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Navigating the Digital Maze : A Study of Higher Education Students' Online Awareness and Digital Footprints in Goa

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ABSTRACT

The understanding of digital footprints in the current digital environment is very much important when it comes to deciphering the complexities involved in managing ones online identity, especially for the students of higher education. The present study tries to look into the attitudes and behaviors of 120 higher education students.



The study delves into the dynamics of digital footprints and online awareness in the state of Goa. The survey focusses on identifying the trends regarding the sharing of personal information, the use of privacy settings, and the degree of awareness regarding the implications of leaving a digital footprint.

The results showed that 71.7% of respondents were female and most respondents between age group of 20-25 behaved cautiously online. 20.83% are unfamiliar with digital footprints, despite 67.5% claiming to be aware of them. The findings contribute to the conversation on responsible digital citizenship among the Goa's higher education students and help in providing key insights for the educators and policymakers.

KEYWORDS :

Digital Footprints, Online Awareness, Higher Education, Digital Literacy, Online Identity, Privacy Practices

1. INTRODUCTION

The concept of "digital footprints" have become very important when it comes to our understanding of how people navigate and leave traces of their online presence in the continuously changing digital landscape. This phenomenon has got significant implications for both the personal and professional lives, especially for students since they are both the active online content creators and well as the consumers.

For understanding the students' online behaviors, privacy concerns, and the awareness level regarding the long-term consequences of their digital or online actions, this article tries to explore the complexities of digital footprints and online awareness among the students of higher education institutes of Goa.



The aim of the study is to investigate the digital footprints of higher education students, considering the variables like gender, age, and academic discipline from the institute of higher education in Goa.

The significance of this study resides in its ability to close current gaps in knowledge about how students of higher education view, handle, and deal with the effects of their digital footprints. With the growing importance of online platforms in both personal and professional domains, it thus becomes even more crucial that the individuals practice informed and conscientious digital citizenship.

2. REVIEW OF LITERATURE

A systematic and thematic review of literature was conducted to understand the online awareness and digital identity or digital footprint.

The study conducted by Ainsa (2016), and Blue et al. (2018) explore how digital identities impact career prospects. They highlighted that digital identities help the students to create multimedia resumes, and the employers show increased use of social media for evaluating any candidate.

Dyachenko et al. (2022) extend this to lifelong learning, showing how digital footprints support ongoing professional development.

Livingstone (2008) and Karabatak et al. (2020) emphasize the importance of digital literacy and citizenship. They discuss the implications of digital literacies for learners and the need for digital citizenship education, especially for Generation Z students who show varying levels of awareness about digital footprints.

Baggio et al. (2012) and Blue et al. (2018) in their research conducted addressed security threats and the risks in privacy associated with digital footprints. They discuss the requirement for robust identification solutions and highlight the challenges of balancing data use for improvement of education with privacy protection.

Dyer (2020) and Hildebrandt et al. (2016), in their research explore how technology shapes the student identity, particularly during university transitions. They conceptualize emerging identities as complex sociotechnical assemblages and propose viewing digital selfhood as fluid and incomplete.

Ng et al. (2018), Baranova et al. (2021), and Galimova et al. (2019) explores the responsiblity of digital technology in learning. They found that digital technology use is very important when it comes to learning and that the digital footprints can be used to assess student competencies and improve teaching methods.

Though the review highlights the significance of digital footprints and identities and considerable progress has been done in understanding their potential applications in context of the domain of education, there are still some areas which need further research.

3. OBJECTIVES OF THE STUDY

- To understand the online behaviour of the students of higher education institutes of Goa.
- To study the level of awareness about online digital awareness and digital footprint among the students of higher education institutes of Goa.



- To identify the factors influencing the online behaviour and digital footprint management among students of higher education of Goa.
- To come out with suggestions and recommendations built on the findings of the study.

4. RESEARCH METHODOLOGY

This current study uses a survey method to collect data on online awareness and digital footprints from the students of higher education institutes of Goa. Data was collected through a structured Google form.

The link to the Google form was sent to 150 students of higher education institutes in Goa. A total of 120 responses were received.

The collected data was tabulated and presented in the form of graphs and charts and was analysed using MS-Excel.

5. LIMITATIONS OF THE STUDY

The focus of the study is restricted to the students of higher education institutes of Goa, which may limit the applicability of the findings to other populations or geographical areas.

6. SIGNIFICANCE OF THE STUDY

The study advances knowledge of online awareness and digital footprints among students of higher education, offering guidance to advocates for digital literacy as well as educators and policymakers.



7. DATA ANALYSIS AND INTERPRETATION

I. DEMOGRAPHICS

Table No. 1 : Gender and Age-Wize Distribution of Respondents

DEMOGRAPHICS		
Gender	**Respondents**	**Percentage**
Male	33	27.50%
Female	86	71.70%
Prefer not to say	1	0.80%
TOTAL	**120**	**100.00%**
Age group	**Respondents**	**Percentage**
Less than 20	23	19.16667
20-25	81	67.5
26-30	11	9.166667
above 30	5	4.166667
TOTAL	**120**	**100**

From table No. 1 it is seen that, there is a higher representation of female respondents (71.70%) compared to the males (27.50%), and a small portion (0.80%) preferring not to say anything.

The strong participation of women could suggest greater interest or awareness among females regarding digital footprints.

Additionally, it is seen that, a significant portion of respondents fall in the age-group of 20-25 (67.5%) suggesting high engagement on online platforms and basically represent the young adults – "the digital natives".



II. EXTENT OF DIGITAL FOOTPRINT

Table No. 2 : Extent of Digital Footrpint

	Options	Respondents	Percentage
1	**How frequently do you post personal information (e.g., photos, location, contact details) on social media?**		
	daily	5	4.16666667
	weekly	13	10.8333333
	monthly	17	14.1666667
	rarely	76	63.3333333
	never	9	7.5
	TOTAL	**120**	**100**
2	**Have you ever conducted a Google search on your own name to find out what information about you is available online?**		
	Yes, regularly	9	7.5
	Yes, occasionally	61	50.8333333
	No, never	50	41.6666667
	TOTAL	**120**	**100**
3	**Do you use privacy settings on your social media accounts to limit who can see your posts?**		
	Always	88	73.3333333
	Sometimes	17	14.1666667
	Rarely	9	7.5
	Never	6	5
	TOTAL	**120**	**100**
4	**Have you ever regretted posting something online due to its potential impact on your reputation?**		
	Yes, frequently	11	9.16666667
	Yes, occasionaly	30	25
	No, Never	79	65.8333333
	TOTAL	**120**	**100**

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5	**How often do you review and update your online profiles to manage your digital footprint?**		
	Regularly	9	7.5
	Occassionally	54	45
	Rarely	49	40.8333333
	Never	8	6.66666667
	TOTAL	**120**	**100**
6	**Are you aware of the concept of a digital footprint and its implications for your online presence?**		
	Very aware	14	11.6666667
	Somewhat aware	81	67.5
	Not aware	25	20.8333333
	TOTAL	**120**	**100**

Table No. 2, reveals key insights into the respondents' cautious approach to managing their online presence. A majority (63.33%) post personal information rarely, reflecting heightened awareness of digital risks such as identity theft and cyberbullying.

This behaviour indicates a growing digital literacy among respondents. The low percentage (4.17%) who share personal information daily underscores the uncommon nature of frequent posting.

From the table it can further be inferred that 50.83% of respondents occasionally search for their own names online, reflecting a proactive effort to manage their online reputation and ensure their digital identity aligns with personal or professional aspirations. A significant majority (73.33%) also use privacy settings on social media, showing strong concerns about protecting personal information.

Furthermore, 65.83% of respondents have not regretted online posts, likely due to careful content curation and a lack of negative consequences.



From the data in the table, it could also be seen that 45% of respondents regularly update their online profiles which highlights the importance of maintaining an accurate and professional online image, especially for those entering the job market. However, an awareness gap regarding digital footprints remains, with 67.5% somewhat aware of the concept and 20.83% not aware at all. This gap may be due to differences in digital literacy, access to resources, and the effectiveness of educational initiatives.

III. ONLINE AWARENESS

Table No. 3 : Online Awareness

1	**Do you believe that the information you share online can have long-term consequences for your personal and professional life?**		
	Strongly Agree	27	22.5
	Agree	61	50.83333
	Neutral	31	25.83333
	Disagree	1	0.833333
	Strongly disagree	0	0
	TOTAL	**120**	**100**
2	**Have you received any education or training regarding online privacy and digital footprint management?**		
	Yes, Extensively	4	3.333333
	Yes, Moderately	48	40
	No, None at all	68	56.66667
	TOTAL	**120**	**100**



3	**Are you cautious about accepting friend/follow requests from unknown individuals on social media?**		
	Always	59	49.16667
	Sometimes	32	26.66667
	Rarely	14	11.66667
	Never	15	12.5
	TOTAL	**120**	**100**
4	**How often do you read the privacy policies of websites and apps before using them?**		
	Always	25	20.83333
	Sometimes	56	46.66667
	Rarely	29	24.16667
	Never	10	8.333333
	TOTAL	**120**	**100**
5	**Have you ever adjusted your online behavior based on concerns about your digital footprint?**		
	Yes, frequently	12	10
	Yes, Occassionally	67	55.83333
	No, never	41	34.16667
	TOTAL	**120**	**100**
6	**Do you think your peers are generally aware of the potential risks associated with their online activities?**		
	Yes, very aware	20	16.66667
	Yes, somewhat aware	85	70.83333
	No, not aware	15	12.5
	TOTAL	**120**	**100**

The data in table No. 3 reveals strong awareness among respondents about the long-term consequences of digital footprints, with 50.83% agreeing and 22.5% strongly agreeing that online information can impact personal and professional life.



However, a concerning 56.67% of respondents reported receiving no formal education or training on online privacy and digital footprint management, highlighting a gap in educational programs.

In terms of online behaviour, 49.17% of respondents are cautious when accepting friend or follow requests, indicating a careful approach to digital relationships.

Furthermore, while 46.67% of respondents sometimes read privacy policies, only 20.83% always do, reflecting the challenge of engaging with complex and lengthy documents.

A proactive attitude towards managing digital footprints is evident, with 55.83% of respondents adjusting their online behaviour out of concern for their digital identity. Also, 70.83% of respondents believe their peers are somewhat aware of online risks, suggesting a collective understanding of the importance of managing digital footprints within the community.

IV. INFLUENCING FACTORS

Table No. 4 : Influencing Factors

INFLUENCING FACTORS			
	Options	**Respondents**	**Percentage**
1	**How many hours per day, on average, do you spend on the internet for personal or academic purposes?**		
	Less than 1 hour	12	10
	1-3 hours	67	55.83333
	3-6 hours	39	32.5
	More than 6 hours	2	1.666667
	TOTAL	**120**	**100**



2	**Are you part of any formal digital literacy or online safety programs at your educational institution?**		
	Yes, actively participating	11	9.166667
	Yes, but not actively participating	20	16.66667
	No	89	74.16667
	TOTAL	**120**	**100**
3	**Do you think your academic discipline or major affects your online behavior and digital footprint?**		
	Yes, significantly	9	7.5
	Yes, to some extent	76	63.33333
	No, not at all	35	29.16667
	TOTAL	**120**	**100**
4	**How comfortable are you with adjusting privacy settings on social media and online platforms?**		
	Very comfortable	49	40.83333
	Somewhat comfortable	63	52.5
	Not comfortable	8	6.666667
	TOTAL	**120**	**100**
5	**Have you experienced any privacy breaches or online security issues in the past?**		
	Yes, frequently	5	4.166667
	Yes, occasionally	41	34.16667
	No, never	74	61.66667
	TOTAL	**120**	**100**
6	**Do you think your age influences your level of online awareness and digital footprint management?**		
	Yes, significantly	25	20.83333
	Yes, to some extent	78	65
	No, not at all	17	14.16667
	TOTAL	**120**	**100**

The data in table 4 reveals key patterns in digital behaviour among respondents, with 55.83% of respondents spending 1-3 hours online daily for personal or academic purpose, reflecting typical usage among younger respondents.

However, a notable 74.17% of respondents are not part of formal digital literacy or online safety programs at their institutions, indicating a gap in education that needs addressing to better prepare students for responsible digital engagement.

Interestingly, 63.33% of respondents feel that their academic discipline influences their online behaviour, suggesting that digital footprint management varies across fields of study.

While, 52.5% of respondents are somewhat comfortable adjusting privacy settings, this moderate confidence highlights a need for improved digital literacy training. Furthermore, 34.17% have experienced privacy breaches or online security issues, thus it becomes even more important to have awareness programmes to help the respondents to tackle cybersecurity issues.

It is also seen from the data in table 4 that generational differences also emerge, with 20.83% of respondents recognizing age as a significant factor in online awareness. This implies that there exists a digital divide, where older respondents may face unique challenges in navigating digital technologies and managing their digital footprints, emphasizing the need for targeted educational programs to bridge this gap.

8. RECOMMENDATIONS/ PARTICIPATION

i. Types of digital literacy resources and training that would be most beneficial for improving online awareness



Table No. 5 : Type of Resource / Training

Sr. No.	Type of resource / training	No. of respondents	Percentage
1	Online privacy workshops	26	21.66667
2	Social media safety guides	44	36.66667
3	Cybersecurity seminars	42	35
4	None of the above	2	1.666667
5	All of the above	3	2.5
6	We need content that's quick to grasp to match the attention span of the youth, social media does great work for this.	1	0.833333
7	A compulsory course as part of every syllabus irrespective of the stream, or discipline, or board (state, icse, etc) that is ongoing from the 3rd grade onwards .	1	0.833333
8	Shorter impactful videos eg. Reels ... so they can be easily seen by many.	1	0.833333
	TOTAL	**120**	**100**

From table 5, it is seen that there is a strong preference for practical, hands-on learning approaches to online safety, with 36.67% favoring social media safety guides and 35% of respondents preferring cyber security seminars.

Table No. 6 : User Advice
ii. User advice for fellow students to manage digital footprint

Sr. No.	Advice	No. of Respondents	Percentage
1	Regularly review privacy settings	13	10.83333
2	Think before posting personalinformation	52	43.33333
3	Seek digital literacy resources	3	2.5
4	All of the above	52	43.33333
		120	100



From table 6, it can be inferred that users like to advice fellow students on regularly reviewing privacy settings, be cautious while posting personal information online, and take help of digital literacy resources.

9. SUGGESTIONS AND RECOMMENDATIONS

From the analysis and interpretation of the data collected following suggestions and recommendations are being made;

1. Tailored educational programs needs to be developed for different age groups, to address varying digital behaviours and awareness levels.
2. The educational institutions need to incorporate comprehensive online privacy and digital footprint education in their curriculum.
3. There has to be inclusion of privacy literacy programs in the curriculum as well as there has to be awareness programs to make the students understand the privacy policies and their significance.
4. There has to be an increase in digital literacy programmes.
5. Encourage collaboration between educational institutions, policymakers, and industry for holistic digital literacy education.6. Implement continuous evaluation and feedback mechanisms for educational programs.
7. Develop interactive resources like social media safety guides and cybersecurity seminars.
8. Establish spaces for shared learning experiences and discussions about digital citizenship.



10. CONCLUSION

The study provides valuable insights into digital behaviours and awareness among higher education students, emphasizing the need for tailored educational interventions, stronger digital privacy education, and the development of curriculum to incorporate digital literacy programmes on online safety and digital footprints management. It advocates for a culture of responsible digital citizenship, with community-driven learning spaces and practical resources to support individuals in managing their digital footprints responsibly. The findings serve as a foundation for future research and policy development aimed at fostering a digitally literate and privacy-aware society.

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