A study to assess the impact of artificial intelligence in communication and social relationships among students at district Sirmour, Himachal Pradesh

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Abstract: **Artificial Intelligence (AI) has revolutionized human communication and relationships by adjusting, enhancing, and creating content to fulfill specific needs. With AI-powered virtual therapists, individuals can express themselves freely without fear of judgment or social stigma. Method: A descriptive study aimed to investigate the impact of AI on communication and social relationships among convenient sampling techniques. A self-structured Likert scale with 20 questions was used to collect data, which was then analysed using descriptive and inferential statistics through the SPSS program. The results revealed that 77.3% of students reported a positive impact of AI on their communication and social relationships, while 23.7% reported a negative impact. Conclusion: These findings suggest that AI has a significant influence on the way students interact and form relationships, with the majority experiencing a positive effect**

Index Terms: **Artificial Intelligence, Communication, Social relationship, and Students of Eternal University.**

INTRODUCTION

Artificial intelligence describes a wide range of technologies that power many of the services and goods we use in our daily lives. It shapes our future more powerfully than any other century's invention and refers to machines, particularly computer systems which simulate human intelligence processes. It also involves creating smart programs that can understand and mimic human-like thinking and problem-solving and its interaction with human beings increasing day to day such as– various AI applications like chatbots and robots. The proportion of new computer science Ph.D. graduates from the US. Universities that specialized in AI jumped to 19.1% in 2021, from 14.9% in 2020.[4]There will be 8.4 billion digital voice assistants in use worldwide from 2019 to 2024. In INDIA, AI expenditure surged by 109.6% or $665 million in 2018 and is estimated to surge at a CAGR of 39% to reach $11,781 million by 2025. In 2024, the majority of content creators (70%) use AI tools to assist with content creators, with the most common uses being content optimization (47%) trend analysis (32%), and automated content creators (21%).15 In 2023, emotional intelligence 95% indicates that emotional intelligence partially mediated the relationship between AI use and counterproductive work behaviors.[1]After an extensive review of the literature, the researcher identified the influence of AI Increase among revealed that AI impacts communication, decision-making, privacy, and relationships.

STATEMENT OF THE PROBLEM

A descriptive study to assess the Impact of artificial intelligence in communication and social relationships among undergraduate students at Eternal University, Baru Sahib, District Sirmaur, Himachal Pradesh.

OBJECTIVES OF THE STUDY

1. To assess the impact of AI on communication and social relationships among students at Eternal University, Baru Sahib, District Sirmaur, Himachal Pradesh.
2. To find out the association between the impact of AI with selected socio demographic variables.

OPERATIONAL DEFINITIONS

Impact- It refers to the firm influence and results of artificial intelligence on the efficacy, efficiency, and capacity of communication processes.
Artificial intelligence- In communication and social connections, artificial intelligence (AI) is the use of modern technology to create systems that can

understand, interpret, and facilitate human interaction.

Communication- Communication refers to a two-way process that involves active listening, clarity, feedback, respect, timing, and involvement with AI technologies to improve the efficacy, efficiency, and dynamic of social context communication.

Social relationship- A relationship refers to a way an individual feels or behaves towards each other that involves communication, trust, humour, independence, and patience.

Undergraduate Students- It refers to a person studying in any institution to obtain a specific degree and education.

ASSUMPTIONS: Artificial intelligence in communication and social relationships will have a positive impact on individuals.

DELIMITATIONS: This study only focuses on impact of AI in communication and social relationship .

A quantitative descriptive research approach with Target population of 300 Undergraduate students of age group (17-25 years) from Eternal University, Baru Sahib was adopted with Inclusion Criteria: Students who were Undergraduate Students studying at Eternal University, Dist. Sirmour, Baru Sahib. And Undergraduate Students who will be in the age group (17-25) year. The tool consists of two parts: Parts A- Socio-demographic variables. Part B- Self-Structured Likert Scale for Communication. Parts C- Self- Structured Likert Scale for Social Relationship. The Data is analysed in two parts: Descriptive Statistics and Inferential Statistics.

FINDINGS OF THE STUDY

Table 1 . The frequency and percentage distribution of the sociodemographic profile of Undergraduate Students-

N=300

S.NO.	Variable	Sub Category	Frequency(f)	Percentage (%)
1	Age(years)	17-19	109	36.3
		20-22	174	58.0
		23-25	15	5.0
		Above 25	2	.7
2	Religion	Hinduism	245	81.7
		Sikhism	49	16.3
		Islam	5	1.7
		Christianity	1	3
3	Residential Status	Rural	168	56.0
		Urban	82	27.3
		Semi-Urban	50	16.7
4	Father's Qualification	No Formal education	36	12.0
		Primary	0	0
		Secondary	48	16.0
		Senior Secondary	81	27.0
		Graduation	126	42.0
		Others	9	3.0
5	Mother's Qualification	No Formal education	16	5.3
		Primary	27	9.0
		Secondary	62	20.7
		Senior Secondary	0	0
		Graduation	188	62.7
		Others	7	2.3

6	Occupation of Father	Unemployment	15	5.0
		Private employee	59	19.7
		Self-employee	85	28.3
		Government employee	95	31.7
		Retried	21	7.0
		Other	24	8.0
7	Occupation of Mother	Private employee	18	6.0
		Government employee	27	9.0
		Self-employed	20	6.7
		Homemaker	231	77.0
		Other	4	1.3
8	Family Monthly Income (RS)	<20000	62	20.7
		20000-40000	109	36.3
		40000-60000	70	23.3
		Above 60000	59	19.7
9	Courses	B.Sc. Nursing	195	65.0
		Bachelors of Agriculture	50	16.7
		Bachelors of Arts, Humanities and Social Sciences	14	4.7
		Bachelors of Commerce	29	9.7
		B.Tech. Food Technology	2	.7
		Engineering and Technology	1	.3
		Bachelors of Education	9	3.0
10	Use of Artificial Intelligence (AI)	<1 Hour	126	42.0
		1-2 Hour	113	37.7
		3-4 Hour	52	17.3
		>4 Hours	9	3.0

Table 2: Impact of Artificial Intelligence in Communication and Social relationships among students of Eternal University, District Sirmour, Himachal Pradesh.

Level of Impact	FREQUENCY	PERCENTAGE
Negative (21-60)	71	23.7%
Positive (61-100)	229	77.3%

Table 3:In this section association between the Impact of AI on communication and social relationships among undergraduate students with the selected demographic variables was carried out by using the Chi-square formula.

n=300

Sr. No	Variable	Impact of AI in communication and social relationships.		Chi- Square (Σ^2)	df	p-value
		Negative	Positive			
1.	Age (in years)					

	17-19	24	85	3.795^a	3	0.284
	20-22	45	129			
	23-25	1	14			
	Above 25	1	1			
2.	Religion					
	Hinduism	65	180	6.511^a	3	.089
	Sikhism	6	43			
	Islam	0	5			
	Christianity	0	1			
3.	Residential Status					
	Rural	42	126	1.099^a	2	.577
	Urban	60	66			
	Semi-Urban	13	37			
4.	Father's Qualification					
	No formal education	9	27	.899^a	4	.925
	Secondary	11	37			
	Senior -Secondary	19	62			
	Graduation	31	95			
	Other	1	8			
5.	Mother's qualification					
	No formal education	6	10	3.091^a	4	.543
	Primary	6	21			
	Secondary	11	51			
	Graduation	46	142			
	Other	2	5			
6.	Occupation of Father					
	Unemployment	6	9	8.019^a	5	.155
	Private employee	11	48			
	Self-employee	20	65			
	Government employee	28	68			
	Retried	4	17			
	Other	2	22			
7.	Occupation of Mother					
	Private employee	4	14	1.792^a	4	.774
	Government employee	7	20			
	Self-employee	6	14			
	Homemaker	54	177			
	Other	0	4			
8.	Monthly family income (in rupees)					
	<20,000	22	40	7.485^a	3	.058**
	20,000-40,000	20	89			
	40,000-60,000	18	52			
	Above 60,000	11	48			

9.	Courses					
	B.Sc. Nursing	41	154	10.226^a	6	.115
	Bachelors of Agriculture	14	36			
	Bachelor of Arts, Humanities and Social Sciences	3	11			
	Bachelor of Commerce	7	22			
	B.Tech. Food Technology	0	2			
	Engineering and Technology	1	0			
	Bachelor of education	5	4			
10.	Use of artificial intelligence (AI) daily					
	< 1 hour	37	89	4.334^a	3	.228
	1-2 hour	22	91			
	3-4 hour	11	41			
	>4 hour	1	8			
11.	Do you have any knowledge related to AI? If yes then tell the source.					
	No	20	27	22.317^a	5	<.001**
	Seminar	11	15			
	Conferences	13	84			
	Friends or siblings	8	19			
	Online platform	18	76			
	AI-related Courses	1	8			

Highly significant**

Table 4: Depicts the association of socio-demographic variables with the impact of artificial intelligence in communication and social relationships.

DISCUSSION

In this study With regards to the use of Artificial intelligence, 42% of respondents use it for <1 hour, while 3.0% use it for >4 hours. In a similar study, 82% of participants did not use AI, while only 18% did.A similar study was carried out to evaluate the influence of artificial intelligence on communication, language, and social relationships. It included 291 pairs of participants in the study. The results show that, on average, conversations with (SD=2.67), whereas in the current study, the impact of artificial intelligence on social relationships and communication is measured by (SD=.42575).[2]A similar study was conducted to assess the impact of artificial intelligence on higher education. The study involved 92 participants (graduated and postgraduate), to check the responses. The finding indicates that 43% of the 92 students who participated in the research were found to be positively impacted while 10% reported being negatively impacted. In the current study, 77.3% of students reported that artificial intelligence had a positive effect on communication and social relationships, while the remaining 23.7% had a negative impact.[39]

Nursing Implications:
Artificial intelligence helps in maintaining electronic health records, making clinical decisions based on various information, facilitates voice-based communication for patients with certain limitations, shorten the time nurses gather and document data during each visit

Nursing Education: AI-enhanced curriculum development holds immense potential for identifying knowledge gaps, redundancies, and areas for improvement in nursing education. enables patient simulations and virtual reality training, allowing students to practice in a realistic, simulated environment.

Nursing Research: It helps health professionals in making better decisions, improve patient care, and stay up to date with the latest advancements in the field with reduction of workload and manage stress

Recommendation: Similar study can be replicated with a larger sample size and in various other settings regarding knowledge of AI among adults. A comparative study may be conducted to find out similarities or differences in knowledge between Rural and Urban areas.

Limitations: The study was confined to a small number of subjects, which limits the generalization. The study is limited only to Eternal University, Baru Sahib.

CONCLUSION

The results of the study revealed that the impact of AI on communication and social relationships among undergraduate students had a positive influence. Also, AI significantly improves communication and social relationships among undergraduate students.

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