

Original Article

Perceived Role of Social Media Use : A Cross-sectional Study Comparing Adolescents in Rural and Urban Areas

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Abstract

Background : Social media is a catalyst for negative attitudes and high-risk behaviors.**Aims and Objectives** : The current study aims to find the extent and attitude toward Social Media usage among adolescent girls in Coimbatore.**Materials and Methods** : A cross-sectional study was done on 100 adolescent girls from an urban and another 100 from a Rural area in Coimbatore. A pre-designed pre-tested questionnaire was used to collect data on the role of social media and its usage. Ethical clearance was obtained from the Institutional Committee.**Results** : The mean±SD score on the duration and frequency of social media usage score was slightly higher in the rural area (20.5±3.9) but was not statistically significant. The proportion of people reporting an overall positive role (<30) towards social media was significantly higher in the Rural area (58.2%).**Conclusion** : The study is one of its kind which focuses on the perception of social media exclusively by adolescent girls. The study concludes that there is no significant difference in social media usage patterns between Urban and Rural adolescents. Social media was seen to have an overall negative role in more than 50% of adolescents.**Key words** : Social Media, Adolescent, Social Media Attitude.

Adolescence is a critical period of the psychological, biological, and social transition of a child to an adult. This is a phase of rapid physical and psychological transition making them a vulnerable group of concern. During this development phase, a sense of identity and greater autonomy are built in¹. In the current digital era, the challenges faced by adolescents are unique and incomparable to the previous generations.

A social networking service/ social media is a platform to connect with people who share similar interests, activities, backgrounds, or real-life connections through digital platforms with interactive participation. These sites commonly are used to socialize by sharing news, photos, ideas, or thoughts with other people. A survey among adolescents in the Western world in 2018 revealed that about 97% of adolescents were using common social media platforms². Though these platforms are credited by adolescents for positive outcomes like strengthening friendships, widening contacts, exposing them to different viewpoints, knowing the diverse world, supporting causes they care about² and for professional growth, the negative aspects tend to greatly impact them. The negative role of social media includes poor social participation, poor academic performance, bad social influence exposing

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Editor's Comment :

- Social media use among adolescent girls shows similar patterns in both Rural and Urban settings, but more than half perceive its overall role as negative. While Rural adolescents reported relatively more positive perceptions, excessive use remains linked to adverse psychosocial outcomes.
- Targeted health education and responsible social media use interventions are essential to mitigate potential harms during this vulnerable developmental period.

them to illegal/immoral activities and harmful substances, and constant overwhelmed pressure to construct only positive images of oneself². Social media also acts as a catalyst for negative attitudes and high-risk behaviors³. Due to peer influence, they are forced to post images or messages documenting engagement in risky behaviors⁴. Adolescents are also victimized by stalking, cyberbullying, identity theft, and rumors due to improper use of Social media. As a result, improper social media use is associated with Depression, Anxiety disorders^{5,6} and other mental health problems⁷. The pervasive use of social media has given rise to behavioral addiction disorders such as instant messaging disorder and social media disorder, which are increasingly recognized as significant mental health problems. Research suggests that these disorders are particularly prevalent among adolescents, highlighting the need for greater attention to be paid to this issue in the literature^{8,9}.

The effect or role of social media might be influenced by various factors including gender, developmental differences, or socio-economic factors. Females are twice as likely to experience mental health disorders^{10,11}.

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Females tend to use social media in a different way, and to a different degree, than males do¹². Hence, the current study was intended to be done on female adolescents. The geographical disparity in accessing technology has been well known¹³. But beyond various social and geographical barriers, information and communication technologies including social media have become an integral part of education, socialization and other aspects of life¹⁴. Hence, the current study aims to find the extent of use and role of social media among adolescent girls in Coimbatore.

AIMS AND OBJECTIVE

- To estimate the pattern (duration and frequency) of social media usage among adolescent girls in selected Urban and Rural areas.
- To estimate the role of social media usage among adolescent girls in selected Urban and Rural areas.
- To find the socio-demographic determinants affecting social media among adolescent girls in selected Urban and Rural areas.

MATERIALS AND METHODS

A community-based cross-sectional study was conducted by KMCH College of Nursing in the field practice area of the Department at Sarkarsamakulam in 2018-2019. One Urban area (Kalapatti) and one Rural area (Idikarai) were chosen by stratified random sampling from the list of areas covered by the Sarkarsamakulam Primary Health Center (PHC). The sample size was calculated to be 200. Non-probability purposive sampling was used to select 100 adolescent girls between the ages of 10 and 19 years from both Urban and Rural areas. Inclusion criteria: Adolescent girls residing in that area for at least the last 6 months. Exclusion criteria: adolescent girls with chronic diseases like diabetes, asthma, etc, and those who were mentally or physically challenged. A detailed methodology has been explained in the parent article of the current research¹⁵. Data on social media usage was collected using a pre-designed, pre-tested, interviewer-administered questionnaire that had one part with 11 questions on duration and frequency of use and the second part on the role of social media with 15 questions. The responses to all 26 questions were recorded on a 4-point Likert scale. The negative questions were scored with 4 as strongly agree and 1 as strongly disagree and positive questions were reversely scored. Regarding the role of social media, the responses to 15 questions were summed and a value of 350 and above was considered a negative role. In addition, socio-demographic data were recorded. Ethical clearance was obtained from the Institutional Ethical Committee of KMCHHSR (EC/AP/681/03/2019) and formal permission was obtained from

the Medical Officer of the PHC. Written informed consent was obtained from the participants before enrolment. Data analysis was analyzed using SPSS version 21. Mean±SD was calculated for quantitative data and proportions for qualitative data. Student t-test was used to compare means and the Chi-square test was used to compare proportions. The p value of ≤ 0.05 was considered as statistical significance.

RESULTS

The age of the participants ranged from 10 to 19 years and the majority in both Urban (61%) and Rural (54%) areas were in the 10 to 14 years age group. The most common religion practiced was Hinduism in both Urban (69%) and rural (74%) areas followed by Christianity. The majority lived in nuclear families (Urban-76%, Rural-73%) and followed mixed diets (Urban-93%, Rural-96%) in both the areas studied. A slightly higher proportion of people in the Rural area (43%) had more than 4 members in the family than in the Urban area (36%). More than 95% of the parents in both Urban and Rural areas were literate. The distribution of age group, type of family, food habits, number of family members, and literacy of parents were statistically (chi-square test, $p > 0.05$) similar across both Rural and Urban areas among the selected samples.

Though statistically insignificant, the mean±SD score on the duration and frequency of social media usage score was slightly higher in the Rural area (Table 1). The proportion of people reporting a positive role (< 30) in social media was significantly higher in Rural areas (58.2%) than in Urban areas (41.8%)(Table 2, Fig 1). The mean difference between Urban and Rural areas in pattern of use was 0.7 and in the role of social media was 5.46. However, these differences were not statistically significant (unpaired 't' test, $p > 0.05$). The role of social media on adolescent girls was statistically similar across various socio-demographic characters in both Rural and Urban except for education in the Rural areas (Table 3).

DISCUSSION

In the current study majority of the adolescents in both areas were in the younger age group of 10-14 years and it was also seen that the overall role of social media in their lives was negative. In explanation, in the qualitative study by Radovic A, *et al*¹⁶ adolescents perceived that the pattern of social media use gradually shifted from more negative to positive as they aged from early adolescence

Table 1 — Comparison between social media usage and the role of social media among adolescent girls in Urban and Rural areas

	Mean ± SD	p value
Urban	33.6 ± 4.8	0.7
Rural	39.1 ± 6.4	

Table 2 — The perceived role of social media among adolescent girls in Urban and Rural areas (N=200)

	Positive role (%)	Negative role (%)	p value*	Mean ± SD
Urban	41 (41.8)	59 (57.8)	0.02	33.6 ± 4.8
Rural	57 (58.1)	43 (42.1)		
Total	98 (99.9)	102 (99.9)		

*chi-square test

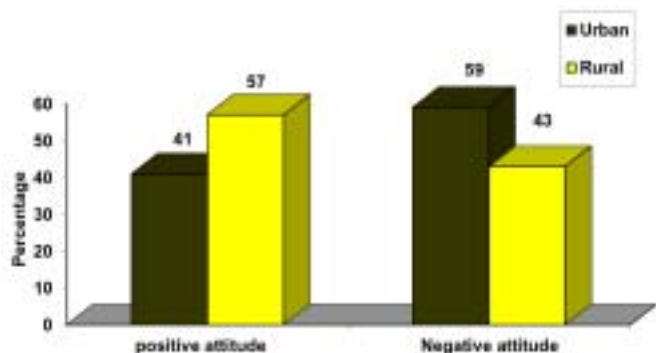


Fig 1 — Distribution of the role of social media among adolescent girls in Urban and Rural areas (N=200)

through the middle to late. A qualitative study by O'Reilly M, *et al*¹⁷ in the UK on adolescents with a comparable age group (mean age was 13.6 years) from varied ethnicities brought out that social media had both positive and negative roles on mental health. On the positive front social media reduced isolation by allowing for continued communication and improving social skills. Among the negative roles, missing out on social connection without necessarily a device, bullying, and trolling were addressed by the adolescents in the report by O'Reilly M, *et al*¹⁷.

The current study reports that more than half the

adolescent girls perceive the role of social media as negative. The study by Jayaraj N, *et al*¹⁸ on internet use among adolescents also reported that on the whole usage for education, purposes was lower than for entertainment on social media. In accordance with the current finding, many other cross-sectional studies have shown that social media has a negative role in life manifesting as poor satisfaction, poor psychological well-being, and poor social competence¹⁹⁻²¹. Girls also reported that academic performances were negatively affected by the duration of social media use. This finding was supported by similar studies on social media in adolescents²². In contrast to the belief that social media platforms help in networking and staying connected literature has shown that adolescents feel more lonely when they are affected by social media disorder^{19,20}. Though overall scores pointed towards the negative role of social media, the usage mean score on pattern and duration of use among both urban and Rural girls remained lower than 50%. This was in contrast to the findings of a multinational study which reported that Problematic Internet Use (PIU) was higher among Asian countries. This might be because of the difference in the study tool, the age group and the gender.

CONCLUSION AND RECOMMENDATION

Thus the study concludes that in the current era of globalization, there is no difference in the pattern and duration of social media use among adolescents in Rural or Urban areas. Though the overall mean score on the role of social media was negative in both Rural and Urban areas, a higher proportion of adolescents in the Rural

Table 3 — Relation between the role of social media usage and socio-demography among adolescent girls in Urban and Rural areas.

Demographic variables	Role of social media					
	Urban (n=100)		Rural (n=100)		Total (N=200)	
	Positive (%)	Negative (%)	Positive (%)	Negative (%)	Positive (%)	Negative (%)
Age						
10-15 years	25 (61)	36 (61)	31 (54.4)	30 (69.8)	56 (57.1)	66 (64.7)
16-19 years	16 (39)	23 (39)	26 (45.6)	13 (30.2)	42 (42.9)	36 (35.3)
p value*		0.9		0.1		0.2
Education						
Primary	5 (10.9)	1 (1.9)	2 (3.5)	4 (9.3)	7 (6.8)	5 (5.2)
Secondary	28 (60.9)	33 (61.1)	31 (54.4)	30 (69.8)	59 (57.3)	63 (64.9)
Higher Secondary	13 (28.3)	20 (37)	24 (42.1)	9 (20.9)	37 (35.9)	29 (29.9)
p value*		0.13		0.05		0.5
Family income						
≤20,000 INR	26 (63.4)	39 (66.1)	51 (89.5)	39 (90.7)	77 (78.6)	78 (76.5)
> 20,000 INR	15 (36.6)	20 (33.9)	6 (10.5)	4 (9.3)	21 (21.4)	24 (23.5)
p value*		0.7		0.8		0.7
Type of family						
Nuclear Family	31 (75.6)	45 (76.3)	31 (54.4)	26 (60.5)	62 (63.3)	71 (69.6)
Joint Family	10 (24.4)	14 (23.7)	26 (45.6)	17 (39.5)	36 (36.7)	31 (30.4)
p value*		0.9		0.5		0.3
Food Habits						
Vegetarian	6 (6.3)	1 (20)	3 (5.3)	1 (2.3)	9 (5.9)	2 (4.2)
Mixed diet	89 (93.7)	4 (80)	54 (94.7)	42 (97.7)	143 (94.1)	46 (95.8)
p value*		0.2		0.4		0.6

*chi-square test

areas experienced social media to have a positive role. Other than the place of residence, no other Socio-demographic variable affected the role of social media in their lives. Since this is a cross-sectional analysis of only perceptions, it carries the limitation of not understanding the actual role and impact of social media. Also, research on the correlates of addictive-like social media use is much more limited. Hence, longitudinal studies should be carried out on this hypothesis. Since a high proportion of adolescents have reported that social media plays a negative role, it is recommended that further research on the consequences of social media in adolescents. Similarly, because a high score in frequency and pattern of use is also observed, further research on the effects of this on sleep, diet, and other aspects of health problems associated with should be carried out. The study also recommends that interventions like health education should be planned to ensure the proper use of social media by adolescents.

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