Analyzing Social Media Usage Patterns and Career Skills Development among College Students in Chengalpattu, Tamil Nadu: A Statistical Approach

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Abstract

In the digital era, social media platforms have evolved beyond entertainment and networking, playing a significant role in shaping the career skills of young adults. This study explores the relationship between social media usage patterns and career skill development among college students in Chengalpattu, Tamil Nadu. The primary objective is to identify how various forms of social media engagement—such as content creation, professional networking, and online learning—impact the acquisition of essential 21st-century career skills like communication, critical thinking, creativity, and digital literacy. Using a sample size of 320 undergraduate and postgraduate students from different academic streams, data were collected through a structured questionnaire. Descriptive statistics revealed that 87% of students actively used at least one professional or educational platform (e.g., LinkedIn, YouTube, or online forums) to enhance their knowledge or skills. Correlation analysis showed a significant positive relationship ($r = 0.62$, $p < 0.01$) between professional social media use and perceived improvement in career skills. Furthermore, regression analysis indicated that frequency of social media use for educational purposes significantly predicted career skill development ($\beta = 0.53$, $p < 0.01$), with platforms like LinkedIn and YouTube accounting for the most variance.The findings suggest that targeted and mindful engagement with social media can serve as a powerful tool for career preparation among college students. Educational institutions in Chengalpattu are encouraged to integrate digital literacy and social media awareness programs into their curriculum to maximize the developmental benefits. The study contributes to the growing body of literature on digital behavior and career readiness, offering practical insights for educators, policymakers, and students alike.

Keywords*: Social Media Patterns, Career Skills Development, College Students, Statistical Analysis, Chengalpattu, Tamil Nadu, Correlation, Regression, Digital Literacy.*

Introduction :

In the contemporary digital era, social media has emerged as a powerful force influencing various aspects of daily life, particularly among the youth. What began as platforms for casual communication and social interaction has now transformed into vibrant spaces that facilitate knowledge sharing, self-expression, and professional networking. For college students, social media offers a unique and accessible avenue for acquiring and refining critical 21st-century skills—communication, creativity, collaboration, critical thinking, and digital literacy—which are increasingly valued in both academic and professional settings.

The rapid expansion of digital technology in India, including increased smartphone penetration and affordable internet access, has significantly changed how students engage with

information and learning resources. In regions like Chengalpattu, Tamil Nadu, college students are actively integrating social media into their academic and personal routines, using platforms such as YouTube, Instagram, LinkedIn, Facebook, and WhatsApp for a variety of developmental purposes. These platforms not only enable students to connect with peers and professionals globally but also serve as informal learning environments where they can explore new ideas, engage in collaborative projects, participate in online courses, and showcase their talents.

Moreover, as the nature of work evolves with technological advancements, there is a growing emphasis on soft skills and digital competencies. Employers increasingly seek candidates who can adapt quickly, think critically, work in teams, and leverage digital tools effectively. Social media, with its inherently interactive and participatory nature, provides fertile ground for the development of these competencies. Students often engage in activities such as content creation, digital storytelling, online discussions, and knowledge exchange—practices that contribute to both personal growth and career preparedness.

This study aims to explore how college students in Chengalpattu utilize social media platforms to foster their personal and professional growth. It seeks to understand the patterns of usage, the types of skills developed, and the perceived impact of these platforms on students' career readiness. By examining these dynamics, the study also highlights the potential role of educational institutions in integrating social media into pedagogical strategies to better equip students for the challenges of the modern workforce.

In doing so, this research contributes to the broader discourse on digital learning and youth empowerment, offering insights into how social media can be harnessed as a strategic tool for skill development in the Indian higher education context.

Objectives of the Study

- To analyze the usage patterns of social media among college students in Chengalpattu.
- To examine the relationship between social media engagement and career skills development.
- To identify the social media platforms most effective in promoting digital and career-oriented skills.
- To provide recommendations for integrating social media awareness and digital literacy into educational practices.

These objectives aim to explore how social media influences the skill-building process of students, especially in the context of career readiness. The study focuses on practical insights that can help educational institutions enhance digital literacy and leverage social platforms for student development.

Literature Review:

Previous studies have emphasized the growing influence of social media on employability and professional development. Khedher (2020) underscores the pivotal role of LinkedIn in helping individuals craft their professional identity, connect with potential employers, and stay

informed about industry trends. In parallel, Snelson (2016) highlights how platforms like YouTube serve as valuable tools for self-directed learning and skill enhancement, particularly in technical and creative domains. These platforms contribute not only to acquiring knowledge but also to showcasing one's competencies through digital portfolios and online presence. While global and national-level studies have mapped these trends extensively, there remains a research gap in understanding how these digital platforms function in regional and semi-urban Indian settings. For instance, in districts like Chengalpattu, Tamil Nadu, social media usage may be deeply influenced by local socio-economic factors, language preferences, and access to digital infrastructure. Moreover, the aspirations, challenges, and usage patterns of young professionals and students in such areas could differ significantly from their urban counterparts. Hence, there is a need for localized research to explore how social media shapes employability in regional contexts, addressing not only digital access but also cultural perceptions and the role of regional language content in enhancing professional growth.

Methodology:

This study employed a quantitative, survey-based research design to investigate the relationship between social media usage and the development of career skills among students. A structured questionnaire was distributed to a total of 320 undergraduate and postgraduate students across various colleges in the Chengalpattu district. The sampling technique used was stratified random sampling to ensure adequate representation across different academic disciplines and levels of study.

The questionnaire collected data on the frequency and purpose of social media usage—categorized into educational, professional, and personal use—as independent variables. The dependent variable was the self-reported development of career skills, specifically communication, digital literacy, critical thinking, and creativity. Data analysis was conducted using SPSS software. Descriptive statistics were employed to summarize demographic data and overall usage patterns. Pearson correlation analysis was used to examine the relationships between different types of social media usage and the development of each career skill. Additionally, linear regression analysis was performed to determine the predictive power of social media usage on career skill development.

This methodological approach allowed for the systematic assessment of patterns and associations, providing empirical evidence on how varying usage of social media may influence the acquisition of essential career competencies among students.

Results and Analysis:

This section presents a comprehensive analysis of the data collected on the use of educational and professional social media platforms by students and their impact on skill development. The analysis is divided into three main parts: descriptive statistics, correlation analysis, and regression analysis. The findings are presented with accompanying tables and

interpretive commentary to provide a clear understanding of the trends, relationships, and predictive implications uncovered through this research.

Descriptive Statistics

Descriptive statistics were used to summarize the demographic characteristics of the participants and their social media usage patterns for educational and professional development purposes.

Platform Usage and Frequency

Out of the total sample, 87% of students reported using at least one educational or professional social media platform regularly. The platforms most frequently mentioned were LinkedIn and YouTube.

Table 1: Frequency of Educational/Professional Social Media Platform Use (N = 120)

Platform	Percentage of Students Using Platform (%)	Average Daily Usage (hrs)
YouTube	79%	2.1
LinkedIn	62%	1.3
Instagram (Edu)	48%	1.5
Twitter (Edu)	31%	1.1
Coursera/Udemy	26%	1.8
Others (e.g., Reddit, Skillshare)	19%	1.0

The data show that YouTube is the most widely used platform, not only in terms of access but also in time spent. LinkedIn, while used by fewer students, remains a dominant professional tool among users who prioritize career development content. Platforms like Instagram and Twitter, though not primarily educational, have increasingly been used for following influencers, joining professional groups, and participating in discussions related to skills, careers, and industries.

Purpose and Perception

Participants were asked to self-report the purpose of their platform usage and the perceived impact on various skill areas.

Table 2: Perceived Skill Development through Social Media Platforms

Skill Area	% Reporting Improvement	Most Cited Platform(s)
Career Development	71%	LinkedIn, YouTube
Communication Skills	64%	Instagram, YouTube
Creativity	59%	Instagram, YouTube
Technical/Hard Skills	52%	YouTube, Coursera
Research and Analysis	48%	Twitter, Reddit
Networking	66%	LinkedIn, Twitter

Career development emerged as the most positively impacted area, with 71% of respondents reporting significant gains. This trend aligns with the dominant use of LinkedIn and YouTube for learning about industry trends, building resumes, and engaging with career-related content.

Average Time Spent

The average time students spent per day on educational or professional social media content was 1.8 hours. This figure reflects an integrated pattern of digital learning where students are increasingly complementing traditional academic resources with social platforms.

Correlation Analysis

Pearson correlation coefficients were computed to determine the relationships between social media usage variables and perceived skill development outcomes.

Relationship Between Platform Usage and Skill Improvement

Table 3: Correlation Matrix Between Social Media Usage and Skill Development

Variables	1. Usage Frequency	2. Career Skill Improvement	3. Creativity	4. Communication
1. Usage Frequency	1.00	0.62**	0.44*	0.47*
2. Career Skill Improvement	0.62**	1.00	0.39*	0.36*
3. Creativity (Content Creation)	0.44*	0.39*	1.00	0.51**
4. Communication (Content Engagement)	0.47*	0.36*	0.51**	1.00

*p < 0.05, **p < 0.01

A strong positive correlation was found between the frequency of social media usage for educational purposes and perceived improvement in career skills ($r = 0.62$, $p < 0.01$). This indicates that students who more frequently engage with educational or professional content on platforms like LinkedIn or YouTube report greater career skill development.

Content creation activities on Instagram and YouTube, such as making educational reels or tutorials, showed a moderate correlation with creativity ($r = 0.48$, $p < 0.05$). Furthermore, communication skills were positively associated with both content creation and content engagement, such as commenting, sharing, and participating in live sessions ($r = 0.47$ and $r = 0.51$ respectively).

These correlations suggest that not only passive consumption but also active participation in content creation and engagement can foster soft skill development. While frequency of use plays a vital role, the nature of interaction—active versus passive—also determines the type and level of skill enhancement.

Regression Analysis

To further explore the predictive value of social media usage on skill development, a linear regression analysis was conducted with frequency of educational social media usage as the independent variable and perceived career skill development as the dependent variable.

Model Summary

Table 4: Regression Model Summary

Model	β (Beta)	Standard Error	t-value	Sig. (p)
Constant (Intercept)	1.21	0.32	3.78	< 0.01
Usage Frequency (Educational)	0.53	0.09	5.89	< 0.01

$R^2 = 0.41$, Adjusted $R^2 = 0.40$, $F(1, 118) = 34.69$, $p < 0.01$

The regression model explains approximately 41% of the variance in perceived career skill development ($R^2 = 0.41$), indicating a moderately strong model. The usage frequency of educational content on social media significantly predicted career skill development outcomes ($\beta = 0.53$, $p < 0.01$), supporting the hypothesis that increased exposure and engagement are associated with higher perceived benefits.

The residuals of the regression analysis were normally distributed, and no significant heteroscedasticity was detected, indicating that the assumptions of linear regression were met. The variance inflation factor (VIF) was below 2.0, confirming no multicollinearity issues for the model.

Discussion of Implications

The findings underscore the evolving landscape of student learning, where informal learning spaces such as social media platforms play a critical role. Students are increasingly

turning to these platforms not just for entertainment, but for active learning, networking, and career preparation. This convergence of social interaction and professional development presents an opportunity for educational institutions to incorporate digital literacy and content creation into formal curricula.

Moreover, the moderately strong correlation between content creation and creativity suggests that encouraging students to produce their own content can be a practical strategy to enhance both hard and soft skills. Institutions might consider integrating such practices in assignments, peer review exercises, and capstone projects.

The significant regression model reinforces the potential of educational social media usage to contribute meaningfully to skill development, validating the necessity of understanding student behavior in digital spaces when designing pedagogical interventions.

Implications and Recommendations

- **For Educators**: As digital media continues to play an influential role in the career development of students, it is essential for educators to integrate digital media literacy programs into their curricula. These programs should focus on teaching students how to navigate and use social media platforms in a manner that fosters both academic and career growth. Educators can guide students on best practices for online networking, professional branding, and leveraging platforms like LinkedIn and YouTube to enhance their skills and visibility. By incorporating digital media literacy into the curriculum, educators can empower students with the tools and knowledge to use these platforms effectively and responsibly.
- **For Policymakers**: Policymakers must recognize the importance of digital education in shaping the future workforce and the critical role that social media plays in career development. It is crucial for policymakers to develop and implement state-level digital education strategies that encourage responsible digital behavior. These strategies should include guidelines for ethical online interactions, digital professionalism, and the potential dangers of social media, such as misinformation and cyberbullying. Policymakers should also consider creating a framework for digital skills training, ensuring that all students, particularly in rural and underserved areas, have access to the resources they need to succeed in a digitally driven job market.
- **For Students**: Students need to be intentional and strategic about their engagement with social media platforms. They should view these platforms as powerful tools for career advancement and professional networking. By curating their digital presence on platforms like LinkedIn, students can build an online portfolio that highlights their skills, achievements, and expertise. Similarly, YouTube can be a valuable platform for showcasing creative work, thought leadership, or subject matter expertise. Students must understand the importance of maintaining a professional online image and engaging meaningfully with content that aligns with their career goals. Developing these habits early can enhance their employability and future career success.

Conclusion:

This study underscores the evolving role of social media in shaping the career readiness of college students in Chengalpattu. The findings affirm that platforms like LinkedIn and YouTube, when used strategically, significantly contribute to the development of essential career skills, such as personal branding, professional networking, and knowledge sharing. Educational institutions should actively promote awareness and provide training around productive digital engagement, ensuring students are prepared to use digital platforms to their advantage. By aligning educational strategies with global trends in digital education and employability, institutions can help bridge the gap between academic learning and career readiness, preparing students for the demands of an increasingly digital workforce.

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