Construction and Standardization of Internet Survey Scale

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Introduction:
The term “Internet survey” refers simply to any SURVEY where the data are collected via the Internet. Internet surveys are having an impact on the survey profession like few other innovations before. In the short time that the Internet (and, more particularly, the World Wide Web) has been widely available, the number of Web survey software products, online panels, and survey research organizations offering Web survey services, either as a sole data collection mode or in combination with traditional methods of survey research, has proliferated. However, the reception within the profession has been mixed, with some hailing online surveys as the replacement for all other forms of survey data collection, and others viewing them as a threat to the future of the survey industry. Although much is still unknown about the value of Internet surveys, research on their utility is proceeding apace. It is difficult to get precise figures on the size of the Internet, but the estimates are impressive. One source reports almost 30 million computers (i.e., hosts connected to the Internet in January 1998), an increase of almost 50% from the preceding year and a 22-fold increase from January (Michael S. Lewis-BeckAlan BrymanTim Futong Liao, 2010).

The World Wide Web (WWW) has also experienced explosive growth: In April 1998, there were 2,215,195 sites, almost double the number from the year before (Michael S. Lewis-BeckAlan BrymanTim Futong Liao (2010)). Although the number of people who connect to or use the Internet is undetermined, it is estimated that in February 1998, there were 62 million users in the United States, and in July 1998, there were 130 million users worldwide.

CMC may be classified as asynchronous or synchronous. Asynchronous CMC includes e-mail, mailing lists, bulletin board services and newsgroups, and Web resources where messages are not exchanged in real time. In such asynchronous systems, the messages are often permanent (unless deleted) and may be stored in some form of archive. E-mail differs from other forms of asynchronous CMC in that it is a point-to-point system involving the exchange of messages between individual senders and receivers (although there may be more than one recipient when the message is copied to others or sent to multiple recipients in a distribution file), whereas bulletin boards and newsgroups involve the posting of messages by individuals that are read by anyone who connects to them. Mailing lists combine features of e-mail and newsgroups: They distribute messages, via e-mail, from an individual sender to all who subscribe to a list. In synchronous types of CMC, including chat rooms provided by Internet service providers and different types of virtual realities users communicate in real time. The messages are transient and, unless recorded, do not endure beyond the time when they are created, sent, and received.

TYPES OF INTERNET SURVEYS
The Internet can be used for survey data collection in several different ways. A distinction can be made between those surveys that execute on a respondent's machine (client-side) and those that execute on the survey organization's Web server (server side). Key client-side survey approaches include e-mail surveys and downloadable executables. In each of these cases, the instrument is transmitted to sample persons, who then answer the survey questions by using the reply function in the e-mail software, entering responses using a word processor, or using software installed on their computers. Once complete, the answers are transmitted back to the survey organization. Server-side systems typically involve the sample person completing the survey while connected to the Internet through a browser, with the answers being transmitted to the server on a flow basis. Interactive features of the automated survey instrument are generated by scripts on the Web server. A key distinction between these two approaches is whether the Internet connection is "on" while the respondent is completing the survey. Web surveys are the prime example of the second type and are by far the dominant form of Internet survey prevalent today. The typical Web survey involves one or more survey questions completed by a respondent on a browser connected to the World Wide Web. Sampling of persons may take many forms, ranging from self-selected samples to list-based approaches. In the latter case, the invitation to participate is often sent via e-mail, with the survey URL embedded in the e-mail message, along with an ID and password to control access. Web surveys are also increasingly used in mixed-mode designs, where mail surveys are sent to respondents, with an option to complete the survey online (Paul Atkinson Sara Delamont, 2010).

ADVANTAGES OF INTERNET SURVEYS
The primary argument in favor of Internet surveys is cost. Although fixed costs (hardware and software) may be higher than mail, the per-unit cost for data collection is negligible. Mailing and printing costs are eliminated using fully automated methods, as are data keying and associated processing costs. These reduce both the cost of data collection and the time taken to obtain results from the survey. Another benefit of Web surveys is their speed relative to other modes of data collection. It is often the case that a large proportion of all responses occur within 24 hours of sending the invitation. Web surveys also offer the advantages associated with self-administration, including the elimination or reduction of interviewer effects, such as socially desirable responding (Pradeep Kumar, T, 2012). RESPONDENTS can answer at their own pace and have greater control over the process. At the same time, Web surveys offer all the advantages associated with computerization. These include the use of complex branching or routing, randomization, edit checks, and so on that are common in COMPUTER-ASSISTED INTERVIEWING. Finally, such surveys can exploit the rich, graphical nature of the Web by including color, images, and other multimedia elements into the instruments.

Operational definitions:
"Internet survey" refers simply to any SURVEY where the data are collected via the Internet.

Internet surveys are having an impact on the Research areas like few other innovations before. In the short time that the Internet (and, more particularly, the World Wide Web) has been widely available, the number of Web survey, online panels, and survey research as a sole data collection mode or in combination with traditional methods of survey research, has proliferated.

DEVELOPMENT OF INTERNET SURVEY SCALE:
The Investigator has decided to construct and standardize a scale to measure the Internet Survey Scale. As the first step the investigator has collected variety of information regarding Inter-
Internet Survey scale could be constructed by adopting various techniques. Presently the developer opted to follow the Likert’s method of summated ratings to develop this scale. The respondents for the scale were Research Scholars/ Research Students, Research Guides/ Supervisors at Teacher Education colleges, Institutes/ Universities of Karnataka state. After a through study of the available literature and other information towards Internet Survey and discussion with Research Guides/ Supervisors, total thirty five items were drafted. The draft was presented to 50 Research experts in the field of education, and their suggestions were incorporated. Some of the items had to be deleted from the draft and finally 20 items were included in the final tool. The unanimity of the Research Experts about the items was taken to be an indicative of the internal consistency of the scale. Out of these, 14 were positive items and 6 were negative items. These 20 items were arranged in random order.

Each statement is set against a five-point scale of ‘ Strongly Agree’, ‘ Agree’, ‘Undecided’, ‘Disagree’ and ‘Strongly Disagree’, and weights of 5, 4, 3, 2,1 are given in that order for the favourable statements ( Positive items) and the scoring is reversed for the unfavourable statements, (Negative items) i.e., 1,2,3,4,5.

Try out of the Scale:
The scale of items/statements intended for the pilot study was administered to the sample of as many as 500 Research Scholars/ Research Students and 50 Research Guides/ Supervisors at Teacher Education colleges, Institutes/ Universities of Karnataka state. Then their responses have been scored carefully and based on their opinion and the suggestions. Then the items were limited only to 20 and remaining statements were omitted based on the difficulties, vocabulary and irrelevance.

Scoring procedure:
The scale has many as 14 favourable (Positive items) and 6 unfavourable statements (Negative items). An individual score is the sum of the scores of the 20 items. The score ranges from minimum 20 to maximum 100. Higher score indicates the Highly favourable Attitude towards Internet Survey

<table>
<thead>
<tr>
<th>Item wise serial no.</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Positive (Favourable)</td>
<td>1,2,3,4,5,6,7,8,9,10,11,12,13,14</td>
</tr>
<tr>
<td>Negative (Unfavourable)</td>
<td>15,16,17,18,19,20</td>
</tr>
<tr>
<td>Total</td>
<td>20</td>
</tr>
</tbody>
</table>

Scoring Procedure

<table>
<thead>
<tr>
<th>Nature of Item</th>
<th>No. of Items</th>
<th>Scoring</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Strongly Agree</td>
</tr>
<tr>
<td>Positive Items</td>
<td>14</td>
<td>5</td>
</tr>
<tr>
<td>Negative Items</td>
<td>6</td>
<td>1</td>
</tr>
</tbody>
</table>

Validity of the Scale:
The items were selected on the basis of the scrutiny by the experts about the intended content of Internet Survey. Therefore the content validity for the tool is presumed to be present. The items selected for the final Scale were based on the item analysis on a sample of 500 Research Scholars/ Research Students and 50 Research Guides/ Supervisors at Teacher Education colleges, Institutes/ Universities of Karnataka state. Therefore, this Scale is deemed to be valid.

Reliability of the Scale:
A Test- Re-test method was calculated the reliability of the scale. Pearson coefficient of correlation formula was used for this purpose. The coefficient of correlation 'r' was obtained. The Test- Re-Test reliability value obtained was 0.70. Since a high correlation value was obtained the test was found to be reliable.

Use of the Internet Survey Scale:
Internet survey Scale can safely be used on Research Supervisors/ Guides, Research Scholars/ Research students at M.Ed, M.Phil and Ph.D levels in colleges and in Universities, i.e., (Age group 23+ to 60 +).

Norms
As a Result of Administering Scale on a sample of 500 Research Scholars/ Research Students, and 50 Research Guides/ Supervisors at Teacher Education colleges, Institutes/ Universities of Karnataka state. The given category indicates the Attitude towards Internet survey and the category wise classification as percentile norms was done.

The following table presents the classification:

<table>
<thead>
<tr>
<th>Scores</th>
<th>Interpretation</th>
</tr>
</thead>
<tbody>
<tr>
<td>20-30</td>
<td>Highly unfavourable attitude towards Internet survey</td>
</tr>
<tr>
<td>31-40</td>
<td>Unfavourable Attitude towards Internet survey</td>
</tr>
<tr>
<td>41-50</td>
<td>Neutral towards Internet survey</td>
</tr>
<tr>
<td>51-60</td>
<td>Favourable Attitude towards Internet survey</td>
</tr>
<tr>
<td>61-100</td>
<td>Highly Favourable Attitude towards Internet survey</td>
</tr>
</tbody>
</table>

The maximum scores in Internet survey Scale are 100 and the scores classified in the percentile norms indicate as follows:

Highly Unfavourable attitude: Typifies Attitude of Internet survey is lower than ordinary one.

Unfavourable attitude: Refers Attitude of Internet survey is simpler than routine one.

Neutral: Refers Attitude of Internet survey is Average

Favourable Attitude: Refers Attitude of Internet survey is Superior than Average one.

Highly Favourable Attitude: Refers Attitude of Internet survey is Outstanding which is Worth Appreciable and mentioning.

REFERENCE

- Paul Atkinson Sara Delamont (2010) Doing Research in Cyberspace pp128-142, Sage methods online, Sage publications, USA
- www.sageresearchonline.com