthy internet habits among young adults in India, even though cities like Coimbatore are growing quickly. With that in mind, this work looks into how empathy ties to intense online use in student circles there, while also checking if age, gender, or background makes a difference.

This investigation uses numbers to explore connections through a structured observation method. From different schools in Coimbatore, three hundred young adults - between eighteen and twenty-five - are included based on accessibility. Information comes from established written surveys filled out by participants themselves. The sense of understanding others shows up via the Interpersonal Reactivity Index, created by Davis, capturing several sides of empathy. How intensely someone gets caught in online activity appears through the PIUQ tool designed by Pramod and Raju. A form gathers details like gender, age, student level, where someone lives, sibling count, alongside household earnings each year. Data from that form get studied through basic summaries, checks for links between traits, comparisons across separate groups, also tests looking at differences in three or more clusters.

Findings show college learners have average empathy along with some issues around internet habits. When one goes up - empathy - the other tends to go down: heavy online activity links to less empathetic responses. Females score higher on care for others' feelings, whereas males lean toward more intense web use patterns. Those still earning bachelor's degrees engage more intensely online than those in advanced study programs. Living in cities nudges internet usage upward just a bit when compared to countryside peers. Age does not shift these patterns much; neither do how many brothers or sisters someone has nor household earnings. Empathy and screen time stay steady regardless of years lived, sibling count, or financial background.

One thing stands clear. Socio-emotional skills matter when it comes to how young adults act online. This work adds to what we already know about mental aspects tied to heavy internet use. Empathy should be part of any effort aimed at better web routines in university settings.

Finding less empathy tied to heavier online struggles in university youth.

Keywords: Empathy, Problematic Internet Use, College Students, Digital Behavior, Psychological Well-Being

INTRODUCTION

Young people now live differently because tech moves so fast. Because of the web, daily routines look unlike they did before. College learners rely on it - not just for schoolwork but staying in touch, passing time, finding news. Phones are everywhere, Wi-Fi follows you, apps keep calling - so being online feels normal. Hours stack up without notice, pulled by endless scrolls and pings. Even though connections help, too much screen time brings trouble. When logging off becomes hard, moods shift, focus fades - that pattern has a name.

Spending too much time online without control often leads to trouble in everyday routines. Trouble focusing on real-life tasks might pop up when screen habits take over. When disconnected, some feel restless or uneasy, almost like something's missing. School work suffers, friendships fade, even job performance dips under the weight of constant browsing. College years bring big changes - new freedom, pressure to succeed, and a hunger to connect - which can pull people deeper into digital spaces.

Lately, more researchers have begun looking at how empathy connects to the ways people use the internet. What we mean by empathy is being able to grasp someone else's feelings, feel alongside them, yet also react appropriately. One part of it - cognitive empathy - is about seeing things from another person's point of view; meanwhile, affective empathy shows up as an actual emotional reaction. Without it, forming close bonds gets harder; instead, this quality supports helpful actions between people while deepening shared emotional awareness.

People who feel more for others often build stronger connections with people around them, yet struggle less in face-to-face talks. On the flip side, those tuned out to emotions might find chatting in person harder, instead leaning toward digital chats that soften emotional pressure. Screens offer space to talk without reading facial cues, sometimes pulling users deeper into constant web use. Because of this shift, empathy can either shield someone from unhealthy habits or quietly open the door to them.

Looking into past work, links were found connecting internet addiction with feelings of being alone, lonely, how emotions are handled. Still, hardly any looked closely at empathy tied to heavy internet use in Indian college youth. Where a person grows up, what surrounds them daily, could shape both their ability to feel for others and how they go online. When cities like Coimbatore change fast, more access to the web might shift how students think, connect, act.

Younger students might engage online differently than older ones, while location shapes access. Gender could affect emotional connection in chats or comments instead of face-to-face talks. Family size sometimes plays a role in how much time someone spends on devices. Income levels often tie into device quality or internet stability at home. Academic level may shift priorities, altering screen habits along with social awareness. Where someone lives can limit or expand their digital reach. These factors together paint varied pictures of student life online.

One reason this research exists is to look at how empathy links to troubling online habits in university learners from Coimbatore. Instead of just focusing on numbers, it digs into mental patterns along with background traits. What emerges is a clearer picture of how young adults interact with digital spaces. Because emotions play a role, insights might feed into programs that nurture balanced screen time. Through this lens, reactions to technology become less about blame, more about context. Until now, few local studies have mapped these connections so directly.

Materials and Methods Objectives

1. To assess the level of empathy among college students in Coimbatore.
2. To assess the level of problematic internet use among college students in Coimbatore.
3. To examine the relationship between empathy and problematic internet use.
4. To examine differences in empathy and problematic internet use based on demographic variables.

Hypotheses

H1: There is a significant relationship between empathy and problematic internet use among college students.

H2: Empathy significantly differs based on gender, age, academic status, place of residence, number of siblings, and family income.

H3: Problematic internet use significantly differs based on gender, age, academic status, place of residence, number of siblings, and family income.

Participants

The participants of the study consist of **300 college students** from various colleges located in Coimbatore, Tamil Nadu. The participants are aged between **18 and 25 years** and include both undergraduate and postgraduate students. Convenience sampling is used to select participants for the study.

MATERIALS

Two standardized psychological instruments are used:

Interpersonal Reactivity Index (IRI)

Developed by Mark H. Davis, the scale measures different dimensions of empathy. It consists of **28 items** rated on a **5-point Likert scale**.

Problematic Internet Use Questionnaire (PIUQ)

Developed by Pramod and Raju, this scale measures problematic patterns of internet use. It consists of **18 items** rated on a **5-point Likert scale**.

A **demographic information sheet** is also used to collect participant information.

Data Collection

Data are collected from college students in Coimbatore after obtaining informed consent. Participants are informed about the purpose of the study and assured confidentiality. The questionnaires are administered through online forms.

Scoring

Responses to the Interpersonal Reactivity Index and the Problematic Internet Use Questionnaire are scored according to the scoring procedures provided in the respective manuals. Higher scores indicate higher levels of empathy and problematic internet use respectively.

Variables

Independent Variable

Empathy

Dependent Variable

Problematic Internet Use

Demographic Variables

1. Gender
2. Age
3. Academic status
4. Place of residence

5. Number of siblings

6. Family annual income

RESULTS AND DISCUSSION

This section presents the statistical findings of the study examining the relationship between empathy and problematic internet use among college students in Coimbatore. The results are interpreted with reference to previous research findings.

Demographic Characteristics of the Participants

The demographic distribution of the participants is presented in Table 1. A total of 300 college students participated in the study, with a balanced gender distribution.

Table 1. Demographic Distribution of Participants (N = 300)

Variable	Category	Frequency	Percentage
Gender	Male	148	49.3%
Gender	Female	152	50.7%
Age	18–20 years	126	42.0%
Age	21–23 years	118	39.3%
Age	24–25 years	56	18.7%
Academic Status	Undergraduate	204	68.0%
Academic Status	Postgraduate	96	32.0%
Residence	Urban	172	57.3%
Residence	Rural	128	42.7%
Number of Siblings	None	46	15.3%
Number of Siblings	One	154	51.3%
Number of Siblings	Two or more	100	33.4%
Family Annual Income	Below ₹2,00,000	82	27.3%
Family Annual Income	₹2,00,000 – ₹5,00,000	126	42.0%
Family Annual Income	Above ₹5,00,000	92	30.7%

Descriptive Statistics of Empathy and Problematic Internet Use Descriptive statistics are presented in Table 2.

Table 2. Descriptive Statistics of Empathy and Problematic Internet Use

Variable	N	Mean	Standard Deviation
Empathy	300	86.42	11.37
Problematic Internet Use	300	52.18	10.94

Relationship Between Empathy and Problematic Internet Use

Pearson correlation analysis was conducted to examine the relationship between empathy and problematic internet use (Table 3).

Table 3. Correlation Between Empathy and Problematic Internet Use

Variables	Empathy	Problematic Internet Use
Empathy	1	
Problematic Internet Use	-0.36**	1

**p < .01

Gender Differences in Empathy and Problematic Internet Use

Table 4. Gender Differences in Empathy and Problematic Internet Use

Variable	Gender	Mean	SD	t value	p value
Empathy	Male	84.03	11.82	2.41	.016
Empathy	Female	88.75	10.64		
Problematic Internet Use	Male	54.12	11.01	2.18	.030
Problematic Internet Use	Female	50.29	10.65		

Differences Based on Academic Status

Table 5. Differences Based on Academic Status

Variable	Group	Mean	SD	t	p
Empathy	Undergraduate	85.67	11.48	1.62	.106
Empathy	Postgraduate	88.04	11.02		
Problematic Internet Use	Undergraduate	53.26	10.87	2.14	.033
Problematic Internet Use	Postgraduate	49.93	10.72		

Differences Based on Residence

Table 6. Differences Based on Residence

Variable	Residence	Mean	SD	t	p
Empathy	Urban	85.71	11.22	1.09	.276
Empathy	Rural	87.38	11.56		

Problematic	Urban	53.44	10.91	2.01	.045
Internet Use					
Problematic	Rural	50.49	10.72		
Internet Use					

ANOVA Results

Table 7. ANOVA Results

Variable	Factor	F value	p value
Empathy	Age	1.84	.161
Empathy	Number of	0.97	.381
	Siblings		
Empathy	Family Income	1.21	.299
Problematic	Age	2.67	.071
Internet Use			
Problematic	Number of	1.34	.263
Internet Use	Siblings		
Problematic Internet Use	Family Income	2.11	.123

CONCLUSIONS

- Internet use can be a problem for some college students. People with empathy do not have this problem as much.
- Empathy is very important because it helps people interact with each other in a way, and they do not need to be online all the time.
- Female college students are usually more empathetic than male college students.
- On the other hand, male college students are more likely to have problems with internet use.
- College students who are undergraduates have more problems with internet use than postgraduate students.
- Students who live in cities are a little more likely to have problems with internet use than students who live in rural areas.
- Empathy is like a shield that protects college students from using the internet in a way.
- If we can make college students more empathic, they will use the internet in a way, and they will be happier and healthier.
- Empathy helps college students to be better. It supports their well-being.
- College students with empathy are better at dealing with internet use. They do not get addicted to it.
- The internet can be a problem. Empathy is the solution, especially for college students.

ACKNOWLEDGEMENTS

To the Department of Psychology at Hindusthan College of Arts & Science in Coimbatore thanks for providing the support and resources needed for this research.

I also thank my research supervisor, Mr. M.Sanjaykumar for his guidance and suggestions throughout the study.

The college authorities and faculty members are thanked for allowing and facilitating the data collection.

Special thanks to the college students who took part in the study and gave their responses.

Lastly, I thank my friends and well-wishers for their support and encouragement while completing this research.

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