INTRODUCTION

Computer technology as applied to educational/training process has generated an increased interest in the past few years. This interest has been to a great extent associated with the appreciation of the many ways computer support can improve the institutional and management responsibilities within the total instructional system. The supporters of computer use for the instructional process offered the promise of greater student achievement, more efficient use of human and material resources, improved attitudes towards learning process and in enhancement of education. Effective computer use is believed to contribute to improve performance. In fact, computers play an important role in terms of instructional methods and learning processes. It is, therefore, desirable to investigate the circumstances under which students feel comfortable when learning with computers. Attitudes and beliefs predict behaviour and behavioural intentions. Belief about an object leads to an attitude towards it and that in turn, leads to behavioural intentions regarding the object. These intentions are responsible for actual behaviour towards an object. When applied to computer use, the theory explains that attitude towards computer use affects user behavioural intentions (future desire), which further affects user actual usage experience (Levine and Donitsa-schmidt, 1997). It is due to this, that a vast literature on psychological research is focusing on the way computer related attitude and beliefs affect the use of computers by students and adults. A number of researchers have examined computer-related attitude dimensions (e.g. liking, usefulness, ease of use etc.) and the relationship between these attitudes and
There is also evidence of growing concern that student negative attitudes might affect individual motivation and performance and thus lead to certain groups having fewer opportunities to use computers which in turn would interfere with future work options. However, most of the researches have concentrated on various attitudinal dimensions, while neglecting to examine the personal beliefs and self-confidence which can lead to these negative attitudes. The available literature suggests that a large body of research has attempted to examine different elements related to computer ownership and computer use. These studies have examined the relationship between computer use and variables such as demographic background (Shashaani, 1994), personality characteristics, types and amount of computer experience, attitudes (Francis and Evans, 1995) stereotypes, anxiety and commitment to learning (Geissler and Horridge, 1993). In general, research demonstrates that exposure to computer is positively related to attitude. Shashaani (1994) and Woodraw (1994) found that level of computer usage strongly affect all computer attitude measures; interest, confidence, perceived utility and stereotype attitudes. The present study examines the relationship between computer related attitude and commitment to learning, computer confidence and computer experience. More specifically, the study examines to what extent and in what direction, self-confidence in computer and computer experience is related to computer-related attitude and commitment to learning in Indian situations.

**OBJECTIVES**

- To identify computer self-confidence and computer related attitude among students.
- To find out the relationship between computer self confidence, computer related attitudes and commitment to learning among computer students.
- To find out the relationship between computer experience, computer related attitudes and commitment to learning among computer students.

**HYPOTHESES**

- Significant relationship exists between computer self-confidence,
computer related attitudes and commitment to learning.

- Significant relationship exists between computer experience, computer-related attitude and commitment to learning.

SAMPLE

A sample of fifty subjects (male and female) who were receiving training in computer applications at NIIT Computer Center, Rohtak (Haryana) were selected as sample for the present study. The subjects were administered a computer attitude and self-confidence questionnaire in the NIIT Computer Center, during training period. Before administering a questionnaire, a brief introduction regarding the goal of study and assurance of confidentiality was given. It took about 20 minutes to complete the Questionnaire.

TOOLS USED

Computer Attitude and Self-confidence

Questionnaire by Levine and Danitsa-Schmidt(1997) was used for collection of data in the present study. It consists of 42 items both negative and positive covering seven dimensions. The Questionnaire was validated using principle component factor analysis with varimax rotation. Seven factors were extracted which contained three to eleven items. The internal consistency co-efficients using Chronbach’s alpha reliability ranged between 0.65 to 0.90 for the scales.

Computer Experience

Computer experience was determined by asking the subjects whether they owned a computer at home (Yes-1, No-0) and the frequency of general computer use both at home and at NIIT Center ranging from (never (0) to lot (3)).

Commitment to Learning Computers

Commitment to learning was determined using the modified methodology used by Levine, Domltsa-Schmidt (1997). Subjects were asked to rate their perceived current knowledge and their desired knowledge of computer applications on 5-point Likert scale ranging from "none" to "very high". Higher scores represent higher levels of perceived and desire knowledge. For the purpose of this research...
the student's desired knowledge minus the student's perceived current knowledge is referred to as "commitment". Commitment is thus defined as the degree of desire for more computer knowledge relative to existing knowledge. Higher positive scores indicate a high level of commitment.

Table 1
INTER CORRELATIONS AMONG COMPUTER SELF CONFIDENCE, COMPUTER EXPERIENCE, COMPUTER RELATED ATTITUDES AND COMMITMENT TO LEARNING

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>SC</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td></td>
<td>ATC</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td></td>
<td></td>
<td>CRS</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td></td>
<td></td>
<td></td>
<td>TOE</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>ADC</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>CHF</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>ST</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>TA</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>C.EXP</td>
<td></td>
</tr>
<tr>
<td>10.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>CL</td>
</tr>
</tbody>
</table>

1. Computer self confidence (SC)
2. Computer as an Educational tool (ATC)
3. Computer related stereotype attitude (CRS)
4. Computer as a tool of Enjoyment (TOE)
5. Appreciation of computer as an important tool (ADC)
6. Computer as Human Friend (CHF)
7. Computer related Sex Stereotype attitude (ST)
8. Total Attitude Score (TA)
9. Computer Experience (C.EXP)
10. Commitment to learning (CL)

RESULTS AND DISCUSSION

Inter-correlation among computer confidence, computer related attitudes, computer experience and commitment to learning were worked out to find out the relationship among these variables. The table depicts the relationship among variables under study. It points out that computer self-confidence is positively and significantly related to computer stereotypes \((r = p < .01)\) and total attitude scores \((r = p < .001)\). The relationship between computer confidence and computer attitudes had often been the subject of inquiry. On the whole, it was found that students with greater confidence in their ability to learn new computer uses have more favourable attitudes towards computers. The results of this study are in tune with findings of Feishbein and Ajzen (1975) who found that the students having greater confidence in their
ability to learn new computer uses have more favourable attitudes towards computers. The results are further supported by the research Woodrow (1994), Shashaani (1994) and Francis and Evans (1995) which indicate a strong, positive correlation between computer related self-confidence and computer attitudes. Computer confidence is found to exert a strong negative effect on commitment to learning computers rather than a positive ($r = p < -0.225$). The results of this study indicate the negative effect of computer confidence on commitment to learning. It suggests that less is the computer related self-confidence more is commitment to learning. Conversely, the more confidence in computer, the lower the commitment to learning computer applications. These findings are indirectly supported by Geissler and Horridge (1993) who demonstrated that students who had taken the computer course at school and students who owned a computer expressed a higher level of a computer knowledge in computer, but lower level of commitment to learning computer applications as compared with students who had neither learnt computers at high school or university or who did not own a personal computer. Geissler and Horridge (1993) reported that the students who have attended a high school or university computer class or owning a computer have strongly and positively influenced a student’s self perceived level of current knowledge and negatively influenced their commitment to learning about computer. Kay (1993) has reported similar results in which lower level of commitment was evident for students who had taken courses at the university level or at high school and among those who have owned a computer. Levine et al (1997) also found computer confidence to have a negative effect on commitment to learning. It was thus concluded by Levine et al (1997) that some sort of balance exists between perceived current knowledge and perceived desired knowledge. Students who showed a high level of computer knowledge often indicated a lower desire to learn more about computers, while the students who indicated a lower level of knowledge often expressed a greater desire to gain more knowledge (Levine et al 1997). It is, therefore, reasonable to assume that the students with low level of confidence are those with little current knowledge and greater desire to learn more, while, the students with higher level of confidence are those who have computer knowledge and therefore, do not desire more knowledge about computers. The findings are in line with the research carried by Levine et al (1997) in
which they found negative correlation between computer confidence and computer attitudes.

Non significant negative correlation was found between computer experiences and computer attitudes ($r = -.082$). Levine and Gordon (1989), identified a strong positive relationship between the presence of a computer in homes and attitudes towards computers. Kay (1993) emphasized on the contextual significance of computer experience and differential effects they may have on enhancing computer attitudes. However, in the present sample the amount of home computer experience and school computer experience is much less because of lack of computer facilities in homes and schools in Indian conditions. It is in this context that no significant correlation was observed in computer experience and computer attitudes. In addition, no significant relationship was found between computer experience and commitment to learning ($r = -.315$). The table value suggests that although no significant relationship was found, it was negative and relatively high. These findings corroborate the findings of Levine et al. (1997) who identified a negative relationship between frequency of computer use and commitment to learning.

REFERENCES


