A Critical View of User Studies

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ABSTRACT

With his personal experience in the library and information science profession, the author brings out problems in conducting user studies and surveys, data representation and publications. It critically discusses some of the concerns like pre-determined outcome through structured questionnaires, improvement of responses, how different surveys of same issues or population gives different results depending on the survey organisers, repetitiveness and originality in users' surveys, problems encountered in data fitting in tables and drawing inferences, joining hands for multiple paper authorships, cutting and pasting technology, and plagiarism. Some of the unethical practices in PhD problem identification are also discussed. It is concluded that dishonest practices are to be curtailed. It suggests the authors, when contributing papers, to keep in mind the reputation and name of their organisation which is by far larger than life and to keep its flag high by avoiding acts that may bring disrepute to it.

1. INTRODUCTION

At the outset, it is clarified that throughout this paper the terms studies and surveys are used to synonymously to mean research carried out by scholars (or authors of papers) by undertaking use and user studies. During my stint first as Editor and later as Editor-in-Chief of *DESIDOC Journal of Library and Information Technology (DJLIT)*, I was appalled to receive a number of User Studies on different aspects of Library and Information Science (LIS). Many a times I encountered dilemma about a paper's originality and its suitability for publishing in the *Journal*; I found many papers are not authentic where they are original and not original where they are authentic. I also pondered on whether a paper adds "something" new to the existing pool of knowledge in the subject or a mere repetition of what was already published earlier. I also felt to convey to the professionals about the shortfalls in the papers. Although the Editors always convey the decision along with referees' comments and shortfalls, it was a routine. The Organisers have given me an opportunity to discuss some of these issues and concerns in use and users' studies. I would like to thank them sincerely for the opportunity.

While use and user studies have become a gateway to do research in social sciences, surveys have become a part and parcel of daily life. Undoubtedly, there will be a survey (or many surveys) being administered everyday in some part of the world. News magazines (for example, *India Today*) will have a daily poll with a simple "yes" or "no" on a contemporary issue. Surveys are made mainly to understand the pulse of the public about a certain issue or contemporary problem or about a product in the market to place (or before launching or developing a new product). Surveys cover both quantitative and qualitative aspects. Thus Market Research Surveys, Government Survey of Citizens (Telangana Sakala Janula (House Hold) Survey), Census, nutrition in school children, etc belong to the quantitative category where respondents answer questions. On the other hand surveys like agriculture survey, food habits, industry survey (notably conducted by *The Hindu* newspaper), and so on. Other types of surveys include political surveys, commonly known as "polls" (for example public opinion polls) about whom to

vote in an election (voter survey), voting demographics, what are the major issues of political parties, number of seats a party would win, exit-polls, public health, etc. Added to these are the recent surveys by news magazines of best engineering colleges in India, best educational institutions, best management colleges, best science colleges, top private companies to work with and so on.

2. ISSUES AND CONCERNS

There are several issues and concerns of users surveys carried out by research scholars, students and faculties, not only from library and information science field but many other fields as well. Wyse (2012) in a more detailed way discussed the various advantages and disadvantages of online surveys. Another website that provides useful information is http://www.survio.com/en/blog/popular-series/online-surveys-and-their-advantages-disadvantages#.VcLztfOqqko. I would like to bring out here certain issues and concerns I experienced in my over 35 years of professional endeavours.

2.1 Aims of Studies and Surveys

Users' or use studies or surveys are taken up to prove one or more hypotheses or arriving at a conclusion or drawing inferences based on the tabulated and analysed data sets. Some use sampling techniques but a few like Census as well as Telangana House Hold Survey, and also when the population covered is manageable (like number of institutions in an organisation, or a city, region etc) cover whole population.

I am aware that use and users' studies throw light on various aspects of a library and information centre. No doubt there are many advantages; they help find out shortfalls in collection, subject areas in which resources need to be added, what services are needed, what facilities to be created or enhanced, which areas of the library need to be to the augmented, what infrastructure is to be put in place and so on. The data may also reveal some grey areas which could be addressed by taking necessary steps. The surveys help research scholars in writing papers, attend conferences, and above all getting their PhDs.

2.2 Open-Ended vs Structured Questionnaires

In any study or survey both open-ended (non-structured) or closed (structured) questions are used. Sometimes, in a structured questionnaire, there may be mix of both closed and open-end questions to get the opinion of the respondent. It is also well known that the response rate is higher when structured questionnaires are used while the response rate is less in the case of all open end questionnaires. This may be because of the lesser time taken to answer structured questions.

In structured (closed) questionnaires, the researcher can frame anticipated answers to the questions to match with the outcome (hypotheses) to be proved by him or her in the research study. Though there is an alternative "Any other (please specify) point at the end of the answers, in my personal opinion, the respondents will be overwhelmed by the readymade answers. Here the researcher is "putting words in to the brains of the respondents, who are not allowed to think and answer. This makes the life of the researcher easy. On the other hand if the questionnaire has open-ended questions, the respondents may take longer time (or even not respond) to fill it up and mail affecting the outcome. To improve response rate, even if the researcher is personally visiting and administering the open-ended questionnaire, the time taken will make him/her to cover only very few questionnaires in a day, making it prohibitive in terms of time taken to complete all the sample population. It will be much more difficult if the sample population is spread over large area, say different locations, states, cities, etc.

2.3 Modification of Responses

According to Wikipedia, survey methodology is a statistical technique used for studying "sampling of individual units from a population and the associated survey data collection techniques, such as questionnaire construction and methods for improving the number and accuracy of responses to surveys (emphasis by author). Since there is scope to improve the number of responses as well as the outcome to

suit the research study the researcher goes on extending deadlines, sending request mails and waiting patiently for responses. In worst case scenarios, some responses may be compromised.

2.4 Differing Outcomes

It is common for different news magazines and newspapers to undertake voter survey to predict polls, some time before elections and predict the outcome. All the agencies make the survey covering same area and similar population based on demographics. It has been observed that many of voter surveys and poll predictions are far from (some times nearer) to the final outcome. Sometimes the result is altogether shocking. For example, nobody predicted that the Indian National Congress (INC, or its alliance) will be reduced to such a small number (INC even lost the Leader of Opposition (LOP) status). For that matter, no survey predicted the victory of *Aam Aadmi* Party in Delhi will be so stunning, where both INC and the *Bharatiya Janata* Party lost the LOP status. This gives a feeling that the surveys are made to a preconcluded outcome as per the *wishes of the management of the publication*. Same population is used by different players covering same issues but leading to different predictions or inferences. What does it say? To me it means, they had predetermined result in mind and accordingly questions were prepared, so that the expected outcome is achieved.

Consider for that matter, the surveys of News Channels on burning societal issues. Many of us know that every news channel is aligned with a political party of ideology. And these parties or ideologies drive the outcome of the surveys or polls differing with other news channel results. How is this to be judged?

2.5 Repetitiveness and Originality

I have been receiving questionnaires for user survey of use of electronic resources or internet and so on which I answered without fail as I know the problem of receiving back filled in questionnaires matter in completing PhD. Many of the questions in these surveys (on Use of Internet or E-resources) are similar with very little rearrangement or rewording. Naturally so as the topic or theme is same and population is similar. So inferences would also be similar.

Further, as Editor/Editor-in-Chief of *DJLIT*, I felt dilemma when I came across papers with titles on Use of Internet in Engineering Colleges from different regions in Karnataka, Tamilnadu, Andhra Pradesh, etc. The topic may change to use of information and communication technologies, or use of e-resources, or something else. All are common in their goal—publish an article in peer-reviewed journal. Initially we published a couple of papers. Later at a cursory glance we used to return the paper to the author informing lack of novelty (or originality) as same inferences, as in earlier published papers, are deduced (the same advantages like Internet is highly useful, provides instant information, etc etc and disadvantages like lack of bandwidth, lack of infrastructure, less number of PCs, or electricity issues, etc.). The outcome is obvious and outcome known; nevertheless a survey is conducted and papers are submitted to conferences or journals. we used to wonder what new knowledge such repetitive papers are adding to the existing knowledge.

2.6 Data Presentation in Tables

I have been on the Editorial Advisory Committee or editor or one of the editors of many Conferences and edited pre-conference papers or proceedings. The latest *mantra* is if there is a national or international conference, many an enthusiastic professional would quickly conduct a survey, sometimes with small) population, analyse and is submit paper. This became more common after the University Grants Commission (UGC) has stipulated qualitative requirements of attending conference, presenting paper in books with ISBN, etc. for career promotions and recruitment to senior posts. Many a time I encounter lengthy narratives of definition of the terms, aims and objectives of study, limitations, hypothesis, and methodology as though the author is submitting doctoral thesis. These should be bare

minimum in a research paper, perhaps, in my view, not more than half a page. I got a shock when I have to listen all these nuances of definitions of community, community information and community information centres in an invited lecture delivered by a well-known *Professor and Head of the Department of LIS* of a prominent university. What is more shocking was the paper was presented in *International Conference* where over 25 from a dozen countries were attending. Perhaps the professor dealt the audience who are mostly working and retired (like me) library professionals as students in the class room (on second thought it may be a class room lecture). It is another matter that the Power Point slides were poor to the standards of international conference). I suggested to the organisers to request presenters to avoid definitions, aims, introduction etc and present only methodology and results, conclusions and suggestions. But few did follow the suggestions.

Another point of concern is the representation of data in tables as well as bar or pie charts. Not only these are repetition but they increase length and problem of printing when colours are used. For aesthetics colour bar or pie charts may be very pleasing, but when printing in black and white (as most conference organisers do) use of lines, blocks and grey may be more appropriate. Yet another issue is lengthy tables. I have observed a few authors merely list tables without deducing any inference. It means the author was unable to understand anything from the data in the table. Or more precisely, *perhaps the author leaves it to the reader to comprehend and understand what the table conveys (or what the author does not convey???)*.

When listing variable head, say number of authors and number of papers published in descending order, depending upon the number of entries (rows) in the table the author should cut at a specific number of papers, say 10 or 5. To my shock in one of the PhD theses I received for evaluation, the researcher listed 250 entries, in which 41 authors published 2 article each and 241 authors published one article each!!! Some 404 titles of journals listed running to many about 20 pages in a table of Ranked list of Journals including listing all titles of journals only once cited. In another table the researcher listed multi-authored papers running to 40 pages of names authors of papers comprising 1229 entries of single-authors, 283 with two authors, and 74 with three authors. In yet another table, the scholar lists all 770 books cited in the articles as Citation Classics with top rank book receiving 6 citations (!!!) and 658 books with single citation were also mentioned as Citation Classics (sic).

Recently the Editors have to return some of the papers received for the current issue of *Journal of the Indian Library Association (JILA)* as these included some of the concerns mentioned here. Some papers needed heavy editing as the papers contained valuable data but poorly written. In the case of one big table, it took me one whole day to reduce it to meaningful representation. One author provided a category wise status of more than 70 State Central/District libraries of Uttar Pradesh. For the love of the profession we rewrote some paragraphs and inferences from tables. I would like to mention here one instance where, with consent of the original author, my co-editor became the second author, for a paper presented in one of the conferences as it needed overhauling and rewriting for improving quality of the paper.

2.7 Mutual Benefit Programmes

I observed another phenomenon of writing more number of papers by a single team or a guide. It is not objectionable but for rotation of names from first author to second or third and vice versa. It means I write a paper and take your name as co-author and you write a paper and take me as co-author. Same co-authors from different institutions contribute papers to many conferences rotating names. Of course, it is institutional collaboration which is necessary for cross-fertilization of ideas. So, both (or more) have as many papers instead of one each. Can we call it mutual benefit programme? I believe it is unethical.

2.8 Ctrl C and Ctrl V

Another malady I observed in submission of papers is cutting and fitting technique popularly known as Ctrl X or C and Ctrl V. In my personal observation when we check for plagiarism, startlingly some paragraphs are similar (to those already published). This is again I believe the effect of UGC directive, increased availability of published literature in open access, and the lack of time (or casual and complacent approach?) because of busy schedules of authors.

2.9 Plagiarism

The adage says that if you copy from one article, it is plagiarism and if you copy from many, then it qualifies as research enabling one to get PhD. This applies to some of our students including scholars and authors of LIS field. "A survey among the student community shows that those pursuing higher education use information relevant to their subject only when they are pressurised to look up for some information on their own. Many a project work, seminar and thesis submitted by students happen to be plagiarised from a source which they do not even bother to mention or acknowledge much to the consternation of the authors, who sometimes accidentally stumble upon their work verbatim in another person's name. We have no choice but to stick to the old fashioned way of holding on to our integrity and honour and acknowledging the hard work and the earnest efforts of people who may have arrived at some results in their respective fields (Prathi, 2015).

There are many instances where world famous personalities, vice chancellors, professors, and scientists are resorting to plagiarism day in and day out. So, some of the research scholars and/or authors are not exceptional to this phenomenon who help themselves to use material from already published sources or from websites without making acknowledgement. These do not follow ethics and kill their conscience for pecuniary benefits or professional progresses (see Moorthy and Ramaiah (2014) for a detailed discussion of the factors influencing plagiarism, the circumvention of plagiarism detection tools and issues and concerns elsewhere).

2.10 Duplication of Surveys

We discussed about the issues and problems of research papers written based on user studies and surveys. Now I would like to dwell upon a similar phenomenon in doing research. I fail to understand why guides do not encourage students to take challenging topics for doing research. In my view majority of PhDs in library and information field depend on surveys or studies. The topics will be similar covering a specific area or same population. I cannot but mention about one topic which has given rise to many (may be anywhere between 40 and 50). To my knowledge Dr M.S. Sridhar, a scientist of Indian Space Research Organization took "Study of Information Seeking Behaviour of Space Technologists with emphasis on Correlating User Characteristics with such Behaviour" in early eighties as topic for PhD. After this, many scholars took study of information seeking behaviour in various fields of human knowledge. I know two PhD topics taken during the same time in my organization with similar topics. "Information Seeking Behaviour of DRDO Scientists" by one scientist, and "Information Gathering Habits of DRDO Scientists" by another Scientist. Both registered in about 6 months gap and awarded by universities about an year apart. I do not know if there is a lot ofdifference between "seekingbehaviour" and "gathering habits". I had the opportunity to edit (no, rewrite) some chapters of one thesis, and I know what are the findings of another. The final observations are to a large extent same. Same population (DRDO scientists) covered by them, same type of topic, same results. But two PhDs awarded. Should we believe that the second guide does not know the first one was registered already? I know of a PhD thesis with a topic "Information Seeking behaviour of Medical Practitioners" from a Town. I received PhD theses for evaluation covering bibliometric analysis of 7 years of a periodical (which is published for the last 20 years), when all volumes and issues are available on web. I received another PhD thesis on digitization of manuscripts limiting to 10 universities of which only 6 were covered and details of 7 were given with more than 2 chapters merely cut and paste of material from the

universities web sites. While I rejected one, I suggested revision for the other, both scholars were awarded PhDs!!! As a library professional, I feel it disgusting.

3. ONLINE SURVEYS

The ever changing applications of information technologies, increasing access to computer and computing facilities, and the one-click distribution of mails via World Wide Web and Internet paved way to computer (Internet)-administered questionnaires. These became attractive alternatives to traditional systems of surveys like mail, personal or telephone interviewers and printed questionnaires. However, there are many navigational issues in the online design and administration of questionnaires (Norman, *et al.* 2000, 2001).

A Google search on the topic *Online questionnaires* on 6 August listed about 62,10,000 results in 0.34 seconds. These provide a lot of advantages. Online survey providers like Survey Monkey (https://www.surveymonkey.com/mp/online-questionnaires/) have millions of audience to take survey. They provide guidelines on designing, constructing the questionnaire, etc. Smart Survey (https://www.smartsurvey.co.uk/online-questionnaire) provides online sample questionnaires and templates removing the Research Scholars the trouble of making their own efforts in designing the questionnaire. Kwiksurvey (https://kwiksurveys.com/) helps in creating simple and fast questionnaires and facilitates unlimited questions, unlimited responses (???), exporting results, and sending invitations by email. Though, the email list may not be having many library professionals from India. eSurv (http://esurv.org/) integrates with the Scholar's email provider besides sharing on FaceBook and other social networks. Table 1 (Wright, 2005) lists various websites providing online survey facilities.

<u>Table 1. Websites that facilitate online surveys</u>

| CreateSurvey | http://www.createsurvey.com |
|---------------|----------------------------------|
| EZSurvey | http://www.raosoft.com |
| FormSite | http://www.formsite.com |
| HostedSurvey | http://www.hostedsurvey.com |
| InfoPoll | http://www.infopoll.net/ |
| InstantSurvey | http://www.netreflector.com |
| KeySurvey | http://www.keysurvey.com |
| Perseus | http://www.perseus.com |
| PollPro | http://www.pollpro.com |
| Quask | http://www.quask.com |
| Ridgecrest | http://www.ridgecrestsurveys.com |
| SumQuest | http://www.sumquest.com/ |

SurveyCrafter
SurveyMonkey
SurveySite
WebSurveyor
Zoomerang

http://www.surveycrafter.com
http://www.surveymonkey.com
http://www.surveysite.com
http://www.websurveyor.com
http://www.zoomerang.com

<u>Source:</u>Wright, Kevin B. Researching internet-based populations: Advantages and disadvantages of online survey research, online questionnaire authoring software packages, and Web survey services.

http://www.supersurvey.com

However, when compared to the traditional surveys like mailing (by post), telephone, and oral interviews), online surveys are riddled with many issues. Gingery (n.d) listed many advantages and

SuperSurvey

disadvantages of online surveys. Advantages include low cost, automation and real-time access, less time, respondent convenience, design flexibility and absence of interview. Disadvantages cover limited sampling and availability of respondents, cooperation problems due to lack of personal touch and absence of interviewer.

4.CONCLUSION

I would like to conclude my concerns about "User Studies, Data Representation: Issues and Concerns" with one word of caution. The invaluable suggestion I received from Dr SS Murthy, the then Director, DESIDOC when I took a paper written by me to seek permission to include his name also to get it accepted by conference organisers. First he declined to have his name as first (or co) author as it is unethical since he has not contributed anything to the paper. He made one statement as regards the paper and its contents: "Whenever you submit a paper with by-line of DESIDOC as institutional affiliation, try to be honest, truthful to facts and have some quality. For, DESIDOC is far far far bigger than you, an individual. One bad piece will get disrepute to DESIDOC". I followed it till date. A later Director of DESIDOC (for that matter many Directors of many institutes) gave a fatwa that any article that goes out for publication will have his name and his deputy's name as co-authors. Lo and behold, they have nearly 35 papers each as last and last but one author. The author of a paper is very small, but the institution and the organization he/she works are much much bigger than him in stature, name and fame. As an individual, an author loses very little but the disrepute to institution is irreparable. Let us try to uphold the Institution/university/ organization in high esteem.

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REFERENCES

- 1. Gingery, Tyson. Advantages and disadvantages of online surveys. Available at Error! Hyperlink reference not valid.
- 2. Moorthy A.L. and & Ramaiah, Chennupati K. Copyright in open access era: Dealing with plagiarism. Paper presented in the National Conference on Scholarly Communication and Intellectual Property Rights (SCIPR-2014) at School of Planning and Architecture, Vijayawada, 4-5 August 2014. In Scholarly Communication and Intellectual Property Rights, edited by Y Srinivasa Rao & AL Moorthy. Hyderabad, BS Publications, 2014. pp. 103-120.
- 3. Norman, Kent L., Pleskac, Timothy J., Norman, Kirk, and Stevenson, Rod. Navigational issues in the design of On-line self-administered questionnaires. *Behaviour & Information Technology*, **20** (1), 2001, 37-45. DOI: 10.1080/01449290010021764. Available at http://hcil2.cs.umd.edu/trs/2000-10/2000-10.pdf, accessed on 6 August 2015
- 4. Norman, Kent L., Pleskac, Timothy J. and Norman, Kirk. Navigational issues in the design of on-line self-administered questionnaires: The effect of training and familiarity. Available at http://hcil2.cs.umd.edu/trs/2001-09/2001-09.html, accessed on 6 August 2015
- 5. Prathi, S Radha. Ethics of knowledge sharing. *Deccan Herald*, 07 July 2015, http://www.deccanherald.com/content/487826/ethics-knowledge-sharing.html, accessed 8 July 2015
- 6. Wikipedia. (https://en.wikipedia.org/wiki/Survey_methodology, accessed on 14 July 2015).
- 7. Wright, Kevin B. Researching internet-based populations: advantages and disadvantages of online survey research, online questionnaire authoring software packages, and Web survey services, *Journal of Computer-Mediated Communication*, **10** (3), April 2005; DOI: 10.1111/j.1083-6101.2005. tb00259. Available at http://onlinelibrary.wiley.com/doi/10.1111/j.1083-6101.2005. tb00259.x/full; accessed on 6 August 2015.
- 8. Wyse, Susan E. Advantages and disadvantages of surveys. http://www.snapsurveys.com/blog/ advantages-disadvantages-surveys/; accessed on 6 August 20150.