Development of compact disc (CD) for awareness generation on “Swachh Bharat”

Suchitra Singh, Sanghamitra Mohapatra and Aarti Singh

Abstract

The present research entitled “Development of Compact Disc (CD) for awareness generation on Swachh Bharat” was undertaken with the objectives to collect relevant material and develop a Compact Disc (CD) on awareness generation on Swachh Bharat and to assess the effectiveness of the developed Compact Disc (CD). The study was conducted during the year 2016 in Allahabad district of Uttar Pradesh. Sixty respondents (20 staffs, 20 students and 20 villagers) were selected purposively for the evaluation of the developed CD. The script was written in Hindi language so that the villagers could be benefitted like other respondents (staffs and students). The shooting was done in different places of Allahabad to collect the relevant video clips according to the script. The voiceover was done in studio under technical assistance and the editing was completed with the help of Cyber Link Power Director Video editing software. A close ended evaluation schedule was prepared to evaluate the developed CD. Data was analysed by using suitable statistical tools like frequency, percentage and one way ANOVA table. The CD on Swachh Bharat consisted of the contents to increase the awareness on health practices, sanitation, cleanliness and Swachh Bharat Mission (SBM), the government programme which is run by a present government to make India clean and green. From the tabulated value (3.162), overall results for two parameters i.e. quality of voice and quality of picture were recorded. Significant difference was found in the calculated values of two different parameters such as quality of voice (17.16) and quality of picture (23.84). The result shows that all two parameters within three respective groups had different viewpoints with positive feedbacks. It is concluded from the study that compact disc on Swachh Bharat left a positive impact on viewers.

Keywords: Swachh Bharat Mission, CD, Allahabad, Awareness

1. Introduction

Multimedia is the integration of digital media including combinations of electronic text, graphics, moving images, and sound, into a structured digital computerized environment that allows people to interact with the data for appropriate purposes. The digital environment can include the Internet, telecoms and interactive digital television. The word multimedia is used to have a specialist connotation for the audio-visual industry. Uses of multiple or mixed media in such analogue systems as slide shows or overhead projectors were known as ‘multimedia’ (England and Finney, 2011). As quoted by Barr (1990) [1], “If we wish to prepare students for life-long learning, we must begin to introduce them to the tools which they will use in the careers they pursue after their formal education is completed”.

Technology gives the learners to get control over their learning. New technologies allow learners to access information easily, a process which should also be monitored by instructors (Rakes et al., 1999) [2]. Technology supported instructional environments facilitate transforming abstract information to real-life settings, sustain using new information in practical applications which reflects real situations, problems and sample cases and equip students with experiences which have references in the real world (Grabinger, 1999) [3]. Mahatma Gandhi communicated a quintessential message to the nation through his efforts to educate people around him about cleanliness. He wished to see a “Clean India” where people work hand in hand to make the country clean. To work seriously towards this vision of Gandhi, Prime Minister Shri Narendra Modi launched the Swachh Bharat Abhiyaan on October 2, 2014 and asked people from all walks of life to help in successful implementation of this
mission. The mission seeks to achieve the goal of Clean India in
next five years so that the 150th birth anniversary of Bapu
can be celebrated as an accomplishment of this duty. Swachh
Bharat Abhiyaan exhorts people to devote 100 hours every
year towards the cause of cleanliness (National Portal of
India, 2015).

2. Objectives
The objectives of the present study are:
1. To develop a suitable compact disc (CD) for awareness
generation and sensitization on Swachh Bharat.
2. To evaluate the developed compact disc (CD) as an
educational tool.

3. Materials and methods
The present study was conducted during the year 2016 in
Allahabad district of Uttar Pradesh state. This was selected
purposively because such kind of study had not been
conducted in this area in the past. The CD was developed as
an effective intervention tool. Purposive sampling procedure
was used for selection of 60 respondents i.e. 20 staff members
of the Sam Higginbottom University of Agriculture,
Technology and Sciences (SHUATS), 20 students from the
same university and 20 villagers of Allahabad district.
Keeping in mind the objectives of study, an interview
schedule was structured. Scoring Procedure was adopted
according to Likert scale to evaluate the CD. Data was coded,
tabulated, analyzed and interpreted using suitable statistical
tools viz., frequency, percentage, Analysis of Variance (One
way ANOVA), Arithmetic mean and Standard deviation.

4. Results and discussion

Table 1: Distribution of respondents according to opinion obtained regarding quality of voice of the CD.

<table>
<thead>
<tr>
<th>S. No.</th>
<th>Scale (1–5)</th>
<th>Staff Members</th>
<th>Students</th>
<th>Villagers</th>
<th>F ‘cal’</th>
<th>F ‘tab’</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Excellent (5)</td>
<td>-</td>
<td>-</td>
<td>12 60</td>
<td>7 35</td>
<td>17.16</td>
</tr>
<tr>
<td>2.</td>
<td>Very Good (4)</td>
<td>12 60</td>
<td>10 40</td>
<td>11 55</td>
<td>- -</td>
<td>- -</td>
</tr>
<tr>
<td>3.</td>
<td>Good (3)</td>
<td>8 40</td>
<td>- -</td>
<td>2 10</td>
<td>- -</td>
<td>- -</td>
</tr>
<tr>
<td>4.</td>
<td>Average (2)</td>
<td>- -</td>
<td>- -</td>
<td>- -</td>
<td>- -</td>
<td>- -</td>
</tr>
<tr>
<td>5.</td>
<td>Poor (1)</td>
<td>- -</td>
<td>- -</td>
<td>- -</td>
<td>- -</td>
<td>- -</td>
</tr>
</tbody>
</table>

* Significant, ** Non-significant (P< 0.05)

Fig 1: Distribution of respondents according to their opinion on
audibility of voice quality of the CD.

The table 1 and fig. 1 shows that maximum number of
students (60%) opined that the quality of voice is clearly
audible according to CD on Swachh Bharat followed by 35
per cent of villagers observed that it is audible.
The maximum number of staff members (60%) opined that
the quality of voice is very good and clearly audible to the
target group followed by 55 per cent of villagers and 40 per
cent of students.
The maximum number of staff members (40%) opined that
the quality of voice is clear followed by 10 per cent of
villagers opined to be good.

The calculated value of ANOVA was 17.16 which were
greater than the table value of ANOVA which is 3.16 at 2
degree of freedom at 5 per cent level of significance.
Therefore it is concluded the opinion varies significantly
different due to groups. The order of average value are as C₂
(4.6) > C₃ (4.25) > C₁ (3.6).
The findings are consistent with the finding of Gobl and
Chasaide (2003) [4] which shows that explores the role of
voice quality in the communication of emotions, moods and
attitudes. Listener’s reactions to an utterance synthesized with
seven different voice qualities were elicited in terms of pairs
of opposing affective attributes. The voice qualities included
harsh voice, tense voice, modal voice, breathy voice, whispery
voice, creaky voice and lax–creaky voice. These
were synthesized using a formant synthesizer and the voice
source parameter settings were guided by prior analytic
studies as well as auditory judgments. Results offer support
for some past observations on the association of voice quality
and affect and suggest a number of refinements in some cases.
Listener’s ratings further suggest that these qualities are
considerably more effective in signalling milder affective
states than the strong emotions. It is clear that there is no one
to one mapping between voice quality and affect rather a
given quality tends to be associated with a cluster of affective
attributes.

Table 2: Distribution of respondents according to opinion obtained regarding quality of picture of the CD.

<table>
<thead>
<tr>
<th>S. No.</th>
<th>Scale (1–5)</th>
<th>Staff Members</th>
<th>Students</th>
<th>Villagers</th>
<th>F ‘cal’</th>
<th>F ‘tab’</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Excellent (5)</td>
<td>5 25</td>
<td>17 85</td>
<td>1 5</td>
<td>23.84</td>
<td>3.162</td>
</tr>
<tr>
<td>2.</td>
<td>Very Good (4)</td>
<td>13 65</td>
<td>3 15</td>
<td>13 65</td>
<td>- -</td>
<td>- -</td>
</tr>
<tr>
<td>3.</td>
<td>Good (3)</td>
<td>2 10</td>
<td>- -</td>
<td>6 30</td>
<td>- -</td>
<td>- -</td>
</tr>
<tr>
<td>4.</td>
<td>Average (2)</td>
<td>- -</td>
<td>- -</td>
<td>- -</td>
<td>- -</td>
<td>- -</td>
</tr>
<tr>
<td>5.</td>
<td>Poor (1)</td>
<td>- -</td>
<td>- -</td>
<td>- -</td>
<td>- -</td>
<td>- -</td>
</tr>
</tbody>
</table>

* Significant, ** Non-significant (P< 0.05)
Fig 2: Distribution of respondents according to their opinion on clarity of picture quality of the CD.

The table 2 and fig. 2 shows that maximum number of students (85%) opined that the quality of picture is clearly visible according to CD on Swachh Bharat followed by 25 per cent of staff members and 5 per cent by villagers. The maximum number of staff members (65%) and villagers (65%) opined that the quality of picture is very good and clearly visible to the target group followed by 15 per cent of villagers. The maximum number of villagers (30%) opined that the quality of picture is clear followed by 10 per cent of staff members opined to be good. The calculated value of ANOVA was 23.84 which were greater than the table value of ANOVA which is 3.16 at 2 degree of freedom at 5 per cent level of significance. Therefore it is concluded the opinion varies significantly different due to groups. The order of average value are as \( C_1 \) (4.85) > \( C_2 \) (4.15) > \( C_3 \) (3.75).

The findings are consistent with the finding of Ghadiyaram and Bovik (2015) which shows that most publicly available image quality databases have been created under highly controlled conditions by introducing graded simulated distortions onto high-quality photographs. However, images captured using typical real-world mobile camera devices are usually afflicted by complex mixtures of multiple distortions, which are not necessarily well-modelled by the synthetic distortions found in existing databases. The originators of existing legacy databases usually conducted human psychometric studies to obtain statistically meaningful sets of human opinion scores on images in a stringently controlled visual environment, resulting in small data collections relative to other kinds of image analysis databases.

5. Conclusion
It is concluded from the study that compact disc on Swachh Bharat is a major aid that can help the target group by providing necessary information about this Scheme. CD has played a major role in education of students and villagers. This CD was developed to create awareness and sensitization on Swachh Bharat. Significant difference was found in the mean values of two different parameters such as title and duration. The students were having high level of responses to the title and duration. The main objective of the CD was fulfilled as all the three respective groups gained the required information through CD for awareness generation on Swachh Bharat.

6. Recommendations
1. To enhance the level of awareness there is a need to conduct camps and workshops at village and district levels for the members of the whole family and intensified educational efforts by local health agents and extension workers must be made. The awareness through campaign can be organized for 2 to 3 times with certain interval of days to gain more knowledge.
2. To enhance the utilization of health programmes and Swachh Bharat Mission effective use of Information Communication Technology can be done by imparting educational programmes with effective audio visual aids, by radio and success stories of beneficial effects can be highlighted and publicized.
3. Awareness creation can be made by displaying the CD in the public places like Railway Station, Bus Station, Shopping Malls etc.

7. References