DIGITAL FOOTPRINT AWARENESS AMONG PROSPECTIVE TEACHERS

Dr. Ampili Aravind
Principal
NSS Training College, Ottapalam
Palakkad - 679 101, Kerala

Abstract

In today’s world of connected learning, the impact of social media on education is becoming a driving factor. The technologies such as what app, Facebook, Twitter, Snap chat etc. are one of the driving forces behind the impact of technology on education. There are positive and adverse effects of social networking to students and still out concerning the long term effects of social media exposure may have. A digital footprint is all of the recorded actions someone commits in a digital environment. These can include but are not limited to: login and logouts, emails, texts, tweets, blog posts, visit to websites, use of mobile device, online purchases and so on. In the present study, the major objective was to find out the digital footprint awareness of prospective teachers. The study employs survey method with a sample of 410 B.Ed. students studying under Calicut University. Digital footprint awareness test was used for collecting data. Statistical techniques of descriptive statistics, percentage analysis and one way ANOVA were used for analyzing the data. It was found that the majority of the prospective teachers have average level of digital footprint awareness. The results also indicate that there is no significant difference in the digital footprint awareness of prospective teachers based on type of management but there is significant difference in the digital footprint awareness of prospective teachers based on their subject of study.

Introduction

In the era of technology, Information Technology aids plenty of resources to enhance the teaching skills and learning ability. The learning resources are being widened; it is easy to provide virtual reality experience in learning. Now with this vivid and vast technique as part of the IT curriculum, learners are encouraged to regard computers as tools to be used in all aspects of learners’ studies. Any time anywhere access to be is the main feature of Information Technology. It is helpful to the education process, there is a chance to information explosion. Education meets the needs of variety of learners. In this situation, IT helps the learning process.
It is a requirement of the society that the individuals should possess technological literacy. IT accesses authentic and up to date information at any time anywhere in learning.

A digital footprint is a trail of data while using the internet. It includes websites, emails and online services. Digital footprint or digital shadow refers to one’s unique set of traceable digital activities, actions, contributions and communications that are manifested on the internet or on the digital devices. There are two main classifications for digital footprints: passive and Active. A passive digital footprint is created when data is collected without the owner knowing, whereas active digital footprints are created when personal data is released deliberately by a user for the purpose of sharing information about oneself by means of websites or social media. In other words, there are two ways digital footprints are built;

- Active ways: Blogs, articles, photos, videos and anything else the user may post.
- Passive ways: What others post on the Internet about the user.

**Need and Significance of the Study**

For teachers, creating and maintaining a digital footprint (Blog, Seesaw, Google drive, Google classroom) are essential in order to follow best practice in education. The students live in an online world; they are physically and emotionally attached to their devices and many of their relationships exist within technology. In the present era, students learn to protect their own privacy and respect others privacy. The digital world is permanent and with each post students are building a digital footprint. By encouraging students to self-respect before they self-reveal, they will consider how and what they share online can impact themselves and others. Teachers should have the awareness about these facts; have the responsibilities to provide the right education to students. Teacher blogs and other online resources help the students to stay connected, engaged, inspired and to continue learning with a community of like-minded educators. Awareness about one’s own digital footprint can also help to support digital literacy.

To meet the new challenges, teachers should develop the digitalized competencies in the teaching career, implement innovative teaching strategies for modern pedagogy. Thus, the present study is entitled as ‘Digital Footprint Awareness among Prospective Teachers’.
Operational Definition of Key Terms

Digital Footprint Awareness: Digital footprint is operationally defined as the information about a particular person that exists on the internet as a result of his/her online activity. Digital footprint awareness is the awareness of a person about the trail, traces or footprints that he/she leave on the internet as a result of online activity.

Prospective teachers: According to Merriam-Webster dictionary, prospective means like to be or become something specified in the future and teacher means a person or thing that teaches something, especially a person whose job is to teach students about certain subjects. In the present study, prospective teacher means teacher trainees in B.Ed. colleges under Calicut University.

Variables of the Study

Criterion variable: The criterion variable selected for the present study is

- Digital footprint awareness

Classificatory variables: The classificatory variables selected for the study are

- Type of management
- Subject of study

Objectives of the Study

- To find out the levels of digital footprint awareness of prospective teachers.

- To compare the digital footprint awareness of prospective teachers for the subsamples based on type of management.

- To compare the digital footprint awareness of prospective teachers for the subsamples based on subject of study.

Hypotheses of the Study

- There exist different levels of digital footprint awareness among prospective teachers.

- There exist significant difference in the mean scores of digital footprint awareness of prospective teachers for the subsamples based on type of management.
There exists significant difference in the mean scores of digital footprint awareness of prospective teachers for the subsamples based on subject of study.

**Methodology in Brief**

<table>
<thead>
<tr>
<th>Method</th>
<th>Survey method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sampling Technique</td>
<td>Stratified random sampling technique</td>
</tr>
<tr>
<td>Sample</td>
<td>410 B.Ed. students studying under Calicut University</td>
</tr>
<tr>
<td>Tool</td>
<td>Digital footprint awareness test</td>
</tr>
<tr>
<td>Statistical Technique</td>
<td>Descriptive statistics</td>
</tr>
<tr>
<td></td>
<td>Percentage analysis</td>
</tr>
<tr>
<td></td>
<td>One way ANOVA</td>
</tr>
</tbody>
</table>

**Analysis and Interpretation of Data**

**Preliminary Analysis**

The important statistical properties of the scores in the variable, digital footprint awareness was analyzed as a preliminary step. The mean, median, mode, standard deviation, skewness and kurtosis were worked out for the variable given in Table 1.

Table 1

*Data and Results of the Preliminary Analysis of Digital Footprint Awareness of Prospective Teachers*

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>Median</th>
<th>Mode</th>
<th>SD</th>
<th>Skewness</th>
<th>Kurtosis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Digital Footprint Awareness</td>
<td>46.89</td>
<td>47</td>
<td>44</td>
<td>7.75</td>
<td>-0.314</td>
<td>-0.459</td>
</tr>
</tbody>
</table>

Results given in Table 1 suggested that there is not much variance in the three measures of central tendency viz; mean, median and mode were found to be 46.89, 47 and 44 respectively. Skewness and kurtosis were found to be -0.314 and -0.459 respectively. This suggests that the distribution of the variable is negatively skewed and that the curve is inclined more to the right.
The value of kurtosis is -0.459 and is less than zero for the normal curve and hence the curve is platykurtic.

Analysis of the Level of Digital Footprint Awareness of Prospective Teachers

The number and percentage of the college students with different levels (high, average and low) of the variable digital footprint awareness worked out and presented in Table 2.

Table 2

Data and Results of levels in Digital Footprint Awareness of prospective Teachers

<table>
<thead>
<tr>
<th>Variable/ Category</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Digital Footprint Awareness</td>
<td></td>
<td></td>
</tr>
<tr>
<td>High</td>
<td>91</td>
<td>22</td>
</tr>
<tr>
<td>Average</td>
<td>238</td>
<td>58</td>
</tr>
<tr>
<td>Low</td>
<td>81</td>
<td>20</td>
</tr>
</tbody>
</table>

It is seen from Table 2 that 58% of the prospective teachers have average level of digital footprint awareness, 22% have high digital footprint awareness and 20% have low digital footprint awareness. The results indicate that the majority of prospective teachers have average digital footprint awareness.

Analysis of the test of significance of difference in the mean scores of Digital Footprint Awareness of Prospective Teachers based on the subsample; Type of Management

One way analysis of variance used to test significant difference of digital footprint awareness of prospective teachers belonging to government, sided and unaided colleges is presented in Table 3

Table 3

Data and Results of the test of significance of difference between the mean scores of Digital Footprint Awareness of Prospective Teachers based on the subsample; Type of Management

<table>
<thead>
<tr>
<th>Variable</th>
<th>Groups</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Squares</th>
<th>F-value</th>
</tr>
</thead>
</table>

From Table 3, it is shown that the obtained F value of digital footprint awareness of prospective teachers based on the subsample type of management is 0.428 which is less than the table value. It means that there exist no significant difference in digital footprint awareness of prospective teachers based on the subsample type of management; government, aided and unaided. Thus the hypothesis is not substantiated.

**Analysis of the test of significance of difference in the mean scores of Digital Footprint Awareness of Prospective Teachers based on the subsample; Subject of Study**

One way analysis of variance used to test significant difference in the mean scores of digital footprint awareness of prospective teachers based on the subsample subject of study; language, science and humanities is presented in Table 4.

Table 4

<table>
<thead>
<tr>
<th>Variable</th>
<th>Groups</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Squares</th>
<th>F-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Digital Footprint Awareness</td>
<td>Between groups</td>
<td>438.631</td>
<td>2</td>
<td>219.316</td>
<td>3.695</td>
</tr>
<tr>
<td></td>
<td>Within groups</td>
<td>24155.430</td>
<td>407</td>
<td>59.350</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>24594.061</td>
<td>409</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

From Table 4 it is shown that the obtained F value of digital footprint awareness of prospective teachers based on the subsample, subject of study is 3.695, which is greater than the table value. It means that there exists significant difference in digital footprint awareness of prospective teachers based on the subsample; subject of study.

Since the obtained F value of the test of significance of difference between the mean scores of the sample based on subject of study is found to be significant for multiple comparisons, scheffe post hoc test is conducted for further study of the result. The data and results of scheffe post hoc test is shown in Table 5.
From Table 5, Scheffe post hoc test reveals that there exists significant difference in the mean scores of digital footprint awareness for subsample based on subject of study; language and humanities subjects of prospective teachers. Then the hypothesis is partially substantiated.

**Major Findings of the Study**

- From the study, it is found that the majority of the prospective teachers have average level of digital footprint awareness.

- The obtained F value (0.428) means that there exists no significant difference in digital footprint awareness of prospective teachers based on the subsample; type of management.

- The obtained F value (3.695) means that there exists significant difference in digital footprint awareness of prospective teachers based on the subsample; subject of study. Scheffe post hoc test reveals that there exists significant difference in the mean scores of digital footprint awareness between language and humanities subjects of prospective teachers.

**Conclusion**

In the present study, the major objective was to find out the digital footprint awareness of prospective teachers. As a sail through the 21st century, technology in the classroom is becoming
more and more predominant. Tablets are replacing the textbooks, and can research just about anything that the needed information on smartphones. The digitalized classrooms have changed the conventional classrooms, the teaching and learning process is entirely changed. In this condition teachers have different duties and responsibilities. Prospective teachers can overcome these challenges in their training periods. The digital footprint awareness help them to improve the teaching and educational purposes by using online media.

References


