College-wise correlation analysis of family background and attributes of UG students with utilization of ICT tools in learning activities in RVSKVV, University Gwalior (M.P.)

Akanksha Sharma, OP Daipuria and Prashant Sharma

Abstract

Throughout all aspects of our lives, information and communication technologies (ICTs) are ubiquitous. There has been much research in this field, but there is a relationship between family backgrounds of UG students with utilization of ICT tools in learning activities. The present study was conducted in Rajmata Vijayaraje Scindia Krishi Vidyalaya, Gwalior, Madhya Pradesh. The study was conducted using a survey research design. A total of 200 undergraduate students from college-wise prepared list were selected with the help of simple random sampling without replacement under a proportionate scheme. The results of the study indicated that there was positive and significant correlation of the utilization of ICT tools with their parents' occupation and family annual income, awareness about ICT tools in learning activities, and knowledge about ICT tools in learning activities, innovativeness, information seeking behaviour, self-confidence and with accessibility of ICT tools in learning activities.

Keywords: ICT tools, learning activities, students

Introduction

Over the past two decades, higher education institutions have heavily invested in Information and Communication Technologies (ICT). Universities have been impacted by ICT in terms of their context, their organization, and their teaching and learning methods. Information and communication technologies (ICTs) can be generally known as the technologies that make possible communication, processing and transmission of communication by electronic means. ICT is an umbrella term that includes diverse number of technologies like radio, TV, telephone which are the old ICTs and computer, internet, wireless and satellite technologies which are the new ICTs.

Information and communication technology (ICT) has become a major source of change or innovation and development of efficiency for many sectors over the world. The application of ICT has become a critical component of both the outside and inside classroom learning process for university students, especially in the education sector. ICT in education is becoming increasingly important as the world moves rapidly into digital media and information. According to some studies, information and communication technologies (ICTs) can and do play a number of roles in education, including preparing graduates and citizens for an information society, improving educational outcomes, as well as improving teaching and learning quality. In today's global network society, social structure and organizational arrangements are largely made up of information networks powered by informational and communication technologies (Castells, 2000) [2]. ICTs broadly defined here to include mobile phones, laptops, apps, internet platforms, networks and databases, as well as underlying infrastructure are a pivotal factor in the existing social order particularly during the COVID-19 global pandemic. “The relevance of ICTs extends beyond identifying, tracing, understanding, managing, treating, and perceiving pandemics” (Wilson & Jumbert, 2018) [6].

Radically, ICTs are our best prospect to maintain social order during a pandemic. ICT platform is the only way to provide information to overcome the limitations of broadcast, passive communication and can provide on demand, active communication and customized.
After seeing the significant contribution of ICT, So the study helps for effective use of ICT tools with the help of objective—issues and their suggestion for effective use of ICT tools in learning activities.

Material and Methods
The present investigation was carried out in RVSKVV university, Gwalior (M.P.). In the investigation, Survey research design was used The population of the study was consist of Undergraduate students (UG) including B.Sc. (Ag) / B.Sc. (Horti), from all five colleges (Indore, Sehore, Khandwa Gwalior and Mandaur) of RVSKVV Gwalior (MP).

200 UG students were selected from College wise prepared list with the help of simple random sampling without replacement under proportionate scheme. The dependent variable studied was utilization of ICT tools and students satisfaction. Data were collected personally with the help of structured interview schedule. To assess the relationship between family background of UG students with utilization of ICT tools in learning activities, correlation coefficient worked out and to test the significance t-test used.

Result and Discussion
College-wise correlation analysis between family background of UG students with utilization of ICT tools in learning activities
The value of coefficient of correlation for CoA Gwalior furnished in the table 1 clearly shows that the utilization of ICT tools was positively correlated and significant at a 0.05 level of significance with their parents’ occupation (0.310) and family annual income (0.303), while, the utilization of ICT tools was non-significantly associated with family size (0.011) and area of residence (0.145).

As for CoA Indore, the value of the coefficient of correlation shows that the utilization of ICT tools by students was positively correlated and significant at a 0.05 level of significance with their parents' occupation (0.310) and family annual income (0.303), while, the utilization of ICT tools was non-significantly associated with family size (0.011) and area of residence (0.145).

As for CoA Khandwa, the value of the coefficient of correlation shows that parents’ occupation and family annual income were positively correlated and significant at 0.05 level of significance with the utilization of ICT tools, and the utilization of ICT tools by students was non significantly associated with family size and area of residence. (Table 1)

College-wise correlation analysis between attributes of UG students with utilization of ICT tools in learning activities
In the instance of students of CoA Gwalior, the Table 2 revealed that the attributes of students, viz., awareness about ICT tools in learning activities (0.70), attitude towards ICT tools in learning activities (0.482), knowledge about ICT tools in learning activities (0.85), innovativeness (0.575), information seeking behaviour (0.776), self-confidence (0.579), accessibility of ICT tools in learning activities (0.753) were allied to by the students at 0.01 level of significance and there was no significant relationship between gender and the utilization of ICT tools.

The data presented for students of CoA Sehore disclosed that the attributes of students, i.e., awareness about ICT tools in learning activities (0.566), attitude towards ICT tools in learning activities (0.377), knowledge about ICT tools in learning activities (0.36), innovativeness (0.58), information seeking behaviour (0.39), self-confidence (0.54) at 0.01 level of significance and accessibility of ICT tools in learning activities (0.280) were allied to by the students at 0.05 level of significance. There was no significant relationship between gender (0.21) and the utilization of ICT tools.

The Correlation coefficient for students of CoA Sehore disclosed that the attributes of students, viz., awareness about ICT tools in learning activities (0.936), attitude towards ICT tools in learning activities (0.298), knowledge about ICT tools in learning activities (0.961), innovativeness (0.634), information seeking behaviour (0.716), self-confidence (0.61), accessibility of ICT tools in learning activities (0.470) were allied to by the students at 0.01 level of significance and there was no significant relationship between gender (-0.163) and utilization of ICT tools in learning activities.

For instance, students of CoA Khandwa The table revealed that the attributes of students, i.e., awareness about ICT tools in learning activities (0.95), attitude, knowledge about ICT tools in learning activities (0.971), innovativeness (0.570), information seeking behavior (0.741), self-confidence (0.722), accessibility of ICT tools in learning activities (0.720) were allied to by the students at 0.01 level of significance and towards ICT tools in learning activities (0.36), significant at 0.05 level of significance. There was no significant relationship between gender (0.051) and the utilization of ICT tools.

The correlation coefficient for CoH Mandaur disclosed that the independent variables, viz., awareness about ICT tools in learning activities (0.62), attitude towards ICT tools in learning activities (0.622), knowledge about ICT tools in learning activities (0.642), innovativeness (0.649), information seeking behavior (0.610), self-confidence (0.58), and accessibility of ICT tools in learning activities (0.693) were allied to by the students at a 0.01 level of significance and there was no significant relationship between gender (0.087) and the utilization of ICT tools.
Table 1: College-wise correlation analysis between family background of UG students with utilization of ICT tools in learning activities

<table>
<thead>
<tr>
<th>S.no</th>
<th>Family background of students</th>
<th>CoA Gwalior (n = 45)</th>
<th>CoA Indore (n = 51)</th>
<th>CoA Sehore (n = 46)</th>
<th>CoA Khandwa (n = 30)</th>
<th>CoH Mandsaur (n = 28)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>r Value</td>
<td>t Value</td>
<td>r Value</td>
<td>t Value</td>
<td>r Value</td>
</tr>
<tr>
<td>01</td>
<td>Parent occupation</td>
<td>0.310</td>
<td>2.141*</td>
<td>0.287</td>
<td>2.099**</td>
<td>0.287</td>
</tr>
<tr>
<td>02</td>
<td>Family Annual income</td>
<td>0.303</td>
<td>2.084**</td>
<td>0.408</td>
<td>3.133**</td>
<td>0.373</td>
</tr>
<tr>
<td>03</td>
<td>Family size</td>
<td>0.011</td>
<td>0.072**</td>
<td>0.191</td>
<td>1.362**</td>
<td>0.087</td>
</tr>
<tr>
<td>04</td>
<td>Area of Residence</td>
<td>0.145</td>
<td>0.965**</td>
<td>-0.058</td>
<td>-0.411**</td>
<td>-0.054</td>
</tr>
</tbody>
</table>

(CoA- College of Agriculture, CoH- College of Horticulture)

**Significant at 0.01 level of probability
*Significant at 0.05 level of probability
NS- non significant

Table 2: College-wise correlation analysis between family background of UG students with utilization of ICT tools in learning activities

<table>
<thead>
<tr>
<th>S.no</th>
<th>Attributes of students</th>
<th>CA Gwalior (n = 45)</th>
<th>COA Indore (n = 51)</th>
<th>COA Sehore (n = 46)</th>
<th>COA Khandwa (n = 30)</th>
<th>COH Mandsaur (n = 28)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>r Value</td>
<td>t Value</td>
<td>r Value</td>
<td>t Value</td>
<td>r Value</td>
</tr>
<tr>
<td>1</td>
<td>Gender</td>
<td>0.001</td>
<td>0.011**</td>
<td>0.21</td>
<td>1.576**</td>
<td>-0.16</td>
</tr>
<tr>
<td>2</td>
<td>Awareness about ICT tools in learning activities</td>
<td>0.70</td>
<td>6.536**</td>
<td>0.566</td>
<td>4.812**</td>
<td>0.936</td>
</tr>
<tr>
<td>3</td>
<td>Attitude towards ICT tools in learning activities</td>
<td>0.482</td>
<td>3.611**</td>
<td>0.377</td>
<td>2.857**</td>
<td>0.298</td>
</tr>
<tr>
<td>4</td>
<td>Knowledge about ICT tools in learning activities</td>
<td>0.85</td>
<td>10.83**</td>
<td>0.636</td>
<td>5.769**</td>
<td>0.961</td>
</tr>
<tr>
<td>5</td>
<td>Innovativeness</td>
<td>0.575</td>
<td>4.612**</td>
<td>0.58</td>
<td>5.038**</td>
<td>0.634</td>
</tr>
<tr>
<td>6</td>
<td>Information seeking behavior</td>
<td>0.776</td>
<td>8.088**</td>
<td>0.39</td>
<td>3.026**</td>
<td>0.716</td>
</tr>
<tr>
<td>7</td>
<td>Self confidence</td>
<td>0.579</td>
<td>4.661**</td>
<td>0.54</td>
<td>4.512**</td>
<td>0.61</td>
</tr>
<tr>
<td>8</td>
<td>Accessibility of ICT tools in learning activities</td>
<td>0.753</td>
<td>7.508**</td>
<td>0.280</td>
<td>2.041*</td>
<td>0.470</td>
</tr>
</tbody>
</table>

**Significant at 0.01 level of probability
*Significant at 0.05 level of probability
NS- non significant

Conclusion

According to the study's findings, the data regarding all five campuses of the RVSKVV namely CoA Gwalior, CoA Indore, CoA Sehore, CoA Khandwa and CoH Mandsaur, the relationship of family background like parents' occupation and family annual income, and attributes of the UG students like awareness about ICT tools in learning activities, attitude towards ICT tools in learning activities, knowledge about ICT tools in learning activities, innovativeness, information seeking behaviour, self-confidence and with accessibility of ICT tools in learning activities shows positive and significant relationship with utilization of ICT tools.

References