

Adarsha Comprehensive College of Education & Research

Karve Road, Pune – 04

Dr. N. K Upasani Research Centre Initiative

Lecture Series on Tools for Data Collection

Report

In the light of the current pandemic, teaching learning has undergone a metamorphosis and learners and educators are stretching their boundaries to come up with solutions that are viable and enriching. Team ACCER initially came up with the idea of having a continued lecture series which spanned over five Saturdays as an in-house activity for its research scholars, but eventually the sessions were so fruitful that they are now publicly available on Adarsha's official YouTube Channel for open reference : Adarsha College Pune <https://www.youtube.com/channel/UCEvZ1KAq6TN5MRogUyzGXIA>.

The lecture series - "Tools for Data Collection" followed a proper sequence – starting from the inception of a data collection tool to its presentation. The following minutes of the lecture series explain in brief the gist of what was done during the various sessions.

27th June 2020

- **Session 1 (10.30am – 11.30am) – Dr. C.A. Gandhe – “Review & Referencing”**

This session being the opening one threw light on the importance of literature review covering almost all aspects related to it. A review of studies done in the past, ongoing researches, books etc form the backbone of any research after the researcher has realised the need to do it. The keywords involved in the research should be noted down and review should for each keyword so that a search strategy can be decided. The speaker enlisted the various sources from where one can refer to this literature. Apart from the regular books, periodicals, journals, reports, he also enlisted the paid and free database options that a researcher can skim through to look for related literature. The various search engines discussed were helpful as they are the need of the hour. Towards the end, he showed a live demonstration as an example of a search engine and discussed its various features. As the sources are numerous, one has to be selective about what and how to go about reading through the literature. Points about how to write and present were elaborated thereafter.

The session was extremely hands on and relevant as it gave a wholesome understanding of ‘how, why, what and when’ with respect to review of related literature. The scholars did ask questions to clarify their doubts about various platforms available today and the speaker explained each query in detail.

- **Session 2 (11.30am – 12.30pm) – Dr. M. S. Kamble – “*Survey Method for Data Collection*”**

Survey Method is an important way of collecting data in a research as one can collect data in bulk. This session focussed on comprehensive information about surveys and when are they most useful. The speaker had used Survey method in his own research and hence, shared a few insights about the same. Survey method is essential to assess the current situation, generalise past/present/ future trends, compare opinions, derive world views etc., and it not just collecting random information. The components of a survey should be absolutely directed towards getting the information that the researcher needs and shouldn't have random questions else it'll be futile. Surveys are an important tool for data collection when we talk of descriptive research. It is one of the quickest ways to assess the thought process of a chunk of the society. He discussed the main eight types of surveys in social sectors and gave apt examples. He also discussed how the respondents perceive surveys and warned about their callous approach which might prove to be a hindrance. He stressed about how to combine surveys with other tools to get a more decisive outcome.

This is one of the most basic and widely used tools, which was discussed in detail by the speaker. He reaffirmed that the steps of conducting a survey should be followed religiously in research studies and clarified the doubts of scholars.

04th July 2020

- **Session 3 (10.30am – 11.30am) – Dr. P.N. Joshi – “*Questionnaire for Data Collection*”**

Questionnaire is a widely used tool for data collection and this session elaborated on how one can make it more effective and also all the steps that the researcher needs to follow to create one. The speaker took the students through a sequential journey of its definition, elements of a questionnaire which include cover letter, title, instructions and the questionnaire itself. Each was discussed with a graphical example and the minor aspects were elucidated. The advantages, disadvantages and the appropriate studies where questionnaires could be helpful were clearly explained. The two types – Structured & Unstructured questionnaires and their characteristics were thoroughly explained. Moving into the finer aspects, the types of questions were enlisted and relevant examples were shared. A new classification of question based on the purpose was also discussed. Thereafter, a comparison was struck between Open & Close ended questions. A colourful flowchart in the presentation explained the steps involved in developing a questionnaire.

The session was enriching as it touched on all the key points regarding a questionnaire. There was no scope of any dichotomy or doubts about its use and relevance and the students were clear in their minds about the steps to be followed. The presentation and explanation were lucid and hands on

- **Session 4 (11.30am – 12.30pm) – Dr. R.G. Jaybhaye – “Online Tools for Data Collection”**

Given the current situation, this is amongst one of the most relevant topics that needed discussion. Be it qualitative or quantitative, online tools will be the most preferred ones in the times to come. Be it time, logistics or convenience, online tools do have an edge over the traditional tools. The speaker elaborated on the various techniques and corresponding online tools available for each. The most common used tools like interviews, questionnaires, survey etc were discussed more in detail with examples and which online tool can be used to maximise and optimise the output. Towards the end, the speaker laid stress on how to select the appropriate online tool for your research. One needs to be precise about what information is needed and what one’s objective is.

The session opened new avenues for researches as now most will be using these online tools for data collection. The sites discussed will be helpful for all scholars throughout the process of data collection.

11th July 2020

- **Session 5 (10.30am – 11.30am) – Dr. S.K. Bhandare– “Rating Scale & its types”**
- **Session 6 (11.30am – 12.30pm) – Dr. S.K. Bhandare – “Rating Scale & its types”**

Rating scale is a very important tool of data collection, mostly to gather quantitative data. The speaker stressed on the purposes and characteristics of a rating scale and how it is a systematic way of getting opinions, assessing values or degree of any emotion or thought. Plus, a rating scale can be used in online and offline formats both. The X axis graph is the ‘continuum’ which describes the extent of the feeling/ emotion. The speaker then enlisted different types of rating scale and used the BB to explain things of how we can place items in a rating scale. The ordinal scale and the interval scale were discussed in detail. The further classification was done in Graphic; Numerical; Descriptive; Comparative scales and proper examples were given. The Likert Scale, Semantic Differential Scale, Thurston Scale etc were discussed and the session then moved on to explain how to establish validity and reliability of the same in short.

The speaker clarified quite a few doubts about different scales and researchers wanted to know if we could mix questions to achieve our objective. The speaker highlighted that even though we mostly have odd number of responses on the scale, in higher studies; even numbers are generally used to that the respondent might not take the leeway of ticking the neutral / central point.

18th July 2020

- **Session 7 (10.30am – 11.30am) – Dr. L.R. Vartak – “Interview as a Tool of Data Collection”**

Interviews are fast gaining popularity in research as qualitative studies are taking centre stage. Mostly in educational research, one uses structured interviews which are used to know about opinions, motives, experiences, likes/dislikes, attitudes, thoughts & emotions.

After briefly comparing an interview and a questionnaire, the speaker explained the functions of an interview and its classification based on a few pointers. Almost over ten types of interviews were touched upon and examples were shared. In a structured interview, things are pre planned and questions are pre decided and hence, it gets over in a stipulated time and has quite a few advantages. The speaker stressed amply on the steps that the researcher needs to follow to develop, standardize and conduct an interview and followed up with analysis which needs to be done on the basis of content & thematic analysis.

The budding researchers had a few doubts which were then clarified by the speakers. A lot of keywords were introduced which make for interesting reading for everyone. This session would surely tempt researchers to skilfully use interview as a tool for data collection.

- **Session 8 (11.30am – 12.30pm) – Dr. S.S. Roy – “Focus Group Interview”**

The concept of a Focus Group Interview has been borrowed from market research. It is being used by a lot of researchers these days and the speaker elaborated on its characteristics and that it is meant for a small homogeneous group and is used to share and compare experiences, develop ideas and explore issues. A comparison was struck between one to one interview and focus group interview. Setting up a focus group interview needs preparation and the active involvement of a moderator and preferably also an assistant moderator. The steps involved, role of a moderator & assistant moderator were discussed in depth. The speaker mentioned types of FGIs, how to choose & combine questions and also elucidated about how to schedule and carry out the FGI. The analysis and its presentation were discussed towards the end which helped one understand the importance of codes, themes, conclusion & feedback.

The speaker deliberated on the characteristics as this is comparatively a new tool of data collection and understanding. The examples shared were very relevant and the speaker managed to explain every bit in detail in the question answer session too. The speaker asked a few researchers of how they could use FGIs in their own study and at what stage!

25th July 2020

- **Session 9 (10.30am – 11.30am) – Dr. P.B. Kasture – “Validity & Reliability of a Tool”**

This was amongst one of the concluding sessions and one of the most important too as one creates one’s own tool and needs to establish its validity and reliability to go through the steps of standardization. The speaker very clearly differentiated and defined what validity and reliability of a tool is. Types of validity were discussed in detail: face validity, content validity, criterion validity; predictive validity; concurrent validity; construct validity. Real life examples were discussed with each one which could help draw connections. A tabular comparison between validity and reliability made it very easy to understand how the two compare and differ at every point. There are factors which affect reliability and these were explained well. The various methods used to determine reliability and its types were discussed and corresponding research examples were shared. The speaker made an interesting point about how validity and reliability

differ in quantitative & qualitative researches and that alternative criterion like credibility, transferability, dependability & confirmability could be used in the latter.

An interesting discussion ensued thereafter about how these four newly introduced terms apply to qualitative research and the minor differences etc. The conversation between the teachers helped resolve any doubts that cropped in the minds of the research scholars.

- **Session 10 (11.30am – 12.30pm) – Dr. S.H. Vishwasrao – “Data Presentation”**

This was the final session of the lecture series which stressed on different aspects of how to present the collected data. This forms one of the most important aspects as one might have collected endless amount of data but the inability to present it well, will just act as a spoiler and hence the presentation should be clear, simple to understand and comprehend for further reference. First we need to classify data which serves a lot of purposes. This classification will depend on what kind of data one has collected. The types of classification were discussed with examples. Thereafter the speaker spoke of diagrammatic & graphical representation of the collected data and explained its rules. Various diagrams were explained with examples and where can they be most suitably used. Bar diagrams, pie charts were discussed in more detail. Graphs and their types were discussed in detail and where can they prove to be most useful.

The students had a few queries which got clarified during the discussion. Making it formally presentable was the key and the speaker made a final point saying that presentation skills are applicable to all chapters and that it is an important skill to learn as a researcher.

Overall remarks:-

The sessions were conducted over Zoom and technically the execution was flawless. The weeklong break in between gave ample time for everyone to read more for themselves and reflect on whatever was taught. Dr C.A. Gandhe offered all the technical support that the team needed. The research scholars would surely have a lot of points to reflect on and the gratitude that poured in form of messages, notes proves that they want more of it – the guidance and inputs.

Suggestions for Future

- Weekly /Fortnightly sessions - Just Q & A round between students and teachers. Many a times, a researcher keeps encountering one or the other problem and all might be at different stages in their research. So the points could be accumulated and discussed in the forum so that everyone else also gets benefited. Plus, this would keep everyone on track and motivated.
- Shorter presentations of research scholars who have put together whatever till now. This would help motivate the rest and also can have a questioning round by teachers (just like during proposal presentation) so that a few mistakes can get rectified then and there.

- Rest some important topics like Statistical tools for analysis, qualitative & mixed method research tenets and inputs writing one's thesis. A follow-up checks every two months or so would be great!

I congratulate the team of behalf of all research scholars for organizing this lecture series and helping us through this journey of research.

Report by,

Ms. Radhika Jadhav, Research Scholar.
