

EXPLORING THE PERSPECTIVES OF POSTGRADUATE FACULTIES OF TUMKUR UNIVERSITY ON THE USE OF WEB 2.0 TOOLS FOR TEACHING AND RESEARCH

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ABSTRACT

The study explores the perspectives on the employ of Web 2.0 tools for teaching and research by the postgraduate faculties of the Tumkur University, Karnataka. Structured questionnaires were used to collect data from 62 faculties. The findings revealed that Facebook was the most liked SNS among the faculties which they used for sharing information and participating in discussions. Wikipedia was the most used social networking site for teaching and research. The use of web 2.0 has helped the faculties to improve the visibility of their scientific output and fetch citations to their work. Lack of support from the university was the main hurdle cited by the faculties to integrate web 2.0 tools. The findings of the study provide a useful idea to the faculties to make use of web 2.0 tools for educational purposes.

Keywords: Teaching, Research, Web 2.0, social media, Tumkur University, Karnataka.

INTRODUCTION

Web 2.0 is considered the second stage in the growth of the internet which is comprised of different websites and applications that help a user to easily and quickly create and share the content online usually free of cost (Ehlers & Kai, 2013). Create, collaborate, share and communicate are the iconic combo of web 2.0 tools (Rohilla, 2017). Social media is one of the features of Web 2.0 which emerged first as a medium of interaction and later transformed how the information is passed across the world (Zolkepli & Kamarulzaman, 2015). Social platforms have simplified the effort of information gathering and knowledge sharing by making each user a content generator rather than a passive consumer (Vivakaran & Neelamalar, 2018). Social media have penetrated almost all the significant domains including academia which offered collaborative learning and teaching experience to the cohorts (Boateng & Amankwaa, 2016). Owing to the increased usage of social media among the students, especially for educational purposes, faculties have started to integrate social media into their teaching pedagogically (Jacquemin et al., 2014). The previous studies revealed that the use of social media has benefitted both the faculties and students educationally, behaviorally, socially and mentally (Boateng & Amankwaa, 2016; Jacquemin et al., 2014). Many higher educational institutions insist their faculties integrate social media for academic activities (Vivakaran & Neelamalar, 2018) and this study is carried out to know the status of Tumkur University faculties and their perspectives on social media/web 2.0 tools for learning, teaching and research.

OBJECTIVES OF THE STUDY

- To know the preferences of use of web 2.0 tools for teaching and research by the faculties.
- To understand the adoption of Web 2.0 tools by the faculties for teaching and research.
- To find out the purposes of using Web 2.0 applications by the faculties.
- To know the benefits and barriers to using Web 2.0 tools for teaching and research among the faculties.

REVIEW OF LITERATURE

Social media have been penetrated almost all the fields and researchers are keen on exploring the different perspectives like its history (Jose Van, 2013; Leonardi, Huysman, & Steinfield, 2013), awareness & use (Strandberg, 2013; Gupta, Gautam, & Khare, 2014; Yin et al., 2015), adoption (Curtis et al., 2010; Hong, 2012), applications (Ngai, Moon, Lam, Chin, & Tao, 2015; Wu et al., 2014), impact (Bhuiyan, 2011; Al-rahmi, Zeki, Alias, & Saged, 2017), security issues (Gayathri, Thomas, & Jayasudha, 2012; Gritsalis, Kandias, Stavrou, & Mitrou, 2014) and so on. Umpteen studies have been taken with regards to social media use by different categories of users at the national and international levels. Even though, here we have embarked only on the use of social media or web 2.0 tools by the faculties for educational purposes.

Mansour (2015) investigated the use of SNS's by the LIS faculties of the Public Authority for Applied Education and Training, Kuwait and perceived those 21 members of the 33 total faculties were using SNS's of which most

of the tent be male. YouTube, Twitter, and Facebook were the most used SNS's among the respondents which they used mainly for making communication with peers & students, sending& receiving messages and finding information. The study findings of Moran, Seaman, & Tinti-Kane (2011) also reported the same results that U.S faculties of higher education were hooked more on Facebook, YouTube and Twitter. The study reported a notable difference in the use of SNS's by the faculties and their area of teaching.

Jacquemin et al. (2014) carried out a similar kind of study to assess the faculties and students' use & perception of Twitter for higher education. The investigator carried out a case study by adding Twitter to the syllabus for sharing course information, and contents and for discussion. The study found that students used Twitter more frequently compared to faculties which corresponds to the study of Kitsis et al. (2016). Twitter was found as an effective tool for augmenting content in the classroom. Even though, it was perceived as an obtuse tool for formal discussion interaction. Another study conducted by Cain, Scott, Tiemeier, Akers, & Metzger (2013) among the pharmacy faculties at five pharmacy colleges in the United States showed that faculties were not interested to befriend their students during the course time through social media and they accepted friend requests only after the students left out from the institutions. Esteve Del Valle, Gruz, Haythornthwaite, Paulin, & Gilbert (2017) assessed the faculty's motivation and involvement in social media for educational practices. The study deployed the UTAUT model to analyze the current and upcoming use of social media among the faculties of selected institutions from selected countries. The result from surveying 333 respondents showed that all were early adopters of social media for personal and professional uses. 91% of the participants were hooked onto various SNS's followed by the multimedia repository (85.28%) and document sharing (84.38%). The study also revealed that the future adoption of some social media like microblogging and presentation sharing would be very high as compared to other media like SNS's. Vivakaran & Neelamalar (2018) explored how the faculties of higher education in Tamil Nadu utilized social platforms for academic purposes. The surveys conducted among 60 faculties of selected colleges in 5 districts showed that most of them (78.7%) were active social media users. Corresponding to the later studies, this study also reported that Facebook and WhatsApp were the favorite social media platforms. Forums and discussions boards were found underutilized, and nearly half of the respondents (44.3%) were not aware of the academic blogs. The main target to use social media among the cohort was collecting information, notes, and content for preparing lectures. Lack of infrastructural facilities inside the classroom (47.6%) and restricted access to social media applications within the college campus (44.4%) were cited as the major hurdles faced by the faculties in implementing social media for academic purposes.

After scanning the literature, it is found that there was an absence of research on the adoption of social media or web 2.0 tools among the faculties, especially in the state of Karnataka. So, we deemed to conduct the present study which would assess the perspectives of faculties on the use of social media for educational purposes.

METHODOLOGY

The study employed a survey method to assess the use of Web 2.0 tools by the faculty members of the PG department of Tumkur University. A structured survey questionnaire was administered to collect data from 80 faculty members of the university including professors, associate professors, assistant professors, and guest faculty. The questionnaire consisted of dichotomous and opinion questions to assess the preference, opinion, and purposes of using Web 2.0 tools, especially for education, teaching and research. The questionnaire was administered both in offline and online mode. The investigator visited each department in person and handed over the questionnaire and got it filled and returned it. The missing faculties were traced on the faculty profile on the university website (http://www.tumkuruniversity.ac.in/index.php?/post_graduate_dept) and collected the email id. They had been sent an online Google Form with a formal request to participate in the survey. Data were collected during the period from August 2021 to December 2021. A total of 62 faculties participated in the survey both offline and online. The responses thus collected were analyzed by using software packages like Excel and IBM-SPSS. The major findings of the study are presented in the following section.

ANALYSIS AND INTERPRETATION

Demographics of the respondents

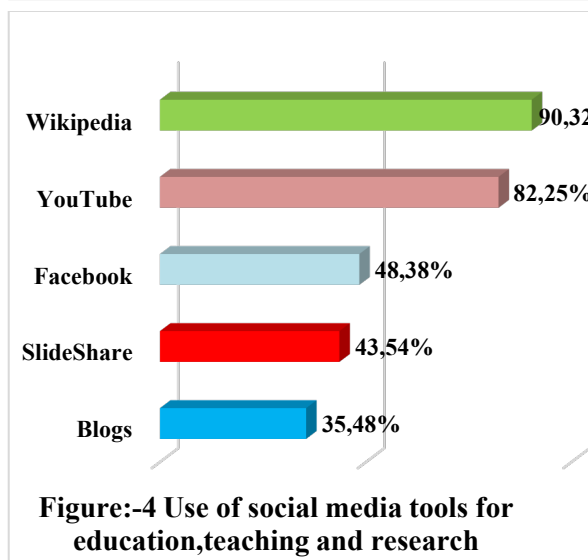
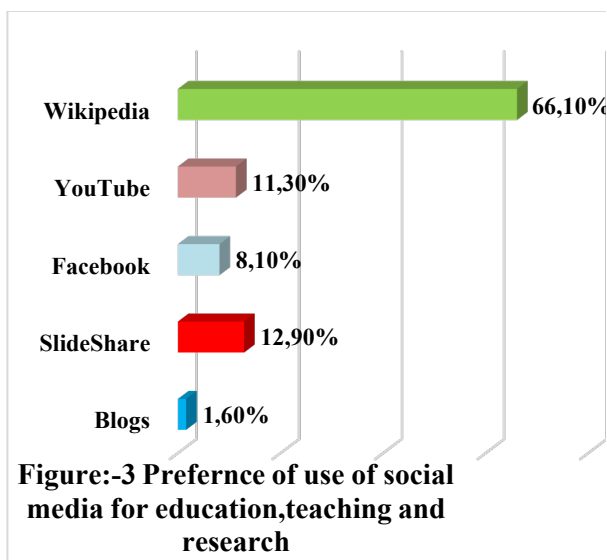
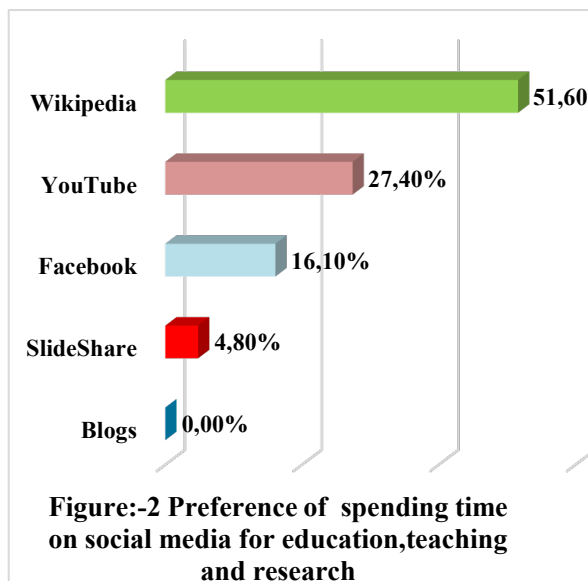
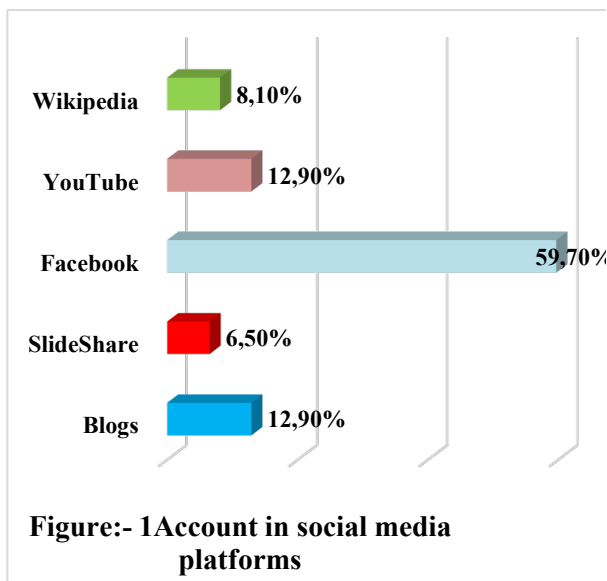
As of the year 2019-2020, over 80 faculty members were working in fifteen PG departments of Tumkur University. Of the 80 questionnaires administered, 62 filled in questionnaires were returned with a response rate of 77.5% including 40 (64.5%) males and 22(35.5%) females. The study had been covered all the levels of the designation of faculties including Guest faculties (3.22%), Assistant professors (72.60%), Associate professors (22.58%) and Professors (1.61%). Moreover, the educational qualifications of the participants were found different i.e. 59.70% of the participants were PhD holders followed by 32.25 with a master's degree. 2 participants had a post-Doctorate degree to their credit.

Table:-1 Demographic details of the respondents

Response	Male	Female	Total
Gender			
	40(64.5%)	22(35.5%)	62(100.00%)
Age			
25-34	11 (17.7%)	13 (21.0%)	24 (38.72%)
35-44	20 (32.3%)	6 (9.7%)	26(41.93%)
45+	9 (14.5%)	3 (4.8%)	12(19.35%)
Designation			
Guest Faculty	0 (0.0%)	2 (3.2%)	2(3.22)
Assistant Professor	28 (45.2%)	17 (27.4%)	45(72.60)
Associate Professor	11 (17.7%)	3 (4.8%)	14(22.58)
Professor	1 (1.6%)	0 (0.0%)	1(1.61)
Educational Qualifications			
Master Degree	10 (16.1%)	10 (16.1%)	20(32.25%)
M.Phil.	1 (1.6%)	2 (3.2%)	3(4.83%)
Doctorate	27 (43.5%)	10 (16.1%)	37(59.70%)
Post-Doctorate	2 (3.2%)	0 (0.0%)	2(3.22%)
Total	40(64.5%)	22(35.5%)	62(100%)

Use of Social media/Web 2.0 tools

An attempt was made to investigate the use of web 2.0 tools, especially social media among the faculties. They were asked whether they had accounts on selected social media platforms and found that 59.70% of the total participants had an account on Facebook followed by 12.90% on both Blogs and YouTube (Figure.1). According to the respondents, Wikipedia was the most preferred social networking site (51.60%) to spend time followed by YouTube (27.40%) and Facebook (16.10%) (Figure-2). The former was the most preferred one by the respondents for academic purposes and teaching (Figure-3). The use of SlideShare and YouTube was also found good among the faculties. It is also clear that no respondent preferred to spend time on Blogs on which academic and teaching activities took place meagre (1.60%). The picture is much clear that the faculties' preferences and use of web 2.0 tools were different. Less preferred tools were used effectively like Facebook and Blogs for research and teaching by the faculties.



Period of using social media

When we sought information regarding the period since they hooked into each social media site, we found that half of the respondents (50%) hooked into Wikipedia for 5-10 years. 56.50% of the respondents were using YouTube for 3-4 years. Facebook had been used by 11.30% of the participants 6 years ago. Blogs must be new to the faculty as the majority of them were blogging for 1-2 years only.

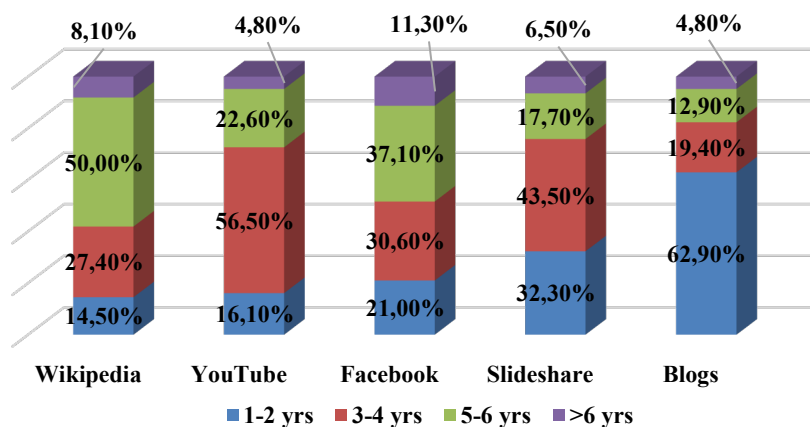


Figure:-5 Period of using social media

Purpose of using Web 2.0 tools

An attempt was made to understand the major purposes of using the Web 2.0 tool among the faculties. As shown in Table 2, it is revealed that Facebook was the favorite tool for instant chatting(79%), sharing information(71%), participating discussion(53.2%), sharing photos(72.6%), sharing seminar/conference information(53.2%) sharing videos and pictures(61.6%). 59.7% of assistant professors and 14.5% of associate professors are hooked on Facebook for chatting with their peers. It was also found that SlideShare was not preferred for chatting. 71% of the faculties had connected with new friends through Facebook. 14.5% of assistants and 9.7% of associate professors used blogs for meeting new people. Blogs also found the use of participating in discussions (41.9%). It is very clear from the table that Wikipedia was the main source of information for the faculty. 69.3% of the total participants depended on Wikipedia for finding new information followed by 21% of respondents on YouTube. The second one stood as the most entertaining platform among the majority (88.7%) of the participants.

Table:-2 Purpose of using Social media/Web 2.0 tools

Purpose	Designation	Wikipedia	You Tube	Facebook	Slide Share	Blogs	Total
Instant Message (Chat)	Professor	-	-	1 (1.6%)	-	-	1 (1.6%)
	Associate Professor	-	1 (1.6%)	9 (14.5%)	-	4 (6.5%)	14 (22.6%)
	Assistant Professor	2 (3.2%)	1 (1.6%)	37 (59.7%)	-	5 (8.1%)	45 (72.6%)
	Guest Faculty	-	-	2 (3.2%)	-	-	2 (3.2%)
Total		2 (3.2%)	2 (3.2%)	49 (79.0%)		9 (14.5%)	62 (100%)
Meet New People	Professor	-	-	1 (1.6%)	-	-	1 (1.6%)
	Associate Professor	-	-	7 (11.3%)	1 (1.6%)	6 (9.7%)	14 (22.6%)
	Assistant Professor	1 (1.6%)	1 (1.6%)	34 (59.7%)	-	9 (14.5%)	45 (72.6%)
	Guest Faculty	-	-	2 (3.2%)	-	-	2 (3.2%)
Total		1 (1.6%)	1 (1.6%)	44 (71.0%)	1 (1.6%)	15 (24.2%)	62 (100%)
Find Information	Professor	1 (1.6%)	-	-	-	-	1 (1.6%)
	Associate Professor	10 (16.1%)	4 (6.5%)	-	-	-	14 (22.6%)
	Assistant Professor	31 (50.0%)	9 (14.5%)	3 (4.8%)	1 (1.6%)	1 (1.6%)	45 (72.6%)
	Guest Faculty	1 (1.6%)	-	-	1 (1.6%)	-	2 (3.2%)
Total		43 (69.3%)	13 (21.0%)	3 (4.8%)	2 (3.2%)	1 (1.6%)	62 (100%)
Sharing Information	Professor	-	-	1 (1.6%)	-	-	1 (1.6%)
	Associate Professor	-	2 (3.2%)	8 (12.9%)	2 (3.2%)	2 (3.2%)	14 (22.6%)
	Assistant Professor	1 (1.6%)	-	33 (53.2%)	-	11 (17.7%)	45 (72.6%)
	Guest Faculty	-	-	2 (3.2%)	-	-	2 (3.2%)
Total		1 (1.6%)	2 (3.2%)	44 (71.0%)	2 (3.2%)	13 (21.0%)	62 (100.0%)
Participating In Discussion	Professor	-	-	1 (1.6%)	-	-	1 (1.6%)
	Associate Professor	-	-	4 (6.5%)	1 (1.6%)	9 (14.5%)	14 (22.6%)

	Assistant Professor	-	1 (1.6%)	26 (41.9%)	1 (1.6%)	17 (27.4%)	45 (72.6%)
	Guest Faculty	-	-	2 (3.2%)	-	-	2 (3.2%)
Total		-	1 (1.6%)	33 (53.2%)	2 (3.2%)	26 (41.9%)	62 (100.0%)
Sharing Seminar/ Conferences Information	Professor	-	-	1 (1.6%)	-	-	1 (1.6%)
	Associate Professor	-	-	5 (8.1%)	1 (1.6%)	8 (12.9%)	14 (22.6%)
	Assistant Professor	-	-	26 (41.9%)	3 (4.8%)	16 (25.8%)	45 (72.6%)
	Guest Faculty	1 (1.6%)	-	1 (1.6%)	-	-	2 (3.2%)
Total		1 (1.6%)	-	33 (53.2%)	4 (6.5%)	-	62 (100.0%)
Sharing Photos and other Resources	Professor	-	-	1 (1.6%)	-	-	1 (1.6%)
	Associate Professor	-	-	9 (14.5%)	-	5 (8.1%)	14 (22.6%)
	Assistant Professor	-	-	34 (54.8%)	-	11 (17.7%)	45 (72.6%)
	Guest Faculty	-	-	1 (1.6%)	-	1 (1.6%)	2 (3.2%)
Total		-	-	45 (72.6%)	-	17 (27.4%)	62 (100.0%)
Entertainment	Professor	-	1 (1.6%)	-	-	-	1 (1.6%)
	Associate Professor	-	13 (21.0%)	1 (1.6%)	-	-	14 (22.6%)
	Assistant Professor	-	41 (66.1%)	4 (6.5%)	-	-	45 (72.6%)
	Guest Faculty	1 (1.6%)	-	1 (1.6%)	-	-	2 (3.2%)
Ttotal		1 (1.6%)	55 (88.7%)	6 (9.7%)	-	-	62 (100.0%)
Sharing Video & Pictures	Professor	-	-	1 (1.6%)	-	-	1 (1.6%)
	Associate Professor	-	-	11 (17.7%)	-	3 (4.8%)	14 (22.6%)
	Assistant Professor	-	3 (4.8%)	28 (45.2%)	1 (1.6%)	13 (21.0%)	45 (72.6%)
	Guest Faculty	-	1 (1.6%)	1 (1.6%)	-	-	2 (3.2%)
Total		-	4 (6.5%)	41 (66.1%)	1 (1.6%)	16 (25.8%)	62 (100.0%)

Benefits and barriers to using Web 2.0 tools for teaching and research

Web 2.0 applications can be effectively used in teaching and research. Al-Daihani, Al-Qallaf, & AlSaheeb (2018) in their research identified major benefits and barriers to using the web 2.0 applications for educational purposes which have been refurbished in this study. According to Figure 6, the main benefit according to the participants was making and maintaining the relationship with others (72.58%), followed by getting and sharing relevant information with the peers and students (67.74%). The use of web 2.0 has helped the faculties to improve the visibility of their scientific output and thereby fetching citations to their work. When assessing the major barriers to using Web 2.0 tools for academic purposes, we found that lack of support from the university (79.03%) was the main hurdle cited by the faculties followed by lack of training (77.41%). Lack of time was also a major barrier to 72.58% of the faculties for integrating social media tools for academic purposes. More than half of the participants (56.45%) cited a lack of digital literacy as a barrier.

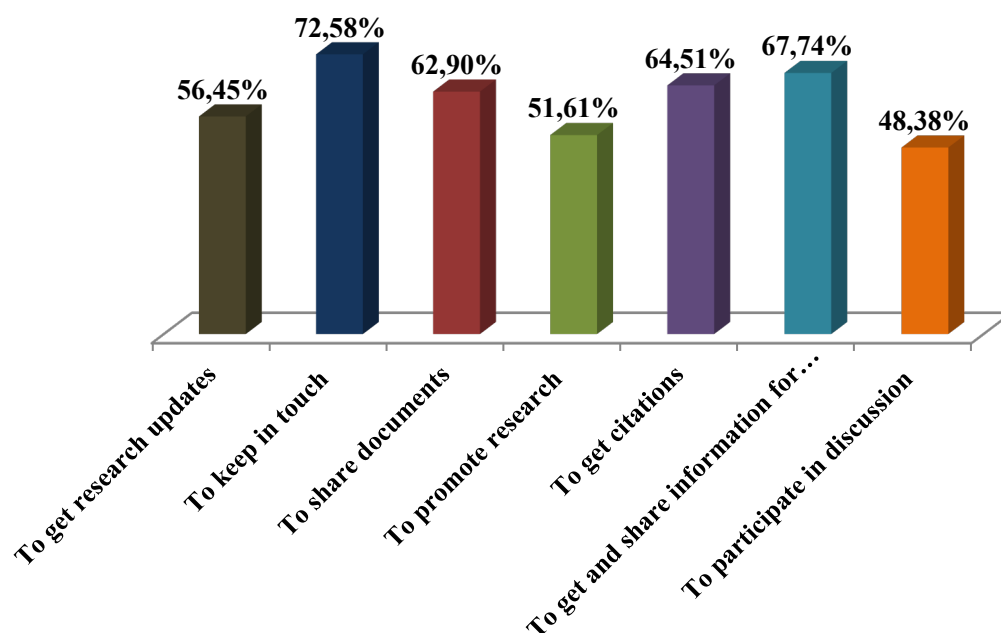


Figure:- 6 Benefits of using Web 2.0 tools for teaching and research

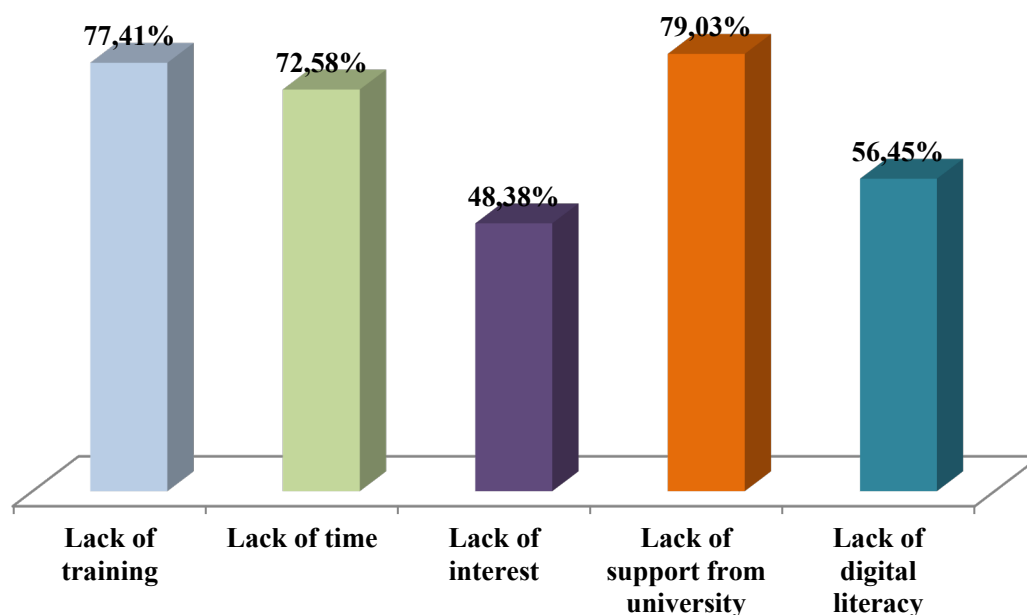


Figure:- 7 Barriers in using Web 2.0 tools for teaching and research

Overall Opinion on Web 2.0 tools

When we sought the overall opinion of respondents about Web 2.0 tools, we found that more than half of the participants (53.2%) preferred Wikipedia for teaching and only a few (1.65) preferred it for faculty work. YouTube would prefer by more than half (56.5%) of the participants for teaching but not for other faculty work. It is also clear that a good number of respondents were not interested to use Facebook (40.3%), SlideShare (27.4%) and Blogs (40.3%) for teaching and other academic & non-academic work even though the activities on these platforms were active (See Table 2).

Table:3 Overall Opinion on Web 2.0 tools for teaching and research

Web 2.0 tools	Use for teaching	Use for faculty work	Use for both	Not use them	Can't answer
Wikipedia	33 (53.2%)	1 (1.6%)	25 (40.3%)	2 (3.2%)	1 (1.6%)
YouTube	35 (56.5%)	5 (8.1%)	18 (29.0%)	3 (4.8%)	1 (1.6%)
Facebook	4 (6.5%)	12 (19.4%)	5 (8.1%)	25 (40.3%)	16 (25.8%)
SlideShare	29 (46.8%)	2 (3.2%)	6 (9.7%)	17 (27.4%)	8 (12.9%)
Blogs	7 (11.3%)	8 (12.9%)	6 (9.7%)	25 (40.3%)	16 (25.8%)

FINDINGS AND DISCUSSION

The current study examined the enactment of web 2.0 tools for academic purposes by the faculties of Tumkur University. The study revealed that the majority of the faculties is preferred to have accounts only on popular social media sites like Facebook and YouTube. A similar kind of study conducted by Ashraf & Mohamed Haneefa (2016) among the research scholars of the University of Calicut brought the same finding that the majority of the scholars were hooked on popular social media sites rather than those which were exclusively meant for academic purposes.

Concerning the preference for spending time for academic purposes, the study found that Wikipedia and YouTube are the most preferred ones. This finding corresponds to the study finding of Vivakaran & Neelamalar (2018). They also noted the wide use of Wikipedia and YouTube as a learning and teaching platform among the higher education faculties of selected colleges in Tamil Nadu. The preference and actual use of web 2.0 tools for academic purposes found a difference or mismatch. Even though the faculties are not preferred some tools like Facebook and Blogs for teaching and learning purposes, the actual deployment of the same is found good.

The period of using the tools revealed that except for blogs, the rests of them are familiar to faculties for more than 2 years. The main purposes of using social media tools also depend upon the nature of the work they wanted to do and the features of the tools. Facebook found a lot of applications among the faculties as it is been a major platform for personal and professional communication and tasks which has been reported in other studies also such as Mansour (2015), Hank, Sugimoto, Tsou, & Pomerantz (2014), Moran, Seaman, & Tinti-Kane (2011). Lack of institutional support is the major bottleneck for the faculties which barred them to use web 2.0 tools effectively for academic purposes. The same has been reported in other studies also (Vivakaran & Neelamalar, 2018 ; Manca & Ranieri, 2016). The overall opinion of the participants showed that many major social media can be effectively used for academic activities. Even though many platforms have their limitations, the attitude toward using the tools is high among the users as reported by Manca & Ranieri (2016).

CONCLUSION

In concluding remarks, it can be said that the use of web 2.0 tools has positively benefitted the faculties in their learning, teaching, and research activities. Furthermore, we would like to suggest the concerned authority address the major obstacles faced by the faculties, especially by offering institutional support and training to the needy faculties to make the best use of tools for their academic activities. It is also noted the underuse of Facebook and blogs for academic activities among the faculties. So, a separate study can be conducted to explore the potential and obstacles of these platforms for teaching in higher education in the university. An extended study can also be conducted among the faculties to explore the awareness and use of academic social networking sites for learning, teaching, and research activities.

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