

Social Media Usage of Higher Secondary Teachers in Kerala

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ABSTRACT As part of the development of technology, the usage of social media is increasing and e-learning is a part of every individual either in formal or in distance education. In the current study, the usage of social media and so the extent of the e-learning nature of teachers at Higher Secondary School level in Kerala state was established. A survey was conducted among 124 higher secondary school teachers using Google form platform. For the survey, an inventory for Social Media Usage developed and standardised by the investigators was utilised. The investigators found that both males and female teachers, were using social media effectively. The study also found that younger teachers use social media more frequently than older teachers.

INTRODUCTION

We are living in a knowledge society that gives importance to various skills. So the kind of skills which are required to achieve goals in the current society as well as for the future might be varying from those skills which were required in the earlier. Therefore, it is very much necessary for teachers to make sure that they are familiar with contemporary social tools. If the teachers are not familiar with them, it means that simply they were not at all well prepared to meet the current educational needs of their students in the technological era. Every teacher should be able to sense the real potential of social media platforms to transform drastically the pedagogical needs of their teaching experience. These contemporary social tools help the teachers to create truly adaptable and flexible learning experiences for their students. The current study tries to understand the perception of Higher Secondary level teachers towards the usage of social media.

The changes in the teaching-learning process due to the wide spread of Covid-19 pandemic are reflected in the social media usage of

teachers also. In the traditional way of teaching, the usage of technology was very rare among the teachers. But due to the shift of teaching – learning process into online platforms, teachers are forced to utilise technology at a maximum level. And in some cases they have to deal with the session throughout with the usage of technology. Thus it is the need of the hour to identify the utilisation of social media by teachers.

As the technology usage is very high among the current generation learners, the teachers also should be well equipped with technology. Many studies show that most of the students are using mobile phones and a wide range of social media (Alamri 2019; Aleksandrova and Parusheva 2019; Schrum 2019). The students of the current era share and access information via the internet, especially through social media (Tsvetkova et al. 2021). To cope up with the needs of the students, the teachers also should be well versed with the most suitable social media applications.

Schools in modern nations have shifted to online learning to avoid students from being deprived of learning opportunities (World Economic Forum 2020). Regardless of the fact that it has the capabilities for better communication and educational uses, however, social media use has still not been well established (Ige 2020). Most schools in developing nations have struggled to transition to digital mode of learning just because of the fact that they do not have the ability and support of ICT resources, internet access, and

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the incapacity of academia (Adnan and Anwar 2020). The goal and purpose of incorporating technology into the academic process is to expand and grow the quality, accessibility, and cost-effectiveness of instructional settings (Jogezai et al. 2021).

As the unanticipated shift to web-based learning has become a criterion of organizational capabilities, many educational systems concentrated in the migration of the academic materials to the digital domains, rather than shifting to online teaching methods (Wu 2020). However, it is reminiscent of the scarcity of contents in educational establishments and the stigmatisation of learners, where insufficient internet access and lack of advanced technologies have affected. Another big issue with digital training seems to be the lack of adequate communication with teachers (Zhong 2020).

The results of the study conducted among teachers regarding their social media usage and smartphone usage (Ansari and Khan 2020) reveal the importance of the present study in the pandemic situation. They have found that it is highly recommended to use social media and smartphones for collaborative learning environments. A study was conducted to correlate the engagement of social media for school and academic teachers' professional development (Mancana and Ranieri 2014). They have utilised Facebook groups used by teachers and Italian University scholars. Their study shows that the teachers are effectively using their social media for academic development while the scholars are utilising social media for communication purposes. A study was (Albalaw 2017) made on the status of usage of social media among mathematics teachers in their classrooms and determined their perception of usage of social media in their teaching learning process. He studied the perception of participants with reference to various demographic variables.

In a study on the role of social media usage in the academic process, it was found that social media is positively used in education and especially very useful in blended learning (Devi et al. 2019). With the help of social media, every teacher is able to communicate with their students effectively in an instant and direct way. Social media also helps the teachers to compare notes on various techniques adopted by them as well as the teaching methodology. How effective is

the integration of social media and teaching methods on exam outcomes was assessed and it was found that social media can break down the barriers in the learning process and students communicate with confidence during their study (Javaeed et al. 2020).

It is suggested that the link between social media and health cannot only be captured and explained by conventional approaches to dose-effect but also needs a more sophisticated understanding of concept and measurement of the behaviour of social media (Bekalu et al. 2019) and found that social media usage was not correlated with the social intelligence of the students (Elias and Mirunalini 2017). But it is found that most of the students were social media users, and there was a significant association between social media usage and the social intelligence of the samples (Bsharah et al. 2014).

While exploring various types of literature, the investigators came to notice that there were very few studies conducted about the social media usage of Higher Secondary School Teachers. The investigators found that there is no study conducted among Higher Secondary School Chemistry Teachers regarding their social media. But it is very much interesting that the usage of social media increased among the people worldwide during the pandemic (Hussain 2020). The study results and findings may contribute to the body of research in using social media in teaching only if the teachers are well versed with social media usage. Possibilities of social media are tremendous for providing effective teaching-learning experiences in the current technological era (Nasta 2019).

The various studies conducted among students and teachers regarding their social media usage and academic use of such media reveal that most of the teachers are lagging to update their knowledge and abilities to use social media for educational purposes. The literature review also shows that there are a few studies conducted in the field and it is the need of the current situation when the teaching learning process shifted to blended methods with a tremendous usage of technology and online platforms.

Objectives of the Study

Finding out the extent of social media usage among Higher Secondary School teachers who

teach chemistry at the higher secondary level in Kerala was the main objective of this study.

The specific objective of the present study was to identify the significance of difference, if any, between the teachers regarding their social media usage with respect to gender, age and teaching experience.

Hypotheses of the Study

Hypotheses of the present study were as follows,

1. Utilisation of social media among higher secondary school chemistry teachers is high.
2. Gender does not play any role in the social media usage of higher secondary teachers.
3. Teaching experience does not play any role in the social media usage of higher secondary teachers.
4. Age of teachers does not play any role in the social media usage of higher secondary teachers.

METHODOLOGY

Data Collection

For different respondents, a descriptive survey method was employed and it was done through a structured inventory designed by the investigators on the basis of the objectives of the study. Journals, books and the internet helped the investigators to collect the secondary data which are utilised in the conceptual framework of the current study.

Sampling Design

The current study was conducted for a population of 2000 Higher Secondary School Chemistry teachers in Kerala state. 150 teachers were randomly selected from various parts of Kerala and a survey was conducted through WhatsApp with help of Google forms. Finally, the investigators received responses from 124 teachers. Randomisation was done by the lottery method.

Tools

A Social Media Usage inventory was developed and validated by the investigators for the current study and it was used for collecting data from the sample. It consisted of two parts. First

part contained 4 objective type questions which helped to identify the demographic details of the respondent and the second part contained 20 statements to be rated on a five-point scale by the respondent. The second part identified the approach of the sample towards the Social Media usage.

Among the 20 statements 6 were positive statements and the rest were negative. Each statement was provided with five options for the respondent. Always, Often, Sometimes, Rarely and Never were the options. The scores were given in the order, 5 points for Always, 4 points for Often so on. The last choice, never, got one point. The negative statements were scored in a reverse order.

Mean, Standard Deviation, t- test and ANOVA have been used in the study for the purpose of differential analysis and correlation analysis to test the degree of association.

RESULTS

When comparing the total mean of Social Media Usage scores, which have a value 45.10 with the median, 44, it can be seen that the mean value is a bit higher than the median value. So we can say that Social Media Usage of Higher secondary school teachers is high.

While considering the variable gender, females have a lower and males have a higher mean value with respect to the total mean value. While considering service duration, the group having more than 15 years only has a lower mean value. An important fact observable (Table 1) is that, as the age increases, the mean value of their scores de-

Table 1: Mean and standard deviation of social media usage scores of higher secondary school teachers with reference to their gender, service duration and age group

Variables	Sub-variables	N	Social media usage	
			Mean	S.D.
Gender	Male	50	47.82	11.69
	Female	74	43.27	7.77
Service Duration	Less than 5 years	14	48.00	10.61
	5 to 10 years	23	49.13	12.69
Age Group	10 to 15 years	23	49.13	10.32
	More than 15 years	64	42.95	7.40
	30 to 40 years	37	49.65	11.74
Age Group	40 to 50 years	71	43.94	8.05
	50 to 60 years	16	39.69	7.45
	Total	124	45.10	9.74

creases and it shows that young teachers make extensive use of social media.

The details in Table 2 show that the t-value is 2.59 and it is higher than the table value of 1.65. Hence, the null hypothesis (hypothesis 2) is rejected and it is concluded that there is no significant difference between the mean scores of male and female higher secondary school teachers.

The study results revealed (Table 3) that the f value 2.89 is significant at 0.05 level with a significant value of 0.0381. This suggests that one or more treatments are significantly different. In order to find out whether there is any significant difference between the mean social media usage of Higher secondary school teachers with respect to their teaching experience, Duncan Multiple Range Test was used to analyse further. These post-hoc tests were utilised to identify the pairs of treatments which were significantly different.

It is revealed from the Duncan Multiple Range Test (Table 4) that there is no significant difference between the teachers who are having more than 15 years of experience and 10 to 15 years of experience, 10 to 15 years and less than 5 years of

experience, less than 5 years and 5 to 10 years regarding their social media usage.

It is also found from Table 4 that there is a significant difference between the teachers who had the experience of more than 15 years and 5 to 10 years regarding social media usage. The teachers who had 5 to 10 years of experience are utilising the social media well than the teachers who had more than 15 years. Other groups do not show any significant differences in their social media usage.

The data (Table 5) reveals that the f value 7.78 is significant at 0.05 level with a significant value of 0.001. This suggests that one or more treatments are significantly different. In order to find out whether there is any significant difference between the mean social media usage of higher secondary school teachers with respect to their age, the Duncan Multiple Range Test was used to analyse further. This post-hoc test helps well to identify which pairs are significantly different from each other.

Analysis of values (Table 6) makes it clear that there is a clear significant difference between

Table 2: Comparison between mean scores of social media usage of higher secondary school teachers with reference to their gender

<i>Dependent variable</i>	<i>Gender</i>	<i>N</i>	<i>Mean</i>	<i>S.D.</i>	<i>t- value</i>	<i>p value</i>
<i>Social Media Usage</i>	Male	50	47.82	11.69	2.59*	0.013
	Female	74	43.27	7.77		

*Significant at 0.05 level df = 121

Table 3: Comparison between mean scores of social media usage of HSST with respect to their service period (ANOVA)

<i>Dependent variable</i>	<i>Service duration</i>	<i>Sum of squares</i>	<i>Df</i>	<i>Mean square</i>	<i>F ratio</i>	<i>p value</i>
<i>Social Media Usage</i>	Between groups	786.94	3	262.31	2.89*	0.0381
	Within group	10873.9	120	90.62		
	Total	11660.84	123			

*Significant at 0.05 level

Table 4: Multiple comparison between mean scores of social media usage of higher secondary school teachers with respect to their service period (DMRT)

<i>Dependent variable</i>	<i>Service duration</i>	<i>N</i>	<i>Subset 1</i>	<i>Subset 2</i>
<i>Social Media Usage</i>	Less than 5 years	14	48	48
	5 to 10 years	23		49.13
	10 to 15 years	23	45.26	45.26
	More than 15 years	64	42.95	
Significance		0.092	1.97	

Table 5: Comparison between mean scores of social media usage of higher secondary school teachers with respect to their age (ANOVA)

<i>Dependent variable</i>	<i>Age</i>	<i>Sum of squares</i>	<i>df</i>	<i>Mean square</i>	<i>F ratio</i>	<i>p value</i>
<i>Social Media Usage</i>	Between groups	1329.19	2	664.60	7.78*	0.001
	Within group	10331.64	121	85.39		
	Total	11660.84	123			

*Significant at 0.05 level

Table 6: Multiple comparison between mean scores of social media usage of higher secondary school teachers with respect to their age (DMRT)

<i>Dependent variable</i>	<i>Age</i>	<i>N</i>	<i>Subset 1</i>	<i>Subset 2</i>
<i>Social Media Usage</i>	30-40 years	16	39.69	
	40 to 50 years	71	43.94	
	More than 50 years	37		49.65
Significance		0.082	1	

the age group 30-40 with both age groups 30-40 and 40-50. But the age group 40-50 do not show a significant difference with the age group above 50.

DISCUSSION

Most of the people have the view that social media and social networks are of entertainment use only, but it's a fact that they can be utilised perfectly for educational purpose when due attention is provided (Al Rahmi et al. 2018). A large number of academic articles are present nowadays supporting the fact that, usage of social media and social networks will facilitate the educational process and activities through blended and collaborative learning (Ansari and Khan 2020). The teachers, especially those who are dealing with the adolescent digital natives should be able to cope up with their needs from emotional and technological angles (Madanick 2015). The usage of social media plays a good role in that. The study results show that the utilisation of social media by the higher secondary school teachers are comparatively high and this result shows that teachers attitude changed somewhat from the previous experiences (Beemt et al. 2019) and supports the studies conducted during the pandemic (Limaye et al. 2020).

Tremendous number of online communities through various social media platforms are common among the digital natives (Brandtzaeg 2016) which are not much familiar with the teachers who are in the 3G or earlier digital era (Ismail et al.

2020). Some study results (Manca and Ranieri 2014) concluded that teachers are effectively utilising the social media platforms for the academic process. The current study revealed that younger teachers are well versed to do so, but the older teachers need more support and they are lagging in the effective utilisation of social media platforms for the academic purposes while the students whom these teachers deal with are better versed with such platforms (Elias and Mirunalini 2017).

In most of the cases when there is a need of utilisation of technology, women are not in the scene (Holman et al. 2018) and the same might be applicable for the social media usage among the teachers. But the current study reveals that there is no difference in the social media usage of teachers with respect to their gender. The study results regarding the social media usage with respect to the teaching experience of teachers show that experience is inversely proportional to the social media usage for academic purpose which is supporting the previous studies (Purvis et al. 2020).

Students who use social media frequently have good communication abilities and it reflects in the academic performance of the students positively (Ansari and Khan 2020) and if the teacher uses social media effectively can succeed to achieve his goals on the learner in the academic process. So the current study results is an alarm to the system which is not updating according to the need of the current society which is shifting to blended and collaborative learning methods,

especially due to the pandemic. In a country like India, even though the technology is not available for the need of every one, the pandemic situation brought a lot of changes. The higher level of social media usage among the teachers during the pandemic should be read along with the findings of various studies conducted among teachers regarding their poor Information Communication Technology (ICT) utilisation (Ismail et al. 2020) and attitude towards social media usage for academic processes (Jogezai et al. 2018).

Proper training should be given to the teachers for the effective utilisation of social media to foster their students (Zhong 2020) and more emphasis should be given to make the academic content available online for their effective use (Wu 2020) during blended learning with the help of social media platforms. Authorities should take care of both students' and teachers' emotional and mental well-being when students and teachers use social media platforms for academic purposes (Bekalu et al. 2019) more frequently in the changing digital as well as pandemic situations.

CONCLUSION

From the study, the investigators found that there is no significant difference between male and female higher secondary school teachers with their social media usage. The study shows that young teachers are somewhat different from elders in their social media usage. The descriptive statistics also shows that the youngsters have a higher mean score for the social media usage. As the pandemic situation necessitated the shifting of educational activities into a blended environment, the utilisation of technology and social media increased among the academia and it is reflected in the nook and cranny of every society. Teachers cannot stand in the way of society's and students' needs in the digital era. The study reveals that older generation teachers should take greater attention to adapt to the changing social and educational needs of digital natives.

RECOMMENDATIONS

According to the study results, it is found that the usage of social media by higher secondary school teachers seems to be higher. This may be due to the fact that the academic process shift-

ed to blended methods in which both online as well as offline materials and methods were utilised effectively. But the results also show that the older teachers utilise social media comparatively lesser than youngsters. If teachers are unable to meet the demands of their students, the learning process will be disrupted and the goals will not be met. More care should be given to the teachers who are not able to utilise the social media effectively for academic purposes, especially in the changing learning environment due to the pandemic. When teaching and learning process utilise more social media platforms, it will help the students to retrieve the information whenever they need to. Utilisation of social media for teaching will be more effective for the students who feel shy to interact with peers. Such students can collaborate with their peer group effectively through social media where there is no need of face to face interaction. Such educational activities will be more useful and effective for physically challenged children too, because they will have access to a variety of learning possibilities that are not available through traditional means. But all this facts will be effective only if the teachers are well versed in utilising the various social media platforms effectively. The academia may take more care to provide proper training and methodology to use various social media for academic purposes. Teachers who are not well versed in utilising social media for educational process may be identified and properly trained to do so as the students whom they are dealing with are the digital natives who are experts to use such technologies in various life situations.

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