

Relationship Between Social Media Usage And Self-Efficacy Among Higher Secondary School Students In Kerala

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Abstract

Social media usage and self-efficacy are intricately connected, as platforms often serve as avenues for individuals to showcase their skills and build confidence in their abilities. Positive interactions and constructive feedback on social media can bolster a person's self-belief, contributing to higher self-efficacy. However, excessive or negative social media engagement may have adverse effects, leading to self-comparisons and reduced confidence. Social media also offers opportunities for collaborative learning and sharing knowledge, empowering users to develop new skills and enhance self-efficacy. Therefore, the impact of social media on self-efficacy largely depends on the nature and purpose of its use. The purpose of this study is to find out the relationship between Social Media Usage and Self-Efficacy among Secondary School Students in Kerala, for this researchers used a normative survey method for 100 sample from Pathanamthitta district. The major findings of this study is there is positive relation between social media usage self-efficacy of higher secondary school students, there is no gender difference in the social media usage and self-efficacy of higher secondary school students. Higher secondary school students have average level of social media usage and self-efficacy

Key words; Social Media Usage and Self-Efficacy

1. Background

In the contemporary digital era, social media has become an integral part of students' daily lives, shaping how they communicate, learn, and perceive themselves. Among adolescents, particularly higher secondary school students, social media offers both opportunities and challenges that influence their academic and personal development. One of the significant psychological constructs influenced by social media engagement is self-efficacy, which refers to an individual's belief in their ability to succeed in specific situations or accomplish a task (Bandura, 1997). Social media platforms such as

Instagram, WhatsApp, YouTube, Snapchat, and Facebook are widely accessed by adolescents in Kerala.

The 2021 Internet and Mobile Association of India (IAMAI) report reveals that over 85% of youth aged 12–19 in Kerala use smartphones regularly, and a significant portion of this usage is devoted to social media. These platforms provide avenues for collaborative learning, peer interaction, knowledge sharing, and emotional expression. However, excessive or unregulated use may lead to adverse outcomes like distraction, low self-esteem, cyberbullying, and reduced academic motivation (Twenge & Campbell, 2018).

Self-efficacy plays a critical role in influencing how students approach learning tasks, manage academic challenges, and make career decisions. It is positively correlated with academic achievement, persistence, and emotional well-being (Schunk & Pajares, 2002). Students with high self-efficacy tend to be more resilient and confident in their abilities, whereas those with low self-efficacy often exhibit avoidance behavior and poor academic performance.

The intersection between social media usage and self-efficacy is a growing area of interest in educational psychology. While some studies suggest that social media can enhance self-efficacy through social support, exposure to success stories, and access to learning resources (Junco, 2012), others caution against the negative implications such as social comparison, fear of missing out (FOMO), and addiction (Vannucci et al., 2017). These contrasting perspectives make it crucial to explore the contextual factors affecting this relationship, especially among adolescents in culturally diverse and socially dynamic regions like Kerala.

Kerala, known for its high literacy rate and progressive educational policies, presents a unique context for such a study. With the integration of ICT into classrooms and government initiatives like the Kerala Infrastructure and Technology for Education (KITE), students are increasingly exposed to digital media. Understanding how this exposure translates into their perceived self-efficacy can offer insights into the psychosocial effects of technology-enhanced learning environments.

Moreover, the COVID-19 pandemic accelerated the digitalization of education, compelling students to depend heavily on social media for peer learning, online classes, and emotional support. This sudden and prolonged exposure raises questions about how digital social interaction has influenced their belief in their capabilities, goal-setting behavior, and self-regulation.

Though research on digital literacy and screen time is abundant, empirical studies on the relationship between social media usage and self-efficacy among higher secondary school students in Kerala remain scarce. Given the increased reliance on social networking platforms and the psychosocial vulnerabilities of adolescence, this study is timely and pertinent.

2. Need and Significance of the Study

The adolescence period is marked by significant emotional, cognitive, and social development. During this transitional stage, higher secondary school students are particularly susceptible to external influences, including peer interactions, media content, and social comparison. The rapid proliferation

of social media in Kerala has transformed how students interact, acquire information, and construct self-identities. Hence, it is essential to explore how these digital interactions impact their self-efficacy, a core determinant of academic motivation and behavior (Zimmerman, 2000).

The increasing prevalence of digital media raises concerns among educators and parents about its effect on students' academic outcomes, concentration, emotional health, and personal development. However, social media is not inherently detrimental; it has the potential to foster peer learning, increase access to educational resources, and offer platforms for self-expression. The question lies in how students use social media and what effect this usage has on their self-perception and goal-directed behavior.

Self-efficacy significantly affects students' learning strategies, emotional reactions, and resilience in the face of difficulties. If social media usage is positively influencing self-efficacy, then integrating social media tools into the educational framework could enhance learning outcomes. Conversely, if it is found to hinder self-efficacy, strategies can be designed to regulate usage and build healthy digital habits.

Kerala, with its well-developed education infrastructure and high digital penetration, provides an ideal setting for such an inquiry. The insights gained can help design interventions to improve student mental health, digital citizenship, and academic success. Teachers can tailor their teaching strategies to harness the motivational potential of social media, and policymakers can formulate media literacy programs to enhance digital well-being.

Furthermore, this study contributes to the limited literature on adolescent self-efficacy in the context of social media within the Indian educational framework. It also supports the Sustainable Development Goal (SDG) 4: Quality Education, by examining how digital behavior intersects with educational outcomes.

Thus, the present study will bridge a critical research gap by exploring the complex interplay between social media and self-efficacy, providing empirical evidence for educators, parents, and policy-makers to act upon.

3. Statement of the Problem

Despite the increasing integration of digital technology in education, there is growing concern over the impact of social media on adolescent behavior, attention span, academic motivation, and emotional development. While social media may provide cognitive stimulation and opportunities for collaborative learning, it may also introduce stress, distractions, and a decline in intrinsic motivation due to constant comparison and cyberbullying.

In Kerala, higher secondary school students are actively engaging with multiple social media platforms, yet their psychological readiness and capacity to navigate these platforms meaningfully remain questionable. While the academic community emphasizes self-efficacy as a determinant of success, little is known about how students' digital interactions influence their belief in their academic capabilities and self-regulation practices. There exists a research gap in understanding the direct

relationship between the nature and extent of social media usage and self-efficacy among higher secondary school students in Kerala. It is imperative to investigate whether social media supports or undermines students' belief in their ability to perform tasks, achieve goals, and cope with academic pressures.

Hence, this study attempts to examine the Relationship between Social Media Usage and Self-Efficacy among Secondary School Students in Kerala, aiming to provide insights that can inform educational practice, policy, and future research.

4. Definitions key terms

Social media: Interactive digital platforms such as WhatsApp, Instagram, YouTube, Snapchat, and Facebook that allow users to create, share, and engage with content and communities online (Boyd & Ellison, 2007).

Self-Efficacy: An individual's belief in their ability to execute behaviors necessary to produce specific performance attainments (Bandura, 1997).

Higher Secondary School Students: Students studying in classes 11 to 12 (generally aged 15 to 18years) in Kerala .

5. Objectives of the study

- ❖ To find out the extent of Social media usage of higher secondary school students.
- ❖ To find out the level of Self Efficacy of higher secondary school students
- ❖ To find out the relationship between Social media usage and Self Efficacy of higher secondary school students
- ❖ To compare the difference in the social media usage of higher secondary school students based on gender
- ❖ To compare the difference in the Self Efficacy higher secondary school students based on gender

6. Hypothesis of the study.

- ❖ There is significant relationship between Social media usage and Self Efficacy of higher secondary school students
- ❖ There is significant difference in the Social media usage of higher secondary school students based on gender
- ❖ There is significant difference in the Self Efficacy higher secondary school students based on gender

7. Methodology of the study

For this present investigation, the normative survey method to be used. The survey method gathers data from a large number of cases of a particular time it is interested in knowing something about the whole population.

8. Sample of the Study

A sample of 100 higher secondary students to be selected by using random sampling technique

from various schools belongs to Pathanamthitta District.

9. Variables

Social media usage and Self efficacy are the variables of this study

10. Results and discussion.

To Find Out the extent of Social media usage of Higher Secondary School Students

To assess the level of Extent of Social media usage of Higher Secondary School Students, the researcher converted the total sample into three groups: high, average and low. For this classification, the conventional procedure of ' σ ' distance from mean M is used. The mean and standard deviation of the total score of Extent of Social media usage is 69.95 and 4.77 respectively. Students whose level of Extent of Social media usage is high obtained scores greater than $M+\sigma$ (74.73) and whose level is low, obtained scores less than $M\sigma$ (65.18) and whose level is average, obtained scores between $M+\sigma$ to $M\sigma$ (74.73 to 65.18).

The data and the result of the classification are given in table 1

Table 1
Number and percentage of the Extent of Social media usage in Higher Secondary school students

Levels	High	Average	Low
Norms	$M+\sigma$	$M+\sigma$ to $M\sigma$	$M\sigma$
Scores	74.73	74.73 to 65.18	65.18
Frequency	30	60	10
Percent	30%	60.0%	10.0%

Average usage 60.0% constitutes the majority, suggesting that balanced social media engagement is the most common pattern. High usage is observed in 30% of the students, which is a substantial portion of the sample, indicating potential areas for further exploration, such as its impact on students' academic and personal lives. Low usage, at 10%, reflects a minority group with limited social media interaction, which might also warrant a deeper understanding of influencing factors. This distribution highlights that while average usage is prevalent, significant segments display either high or low usage levels,

To Find Out the Level of Self Efficacy of Higher Secondary School Students

To assess the level of Self Efficacy of Higher Secondary School Students, the researchers converted the total sample into three groups: high, average and low. For this classification, the conventional procedure of ' σ ' distance from mean M is used. The mean and standard deviation of the total score of Self Efficacy is 69.82 and 4.93 respectively. Students whose level of Extent of Social media usage is high obtained scores greater than $M+\sigma$ (74.75) and whose level is low, obtained scores less than $M\sigma$ (64.88) and whose level is average, obtained scores between $M+\sigma$ to $M\sigma$ (74.75 to 64.88). The data and the result of the classification are given in the table.2

Table.2

Number and percentage of the level of Self Efficacy in Higher Secondary school students

Levels	High	Average	Low
Norms	M+σ	M+σ to Mσ	Mσ
Scores	74.75	74.75 to 64.88	64.88
Frequency	15	75	10
Percent	15.0%	75.0%	10.0%

This majority indicates that most students possess moderate 75.0% self-efficacy, implying a balance between confidence and uncertainty in their capabilities. The distribution of self-efficacy levels among Higher Secondary school students shows that Average self-efficacy 75.0% is the most prevalent, indicating a balanced level of confidence is common among the majority of students. High self-efficacy, seen in 15% of the students, suggests a smaller group of highly confident individuals who may excel in tasks requiring resilience and independence. Low self-efficacy, observed in 10% of the students, highlights a group with potential areas of concern, possibly requiring interventions or support to improve their confidence and self-belief.:

Correlation Analysis

This section is intended to analyze and interpret the relationship between variables Extent of Social media usage and Self Efficacy of Higher Secondary school students. In order to find out the relationship between variables, Karl Pearson’s Product moment coefficient of correlation (r) is calculated. Then the ‘tr’(test of significance in relationship) value is found to test the statistical significance of the obtained coefficient of correlation.

Ho: There is significant relationship between Social media usage and Self Efficacy of higher secondary school students

Table 3

Data and results of test of significance of correlation between Extent of Social Media usage and Self Efficacy of Higher Secondary school students for whole sample.

Variables	r	tr	S.Er	Shared variance
Social media usage and Self Efficacy	0.33	7.39	0.94	10.89%

Table 3 shows the coefficient of correlation(r) between Extent of Social media usage and Self Efficacy was found out to be 0.33. This indicates the moderate relationship between Extent of Social media usage and Self Efficacy. The obtained ‘tr’ value 7.39 is greater than the table value 1.96 at 0.05 level of significance. Hence the null hypothesis is rejected and there is no significant relationship between Extent of Social media usage and Self Efficacy of Higher Secondary School Students. Therefore, an alternate hypothesis can be stated as “There is a significant relationship between Extent of Social media

usage and Self Efficacy of Higher Secondary School Students”.

The coefficient of correlation(r) of 0.33 indicates that there is a positive relationship between Extent of Social media usage and Self Efficacy of Higher Secondary School Students. That means when Extent of Social media usage Higher Secondary School Students develop, their Self Efficacy also improve. The ‘tr’ value is 7.39 and Standard Error of ‘r’ has a shared variance of 10.89% which indicates that 10.89% of correlation between Extent of Social media usage and Self Efficacy of Higher Secondary School Students is due to the between the variables when tested with the whole sample.

To Find Out the significant difference in the Social media usage of Higher Secondary school Students based on Gender

This section intended to analyze the test of significant difference in the variable Extent of Social media usage of Higher Secondary level with respect to gender. The researchers formulated the following hypothesis.

Ho: There is significant difference in the social media usage of higher secondary school students based on gender

Table 4
Data and result of test of significance difference in Extent of Social media usage of Higher Secondary School Students based on gender

Variables	Gender	N	Mean	Standard Deviation	t	P value
Social Media Usage	Male	40	70.49	5.97	0.49	0.486
	Female	60	71.13	6.80		

Table 4 shows the test of significant difference in the Social Media Usage. The critical ratio obtained for Extent of Social media usage of Higher Secondary School Students (t =0.49), is less than the table value (1.96) at 0.05 level of significance (p>0.05). This implies that there is no significant difference in Extent of Social media usage of male and female students of Higher Secondary School Students. It can be concluded that male and female students of Higher Secondary School have almost the same Social Media Usage . So, null hypothesis is accepted.

To Find Out the Significant Difference in the Self efficacy of Higher Secondary School Based on Gender

Ho: There is significant difference in the Self Efficacy higher secondary school students based on gender

In order to find out the test of significant difference, the mean and standard deviation of the scores were calculated and the significant difference between the mean scores by using t-test. The details are given in the table 5

Table 5
Data and result of test of significance difference in Self efficacy of Higher Secondary School Students based on gender

Variable	Gender	N	Mean	Fn	t	p Value
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Self-efficacy	Male	40	69.80	4.97	0.44	0.259
	Female	60	70.29	6.07		

Table 5 shows the **test of significant in the** Self efficacy. The critical ratio obtained for Self-efficacy of Higher Secondary School Students ($t=0.44$), is less than the table value (1.96) at 0.05 level of significance ($p>0.05$). This implies that there is no significant difference in Self efficacy of male and female Higher Secondary School Students. The obtained mean score of female students 70.29 is less than the mean score of male students 69.80, So, the null hypothesis is accepted for Self-efficacy of Higher Secondary School Students. An alternate hypothesis is framed “There is a significant difference in Self efficacy of Higher Secondary School Students with respect to gender”.

Scope of the Study

This study focuses on secondary school students studying in government, aided, and unaided schools across urban and rural areas of Kerala. It aims to assess the type, frequency, and purpose of social media usage and correlate these factors with levels of academic and general self-efficacy. The study does not secondary and cover college students or professional social media users and limits itself to the educational and psychological implications within the school context.

Educational Implications

Curriculum Design: Insights from the study can help integrate digital literacy and self-regulation strategies into the school curriculum. Teacher Training: Professional development programs can focus on using social media constructively in classrooms. Parental Awareness: The findings can help parents understand how digital habits influence students' academic beliefs and behavior. Policy Formulation: Educational boards can use the results to frame balanced social media usage guidelines for students. Student Counselling: School counsellors can address digital behaviours and promote self-efficacy-building interventions among adolescents.

References

- 1) Bandura, A. (1997). *Self-efficacy: The exercise of control*. New York: W. H. Freeman.
- 2) Boyd, D. M., & Ellison, N. B. (2007). Social network sites: Definition, history, and scholarship. *Journal of Computer-Mediated Communication*, 13(1), 210–230. <https://doi.org/10.1111/j.1083-6101.2007.00393.x>
- 3) Internet and Mobile Association of India (IAMAI). (2021). *Internet in India Report 2021*. Retrieved from <https://www.iamai.in>
- 4) Junco, R. (2012). The relationship between frequency of Facebook use, participation in Facebook activities, and student engagement. *Computers & Education*, 58(1), 162–171. <https://doi.org/10.1016/j.compedu.2011.08.004>
- 5) Schunk, D. H., & Pajares, F. (2002). The development of academic self-efficacy. In A. Wigfield & J. S. Eccles (Eds.), *Development of achievement motivation* (pp. 15–31). San Diego: Academic Press.

- 6) Twenge, J. M., & Campbell, W. K. (2018). Associations between screen time and lower psychological well-being among children and adolescents: Evidence from a population-based study. *Preventive Medicine Reports*, 12, 271–283. <https://doi.org/10.1016/j.pmedr.2018.10.003>
- 7) Vannucci, A., Flannery, K. M., & Ohannessian, C. M. (2017). Social media use and anxiety in emerging adults. *Journal of Affective Disorders*, 207, 163–166. <https://doi.org/10.1016/j.jad.2016.08.040>
- 8) Zimmerman, B. J. (2000). Self-efficacy: An essential motive to learn. *Contemporary Educational Psychology*, 25(1), 82–91. <https://doi.org/10.1006/ceps.1999.1016>