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Internet Addiction and Reasoning Ability among Higher Education Students in Uttar Dinajpur District

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Abstract:

The internet is influencing every aspect of our life, from work to social events to our everyday routines. Having access to the internet has become essential in today's world. Some people, particularly students, are negatively impacted by the internet. On the other hand, a pupil with reasoning abilities (RA) can think creatively and rationally. It is important for assessing and dealing with situations, making decisions, understanding complex concepts, and performing well in school as well as in daily life. The research aims to determine the level of internet addiction (IA), examine gender differences in internet addiction and reasoning ability, and explore the correlation between these two variables among students. The research used a cluster cum simple random sampling technique to sample 200 students from colleges and universities, utilizing a quantitative survey methodology with standardized questions. The Internet Addiction Scale (IAS) and the Shailaja Bhagwat Reasoning Ability Test (SBRAT) were employed for data collection. Analysis revealed high level of internet addiction among students, with no significant gender differences in internet addiction or reasoning ability. However, the study found a negative and significant correlation between internet addiction and reasoning ability, suggesting that higher internet addiction is associated with lower reasoning ability. The study concludes that while internet addiction is prevalent among higher education students in Uttar Dinajpur, it is negatively associated with their reasoning skills. The research suggests that educators should guide students to use the internet positively and enhance their thinking abilities. The findings underscore the importance of addressing internet addiction to foster better cognitive skills among students.

Keywords: Internet Addiction, Reasoning Ability, Higher Education Students.

Introduction: The internet has altered our social, professional, and daily life. Internet access has become an integral part of modern living. There is no denying its benefits. Internet availability and use have dramatically increased across all age groups due to the fast technological improvements over the last decade. But like any technology, the internet Volume-X, Issue-II March 2024 167

also has potential disadvantages and an ever-growing issue in recent years is internet addiction (IA). Adolescents are especially vulnerable to the adverse impacts of this addiction on their academic achievement and other areas of their lives (*Karačić & Orešković, 2017*).

Conversely, a student with reasoning skills may think clearly, creatively, and reasonably (Hooda & Devi, 2018). It is considered as 'problem-solving skill' or 'analytical ability' of the pupil (Rani, 2017). Reasoning ability encompasses both logic and creativity. In many facets of life, reasoning ability (RA) is crucial and is regarded as a basic cognitive capacity. It involves having the capacity to assess and resolve issues, make choices, comprehend difficult ideas, and succeed in their educational life (Sonnleitner et al., 2013). Bandhana and Sharma (2012) found that adolescents with high-quality home settings have stronger reasoning abilities than those with low-quality surroundings. Additionally, private school pupils had superior thinking skills compared to government school students. Noor and Ahmed (2018) established a relationship between logical reasoning and academic achievement. Internet Addiction is correlated to depression, anxiety and interpersonal Sensitivity, along with it is found that students who are too much addicted to the internet have low self-esteem (Kumar & Mondal, 2018). Acharya et al. (2023) found that approximately 30% of higher education students in Kathmandu got addicted to the internet. However, increased use of the internet is affecting students' mental health and psychological domains such as anxiety, depression, and interpersonal sensitivity as well as concerning the critical thinking ability of the students (Lebni et al., 2020). According to Raj (2020), internet addiction may not affect working memory, but it may have a negative impact on other areas of cognitive function. Williamson and Anderson (2017) found a correlation between logical thinking scores and exam scores of the students. Students with high levels of emotional intelligence tend to have better reasoning skills as compared to those with low emotional intelligence (Saxena and Singhvi, 2015). Sarkar (2021) found that there is a favourable correlation between the reasoning ability and the mathematical accomplishments of male pupils in high school. Gorain and Saha (2023) discovered that gender and place of residence have an impact on attitudes toward internet addiction, but academic discipline has no such effect. In addition, distinctions were observed between male and female science pupils and those from rural areas. Hence, studying this population's thinking abilities in connection to their Internet addiction is important.

Objectives of the Study:

The study goals were as follows:

- 1) To determine the level of addiction towards the internet (IA) and reasoning ability (RA) of higher education students in the district of Uttar Dinajpur.
- 2) To study the difference in internet addiction in terms of the gender of students studying in higher education in Uttar Dinajpur district.
- 3) To find out if there is a difference in the thinking abilities of male and female pupils.
- 4) To determine the relationship between IA and RA among Uttar Dinajpur District's higher education students.

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Hypotheses:

¹ H_0 : There would be no significant mean difference in Internet Addiction of the students studying in higher education in terms of their gender.

 ${}^{2}H_{0}$: There would be no significant mean difference between male and female students of higher education in Reasoning Ability.

 ${}^{3}H_{0}$: There would be no significant correlation between Internet Addiction and Reasoning Ability among the students studying in higher education in Uttar Dinajpur district.

Design of the study: To collect all the necessary information, the researcher used quantitative surveys as its approach. The researcher used a mixed-methods approach to ensure a holistic understanding of the research objectives. In order to get numerical data that could be statistically evaluated, the quantitative survey used standardised questionnaires on 200 students of college and university in Uttar Dinajpur district. The cluster cum simple random sampling approach was used to pick the study's sample. "INTERNET ADDICTION SCALE" (IAS) Constructed & Standardized by Mrs. Daman Deep Kaur Gulati, Dr. Jose J. Kurisunkal, Professor (Dr.) Mamta Ralliwal and the "Shailaja Bhagwat Reasoning Ability Test" (SBRAT) tool constructed by Dr. (Smt.) Shailaja Bhagwat, were used to collect data. SBRAT consists of 30 questions. Each right response receives a "1" mark, whereas each wrong answer receives a "0" mark. "30" is the highest possible score, while "0" is the lowest of the test. Students are required to choose the correct response for each question from the list of possibilities (a), (b), (c), (d), etc. Other side, the scoring of IAS is to be done by adding the score marked by the students in each item. The five-point Likert scale consisted of 30 items, where the scale's options ranged from "Do Not Apply" to "Always", corresponding to scores from 0 to 5. Test scores range from 0 to 100, with '100' being the greatest attainable score, while '0' is the lowest. Data analysis was carried out using SPSS statistical software, the social science statistical package.

Delimitations: The current study was delimited to the following:

- 1) Only higher education students are selected as samples.
- 2) In the present study, the researcher chose 200 students from higher education institutes.
- 3) Data collection is delimited to Uttar Dinajpur district only.
- 4) More variables can be added such as rural, urban, and discipline of the sample.

Analysis and Interpretations:

> Analysis of Internet Addiction and Reasoning Ability in students of higher education institutions in Uttar Dinajpur district

Objective 1: To determine the level of addiction towards the internet (IA) and reasoning ability (RA) of higher education students in the district of Uttar Dinajpur.

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	Gender	Ν	Mean
Internet	Male	80	51.39
Addiction	Female	120	51.5
Reasoning Ability	Male	80	11.79
	Female	120	12.24

Table 1: Mean Distribution of Internet Addiction and Reasoning Ability Scores of Studentsstudying in Higher Education

Table 1 indicates that the mean score of internet addiction of the students studying in higher education comes out as 51.39 for male students and 51.5 for female students. As per the Internet Addiction Scale (IAS) Constructed & Standardized by Mrs. Daman Deep Kaur Gulati et al., the resulting mean score (51.39 and 51.39) falls under the category of high level of addiction. Thus, it can be interpreted that there are high levels of addiction towards the internet among students of higher education.

On the other hand, the mean reasoning ability score of male and female students (11.79 and 12.24) falls under the category of low-level reasoning ability test as suggested by SBRAT. Hence, there may be a low reasoning ability in both female and male students, who are studying in higher education in the district of Uttar Dinajpur in West Bengal state.

Objective 2: To study the difference in internet addiction in terms of the gender of students studying in higher education in Uttar Dinajpur district.

¹ H_0 : There would be no significant mean difference in Internet Addiction of the students studying in higher education in terms of their gender.

Table 2: Showing't' value comparing Internet Addiction (IA) of Male and Female students ofhigher education

					Std.	Error		ʻt'	Sig. (2-
	Gender	Ν	Mean	SD	Differen	ice	df	value	tailed)
Internet	Male	80	51.3875	19.29349	2.53778		198	0.43	.966
Addiction	Female	120	51.5000	16.34348					

Table 2 shows that the mean difference in IA between male and female students is not statistically significant (t = 0.43, df = 198, N = 200, p.> 0.05). Consequently, the Null Hypothesis (${}^{1}H_{0}$) failed to be rejected. It follows that there are no differences in Internet addiction between male and female students pursuing higher education.

Objective 3: To find out if there is a difference in the thinking abilities of male and female pupils.

 ${}^{2}H_{0}$: There would be no significant mean difference between male and female students of higher education in Reasoning Ability.

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Table 3: Showing't' value comparing ability to reasoning in Male and Female students ofhigher education

	Gender	N	Mean	SD	Std. Error Difference	df	<i>'t'</i> value	Sig. (2- tailed)
Reasoning			11.7875		.45587	198	1.252	.212
Ability	Female	120	12.5417	4.23649		170	1.202	

Table 3 displays there is statistically no significant mean difference in Reasoning Ability (t = 1.252, df = 198, N = 200, p > 0.05) in terms of gender. Consequently, the Null Hypothesis (²H₀) is accepted. It follows that there are no differences in reasoning ability between male and female students pursuing higher education.

Objective 4: To determine the relationship between IA and RA among Uttar Dinajpur District's higher education students.

 ${}^{3}H_{0}$: There would be no significant correlation between Internet Addiction and Reasoning Ability among the students studying in higher education in Uttar Dinajpur district.

Table 4: Showing the Pearson correlation between Internet Addiction and Reasoning Ability of students studying in higher education.

Variables	Internet Addiction			
Internet Addiction	1	482**		
Reasoning Ability	482**	1		

Table 4 shows a negative and significant correlation (r = -0.482, n = 200, p < 0.01) between Internet Addiction and Reasoning Ability of the students of higher education in Uttar Dinajpur district and the null hypothesis $({}^{3}H_{0})$ will be rejected. Thus, it is possible to conclude that there is a significant and negative correlation between college student's reasoning abilities and their internet addiction.

Findings: The findings of the study are as follows-

- (i) Students pursuing higher education in the West Bengal state's Uttar Dinajpur district have high average levels of internet addiction.
- (ii) Higher education students in the Uttar Dinajpur have a low level of thinking ability.
- (iii)Regarding internet addiction, there is no statistical gender difference among higher education students of Uttar Dinajpur district
- (iv)Students involved in higher education do not vary statistically significant in their Reasoning ability based on gender.
- (v) There is negative and significant correlation between IA and the RA of students of higher education.

Conclusion: Since the last decade, rapid technical advancements have greatly boosted internet accessibility and usage among all age groups. By 2023, there is expected to be nearly 850 million active internet users, making India the second-largest nation in the world Volume-X, Issue-II March 2024 171

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in this regard. Higher education students heavily rely on the internet for knowledge acquisition. But, one of the key challenges always faced by students is addiction towards the internet even though they don't know about their addiction. In brief, this research sheds important light on the prevalence and correlations between reasoning skills and addiction towards the internet among students in higher education. The findings suggest that addiction towards the internet is a problematic issue. The survey indicated that college students had a significant prevalence of internet addiction. A negative and statistically significant correlation was observed between students' internet addiction and their reasoning skills. Reasoning abilities include evaluating and handling problems, making decisions, understanding complex concepts, thinking logically and succeeding academically. The study found statistically no significant difference in reasoning ability in terms of gender, but both male and female students of Uttar Dinajpur district have low reasoning ability. Teachers should provide students enough support and direction to help them avoid being addicted to the internet so that they may utilize the internet positively and improve their thinking skills. It is necessary to take a holistic approach to the problem of internet addiction, one that includes both individual treatments and social improvements. Promoting digital literacy and careful internet use can help people take back control of their online habits and lessen the negative effects on their ability to think and reason. It is also possible to minimize the isolating effects of excessive internet use by promoting real-world interactions and giving other outlets for intellectual engagement. This can help to restore reasoning abilities and cognitive resilience for those who have been exposed to excessive internet usage. The present research in this area is limited to college students in the Uttar Dinajpur district and their relationship to internet addiction and reasoning ability. Consequently, it is suggested that further research studies be undertaken with a large number of pupils, additional factors, a focus on teacher addiction and internet users of different ages.

References:

1) Acharya, S., Adhikari, L., Khadka, S., Paudel, S., & Kaphle, M. (2023). Internet Addiction and Its Associated Factors among Undergraduate Students in Kathmandu, Nepal. *Journal of Addiction*, 2023, 1–9. https://doi.org/10.1155/2023/8782527

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- Bandhana, & Sharma, D. (2012). A Study of Home Environment and Reasoning Ability among Secondary School Students. *Developing Country Studies*, 2 (1), 73-80. Retrieved from www.iiste.org
- 3) Bhagwat, S. (2010) Manual for Reasoning ability test.
- 4) Chetri, L. (2021). A Study on Reasoning Ability of Undergraduate Level Students of Sonitpur District on The Basis of Gender and Stream. *PSYCHOLOGY AND EDUCATION*, 58(5), 3271–3280.
 http://psychology.org/pag/index.php/psg/orticle/view/6020

http://psychologyandeducation.net/pae/index.php/pae/article/view/6020

- 5) Gorain, S. C., & Saha, B. (2023). A STUDY ON INTERNET ADDICTION OF HIGHER EDUCATION STUDENTS. Journal of Emerging Technologies and Innovative Research (JETIR), 10(6), 549–564.
- 6) Gulati, D. D. K., Kurisunkal, J. J. & et al. (2021) Manual for Internet Addiction Scale (IAS).
- 7) Hooda, M., & Devi, A. (2018). Development of Reasoning Ability and Barriers among Students. *International Journal of Research in Engineering, IT and Social Sciences, Volume 08*(Issue 11), 129–131.
- Karačić, S., & Orešković, S. (2017). Internet Addiction Through the Phase of Adolescence: A questionnaire study. *JMIR Mental Health*, 4(2), e11. https://doi.org/10.2196/mental.5537
- 9) Kumar, M., & Mondal, A. (2018). A study on Internet addiction and its relation to psychopathology and self-esteem among college students. *Industrial Psychiatry Journal*, 27(1), 61. https://doi.org/10.4103/ipj.ipj_61_17
- 10) Lebni, J. Y., Toghroli, R., Abbas, J., NeJhaddadgar, N., Salahshoor, M. R., Mansourian, M., Gilan, H. D., Kianipour, N., Chaboksavar, F., Azizi, S. A., & Ziapour, A. (2020). A study of internet addiction and its effects on mental health: A study based on Iranian University StudentsA study of internet addiction and its effects on mental health: A study based on Iranian University Students. *Journal of Education and Health Promotion*, 9(1), 205. https://doi.org/10.4103/jehp.jehp_148_20
- 11) Noor, N. F. a. M., & Ahmad, A. H. a. N. A. (2018). Relationship between Emotional, Intelligence, Motivation and Logical Reasoning towards Academic Achievement among Secondary School Students. *International Journal of Academic Research in Business & Social Sciences*, 7(14). https://doi.org/10.6007/ijarbss/v7i14/3662
- 12) Raj, R. (2020). Internet addiction and three cognitive functions. *International Journal of Indian Psychology*, 8(3). https://doi.org/10.25215/0803.125
- 13) Rani, K., V. (n.d.). Reasoning Ability and Academic Achievement among Secondary School Students in Trivandrum. https://eric.ed.gov/?id=EJ1171193
- 14) Sarkar, S. (2021). Reasoning ability and its impact among the secondary boy students: an exploration in mathematical achievements. *International Advanced Research Journal in Science, Engineering and Technology*, 8(8). https://doi.org/10.17148/iarjset.2021.88111

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- 15) Saxena, S., & Singhvi, M. (2015). A Study of Relationship between Emotional Intelligence and Reasoning Ability among College Students. *International Journal of Indian Psychology*, 2(4). https://doi.org/10.25215/0204.019
- 16) Sonnleitner, P., Keller, U., Martin, R., & Brunner, M. (2013). Students' complex problem-solving abilities: Their structure and relations to reasoning ability and educational success. *Intelligence*, 41(5), 289–305. https://doi.org/10.1016/j.intell.2013.05.002
- 17) Williamson, K. C., & Anderson, A. J. (2017). Reasoning ability as a predictor of success in a construction surveying course. *International Journal of Construction Education and Research*, 15(1), 42–61. https://doi.org/10.1080/15578771.2017.1380733