RESEARCH GUIDE

for MCMC & SMC

Third Edition

National School of Public Policy
Lahore, Pakistan

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(Third Edition)

National School of Public Policy, Lahore

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This *Research Guide* is authored by Dr Faheem Jehangir Khan, Senior Research Economist at the Pakistan Institute of Development Economics (PIDE) and former Directing Staff–Research, National Institute of Management (NIM) Islamabad. The Guide is reviewed by Dr Safdar Ali Sohail, former Dean, National Institute of Public Policy at National School of Public Policy (NSPP) and former Director General, National Institute of Management, Islamabad.

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PREFACE

At the National Institute of Management (NIM), National School of Public Policy (NSPP), the aim of research skill development of civil officers is to promote deeper understanding and greater utility of research-based evidence in public sector management and public policy process. Learning by doing research at NIM will:

- Enable the participants to plan, design and conduct policy research, evaluate the quality and utility of results, and, raise valid questions about the research process and policy implications.
- Improve the knowledge and intellectual abilities of the participants by critically evaluating the observations and complex reasoning.
- Advance participants' analytical and critical thinking needed to analyse, evaluate, and compare research/policy arguments, and manage problem-solving situations by consolidating *what works*, *why*, and *why not*.
- Enhance personal and professional effectiveness in managing public policy-decisions.

Keeping in view the above-mentioned research training objectives, the purpose of this 'Research Guide' is to provide the participants of the Course (MCMC & SMC) a detailed orientation, instructions, and guidelines on research methodology for planning, designing, conducting and writing research.

This 'Research Guide' is divided into three parts: (Part I) *Research Orientation* highlights the importance of research in policy and practice, and briefly explains the stages involved in a research process; (Part II) *Research Methodology* presents what are research methods, compares quantitative and qualitative research, and describes case study research and action research; and (Part III) *Planning and Conducting Research* provides detailed instructions about planning research, research design, data collection, data analysis and writing research.

A number of individual and group research activities are planned for each MCMC & SMC training. These include Individual Research Paper (IRP), Current Issue Presentations (CrIP), Case Study Research (CSR), Simulation Exercises (SE) and Tutorial Discussions (TD). Keeping in view the technical assistance required for the participants to conduct these research assignments, *annexes* are included at the end of this Research Guide to provide detailed guidelines for IRP, CrIP, CSR, and SE. Annexes on citation & referencing style, policy on plagiarism, and essentials of good quality research have also been included for participants' guidance.

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LIST OF ACRONYMS

APA Style	American Psychological Association Style
BISP	Benazir Income Support Programme
CI	Chief Instructor
CrIP	Current Issue Presentation
CrIW	Current Issue Writeup
CSP	Case Study Research
DS	Directing Staff
FPSC	Federal Public Service Commission
IRP	Individual Research Paper
IST	Inland Study Tour
LFV	Local Field Visit
MCMC	Mid-Career Management Course
NIM	National Institute of Management
NSPP	National School of Public Policy
PSDP	Public Sector Development Programme
SE	Simulation Exercise
SMC	Senior Management Course
T&C	Training & Coordination
TD	Tutorial Discussion
TNR	Times New Roman
TVET	Technical and Vocational Education Training

PART I: RESEARCH ORIENTATION

Research is a systematic collection, analysis, and presentation of information in order to establish facts and generate knowledge by reaching a new understanding. It entails a careful and detailed investigation into a specific problem, concern, or issue using an appropriate research strategy.

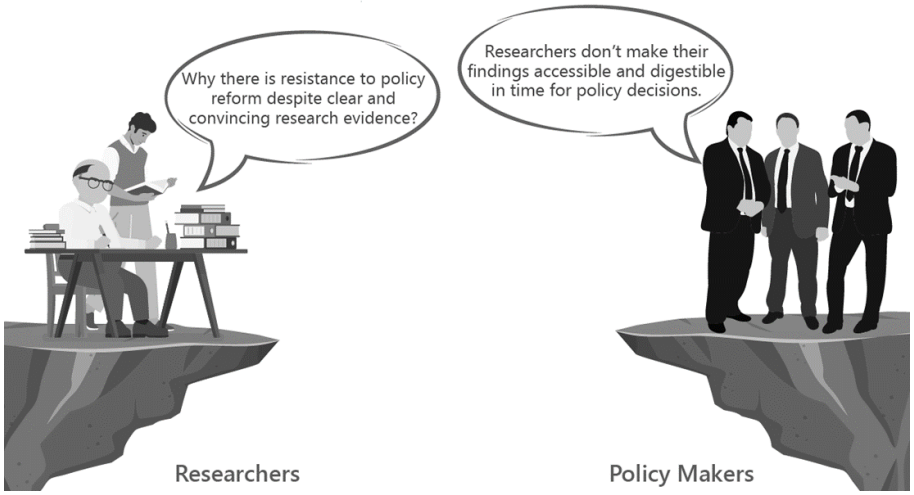
1.1. RESEARCH IN POLICY AND PRACTICE

Research is a key component of *knowledge resource* which is often used to inform, and sometimes to influence, policy decisions. The purpose of research is often to inform the public policy process. From agenda-setting to policy-formulation, decision-making, policy implementation and evaluation, research studies inform the broader audience – including the policy-makers and practitioners – about *what went wrong*, *why*, and *how to improve it*. It is a known fact that knowledge generated through evidence-based research could benefit the government and other stakeholders to devise/review policy initiatives and practices and make right decisions when designing/revisiting policy interventions. Gaining this knowledge often requires research to define and understand the key issues as well as to develop constructive ideas to advance a policy implementation plan. However, for research to have an impact, the results must inform policies, shape programmes, and be translated into practice.

Policy research is a type of research that aims to provide answers and evidence that can contribute to the improvement of policy and policy-making process. Policy-oriented research is not only limited to find solutions to policy problems, but also concerned to improve better practices and interventions by informing organisations, policy-makers and decision-makers with pragmatic, action-oriented useful recommendations.

Literature suggests that policy-makers, practitioners, and researchers live on different planets. This notion of disconnect between different sets of actors involved in managing different stages of a policy process is referred to ***research-policy gap***. This gap is prevalent due to several barriers on research and policy sides. On the *research side*: the research topics are not always relevant to the policy needs, conclusions are not definitive, and/or policy implications often lack the perspective and feasibility aspect. Lack of adequate research and development funding, lack of expertise, poor quality data, and poor dissemination of research also undermine the value and effectiveness of research. By contrast, on the *policy side*: policy-makers and practitioners (civil administration) have short time horizons due to which they often look for quick fixes. They are too busy to read lengthy research papers or reports, hence rely on practical solutions. Instead of the technical soundness of the research, policy-makers and practitioners are often more concerned about the development priorities, completion time, expenditure, visibility and reputation, political risks and possible backlash from the opposition.

Figure 1: Research-policy gap



Source: Khan (2022)

In a changing world – such as demographic, social, economic, political, and climate change – this disconnect can be disastrous for effective management of public policy and sustainable development. To *bridge* the research-policy gap, primarily, there is a need for researchers and policy-makers/practitioners to interact more frequently and understand the policy process and policy needs. Further, in order to mitigate the impact of ever changing political and policy environment, the practitioners (civil officers) must learn and understand the research process and its utility in managing policy decisions.

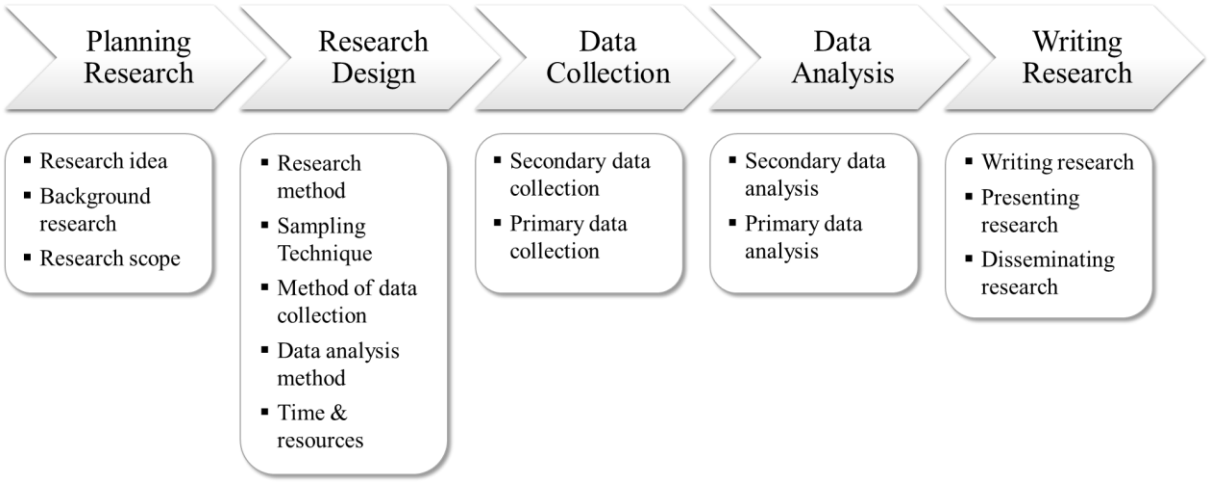
1.2. THE RESEARCH PROCESS

Before starting a research study (or project), it is important to understand main steps involved in a research process. *Figure 1* outlines the five stages and multiple steps involved of a typical research process: (1) planning research, (2) research design, (3) data collection, (4) data analysis, and (5) writing research. [1]

This process is usually followed in all forms of research and evaluation projects, regardless of the method used such as quantitative, qualitative, mixed method, evaluation research and/or case study research. Researchers must follow this process and document the study in such a way that a reader can understand the investigation clearly (i.e., research objectives, methodology, data, findings, and conclusion) and/or another researcher can conduct/replicate the same study again.[2]

[1] Depending on the research topic and familiarity with the policy area and existing literature, researchers may want to rearrange these steps, but need to go through all these stages to complete a research assignment.
[2] *Annex VII* highlights some key considerations for producing a good quality research.

Figure 1: Stages and steps involved in a research process



Source: Khan (2022)

⟹ *A step-wise discussion about the research process is presented in Part III: Planning and Conducting Research.*

PART II: RESEARCH METHODOLOGY

As a researcher, the participants will consider what research method(s) might be most appropriate for achieving the overall research objective by answering the questions under investigation. Selection of research method(s) depends on the question(s) that a researcher wishes to answer, and the scope that may include a range of additional considerations such as problem under examination, understanding of the policy sector and policy processes, time and space, source of knowledge, methods of data collection and analysis, and sampling and ethical considerations. This section (part II) sets out some possible research methods/approaches to study policy issues and/or explore complex public policy problems.

2.1. QUANTITATIVE AND QUALITATIVE RESEARCH

There are a variety of considerations in the process of doing policy research. Among these, the distinction between ***quantitative research*** and ***qualitative research*** must be understood to devise an appropriate research methodology. The quantitative and qualitative research distinction represents a useful means of classifying different methods of investigation. *Table 1* presents a contrast between these approaches.

Table 1: Contrasts between quantitative and qualitative research

QUANTITATIVE	QUALITATIVE
Numbers and statistics (*Quantity*)	Words/Language/Expression (*Quality*)
Interest/point of view of researcher	Interest/point of view of participants
Researcher distant	Researcher close
Theory testing (*Deductive*)	Theory emergent (*Inductive*)
Test pre-set hypothesis	Explore complex societal/policy issues
Static	Process
Structured	Unstructured
Generalisable results	Contextual understanding
Hard, reliable data	Rich, deep data
Macro	Micro
Behaviour (or trends)	Meaning (of actions)
Artificial settings	Natural environment
Answer more mechanistic ‘what?’ questions	Answer ‘why?’ and ‘how?’ questions
Distribution; Correlation analysis; Statistical significance; ANOVA; Regression etc.	Thematic analysis; content analysis; discourse analysis; Grounded theory; Conversation analysis

Source: Khan (2022)

Quantitative research aims to test pre-determined hypotheses and produce generalisable results which are often useful to answer more mechanistic ‘*what*’ questions. A quantitative

research method emphasises objective measurements and quantification in the collection and analysis of data based on hard and reliable statistics. This research methodology usually uses numerical data to study incidence and trends at macro-level and employs statistical models to examine causal and correlative relationships between variables.[3] This requires structured information from large numbers of people, usually through random or probability sampling, followed by collection of primary data through surveys. Other sources of data may include collection and analysis of secondary data; often published and/or official statistics.

Qualitative research aims to provide in-depth understanding of human behaviour/ actions and complex societal/policy issues that are often useful to answer '*why*' and '*how*' questions. This research method usually collects and interprets rich description and deep data (words) rather than quantification in the information collection process and analysis. This requires semi-structured or unstructured information from small numbers of people, usually through non-random (or non-probability) sampling, followed by collection of primary data through fieldwork. Qualitative research methodology has a strong basis in the field of policy studies, social and political sciences. Common methods used for qualitative research include *interviews* and *focus group discussion*. This method allows researchers to explore a situation/phenomenon in-depth (with a smaller group) in a specific context, hence provide rich contextual description and analysis.[4] Researchers can also record and analyse qualitative data from observations (or ethnography[5]) and interactions, in such a way that the researcher becomes a part of the situation rather than an outside observer.

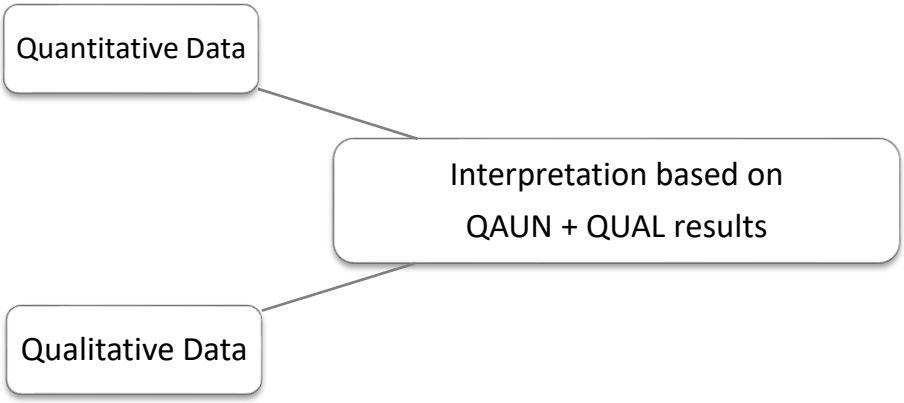
Although quantitative and qualitative research methods have contrasting approaches and application, it is important to understand that these are not contesting methodologies! Instead, both complement each other: a quantitative method is useful to investigate the incidence of a problem or status of a policy initiative at macro-level,[6] whereas a qualitative method is considered suitable to study human behaviour, context-specific cases, and explore complexities in policy processes at micro-level.[7] A combination of both research strategies may help to comprehend a deeper understanding of the issue or policy problem.

Sometimes researchers combine quantitative and qualitative research methods within a single research strategy, called ***mixed methods*** approach. For instance, combination of structured interviewing with structured observation or focus group discussions, or semi-structured

[3] Many statistical packages/programmes are available to handle and process large numerical (primary) data sets such as PASW (SPSS), EViews and Stata.
[4] Unstructured data (text) is often handled and analysed manually, however for bigger data set, NVivo programme can be used to manage the record.
[5] Ethnography is the recording and analysis of a culture or society, usually based on participant-observation and resulting in a written account of people, place and/or institution (Simpson & Coleman, 2017).
[6] Such as incidence of poverty in Pakistan; status of education enrolment in Punjab; impact of BISP, etc.
[7] Such as political economy of PSDP; implementing education sector reform; electoral reform process; managing international relations; criminal investigation and judicial process; eliminating terrorism, etc.

interviewing with closed-ended questions,[8] ratings and rankings of quality and performance.[9] The 'mixed methods' research is often used to triangulate findings. This means that qualitative and qualitative data are to be collected on the same topic and timeframe in order to mutually corroborate (*see figure 2*). This approach is considered more effective in research projects where findings generated by one method can be explained by the other (Khan, 2022). Although, mixed methods approach is getting popular these days, researchers should be mindful that the quantitative & qualitative data and findings deriving from mixed methods research should be mutually illuminating.

Figure 2: Mixed methods approach



2.2. CASE STUDY RESEARCH

A case study entails a detailed, intensive, and context-specific analysis of a *single case*. The prime objective of a case study is to develop as full understanding of a researched case as possible by providing multiple perspectives rooted in a specific context.[10] In this approach, the basic idea is to study *one case* in detail such as a person, policy, project or intervention, process or institution, organisation, community, location or an event (*as subject of case analysis*), using single or multiple research method(s). This research approach is often recommended where no single method can provide an in-depth account or explanation of the policy problem, and where understanding of the issue needs to be holistic, comprehensive and contextualised.

The case study approach is often associated with qualitative research, but it is more of a mixed methods approach. This may involve collection and processing of qualitative and quantitative data, the use of multiple (data collection and analysis) methods – such as document analysis,

[8] *Closed-ended questions* require a simple response such as 'yes' or 'no', while *open-ended questions* need more thought which require more than a simple one-word response. More detail in Section 3.3 (C.2.).
[9] Description of these data collection tools is discussed in Section 3.3.
[10] See Bryman (2014); Flick (2009); Ritchie & Lewis (2003); and Silverman & Marvasti (2008)

semi-structured or unstructured interviews, participants observations, focus group discussion, and/or analysis of official statistics.

In most cases, the case study research design[11] is structured around the *context* rather than sample cases (individual research participants). In such circumstances, the *subject* of a case analysis might be, for example, a *person* (e.g., Imran Khan being a cricketer or a politician), a *policy* (e.g., trade policy, madrassa reform, or Vision 2025), a *project*, *programme* or *intervention* (e.g., BISP *Waseela-e-Sehat* initiative), a *process* (e.g., a legal proceeding or electoral reform process), an *institution* (such as role of FPSC in civil service reform), or an *organisational* context (such as a university or a hospital, involving their management, beneficiaries and stakeholders). Less complex case study designs might involve only two individuals in a case, such as a professional lawyer and his client.

According to its research design, case studies can be divided into three categories: explanatory, descriptive and exploratory. The *explanatory case studies* primarily focus on exploring '*how*' or '*why*' questions. The *descriptive case studies* mainly analyse the sequence of interpersonal (cultural) events after a certain period of time to discover the key phenomena. And the *exploratory case studies* usually help to answer the '*what*' or '*who*' questions.

Although not always common, *multiple cases* can be examined under a case study research design to study a particular phenomenon, referred as ***comparative-case studies***. The research methodology for single and comparative-case studies are similar, but the latter approach requires more extensive conceptual, analytical and synthesising examination of cases, due to which the scope of the study expands exponentially – over time, within and across contexts. Nevertheless, the comparative design enables to better understand the phenomena/situation when meaningfully contrasting cases are compared. This research method is often used to conduct cross-cultural research; study of nations, casts, ethnicity etc. However, this method can also be applied to identical studies, known as ***multiple-case studies***. For example, Ayub & Hussain (2016)[12] researched organisational performances in nine case studies of Pakistani institutions from the public and private sectors. In both, comparative and multiple-case studies, consistency and comparability (of data, instruments, variables, and characteristics of sample) are the most important considerations in the research design.

The rationale for selecting this method would require clear operational definitions of the concepts, key evaluation questions, and selection of comparable cases and indicators for comparative analysis. An in-depth understanding of each case is critical to establish the foundation for the analytic framework that would then be used in the cross-case comparison. This approach helps to understand the casual questions such as how and why particular policy or intervention worked or failed to deliver. For instance, motivational level of a group of people (such as officers or staff) or performance of different departments within a university can be

[11] See Section 3.2: Research Design

[12] Ayub, M. A., & Hussain, S. T. (2016). *Candles in the Dark: Successful Organizations in Pakistan's Weak Institutional Environment*, Oxford University Press.

examined as comparative case studies. In this case, unlike single case study approach, the sample (e.g., group of people or departments) would be the subject of case analysis.

PART III: PLANNING AND CONDUCTING RESEARCH

3.1. PLANNING RESEARCH

Planning a research study/project is the first step of the research process (*see figure 1*). Every research assignment has specific requirements and instructions concerning different features such as: scope, structure/contents, format, citation and referencing style, word limit, plagiarism, deadlines etc. You are required to comply with all specific instructions provided for each activity. This section provides instructions about *planning your research* that includes: identifying area of interest, reviewing the literature, and developing research scope.

> ⟹ *NOTE: The importance of this stage is often underestimated, but negligence might cost you time and/or revisions at the later stage of the research process. Detailed guidelines for individual research paper and citation & referencing style are presented in Annexes I & V, respectively.*

A.1. Research Idea

To develop your research idea, for instance '*what do I want to research?*', you first need to explore whether there are any topics or researchable questions that might interest you. Think about a policy sector, published research work, a case from your professional life or a recent event/phenomenon which came under discussions with friends or colleagues.

> ⟹ *NOTE: in the beginning, do not worry if you end up considering more than one area of interest to be researched. Try to shortlist your areas of interest (keep it to minimum) and start working on them simultaneously. Your task here is to pick one research area, ASAP!*

Select a research area keeping in view your professional and personal interest.[13] To finalise your *research topic*, discuss your ideas with your colleagues and/or experts in the field. An interesting research topic and refined *research scope* (see Section A.3) guarantee much easier process of data collection, analysis and research writing. Once the topic of interest is identified, the next step is to *review the literature* (see Section A.2), work on the *research problem* and formulate the *research scope* (see Section A.3).

Do consider *managing time and resources!* There is no point in working on a research topic which you cannot complete in given time and available resources. It is therefore recommended to work on managing your *time* and assess what *resources* are available to you (see Section B.5).

[13] Interest in a research area is often recommended so that both intrinsic and extrinsic motivations keep you on the right track. An area or topic which is popular but may not match your interest or expertise might lead you to an unpleasant research journey.

> ⟹ *REMEMBER: You can always amend your research scope and make necessary changes in research design before proposal submission. So, do not invest too much time and energies in finding a perfect research idea at the very beginning of your research. This will evolve and be refined as you go through the steps in a research process.*

A.2. Review of the Literature

Review of the literature is an important step in the research process. In this step you would search and select, get access, read through and explore high quality recent published material relevant to your research interest/topic. The principal objectives of the survey of literature are as follows:

- You must know what is already known about the topic.
- What is the status of the debate on the topic.
- What theories, methods and strategies have been applied to study the topic.
- What evidences have been presented and whether there are inconsistencies and controversies relating to the topic.
- What concepts, theories and/or public policy decisions are relevant to the topic.

An initial survey of literature would enable you to formulate the research scope, articulate research argument, and refine research questions.[14] A systematic and well-planned review of the literature will help you to get yourself familiar with the topic and identify unanswered questions where research is needed.

The culminating point of the initial survey of literature is the identification of the gap in the existing literature where you could claim your contribution by conducting research. Once the objectives of research are well defined and the key research questions are formulated, the main survey of literature would begin in the light of the scope, objectives and research questions, leading to the key hypothesis for which the evidence would be marshalled by further research.

> ⟹ *NOTE: Literature review is not just a summary of the published material that you have consulted for your research. The review of literature must be relevant, thematically evaluated, and organised, and expected to be constructively critical.*

It is expected that, at the early stages of your research, a great deal of time will be consumed in exploring the existing literature and debate on the topic. It is important to get most out of it, since you would not need this only for writing a section on literature review but must revisit the relevant literature while writing your findings and policy recommendations at the later stage; relating your findings and observations with others. To execute this exercise in a better way, try to do the following:

[14] Or set *hypotheses* in case you intend to conduct a quantitative research.

- *Search and identify* the relevant information using academic database, online scholarly sites, knowledge networks, relevant government and think tanks websites, official statistics and library.[15]
- *Shortlist* the relevant literature. Not every research paper, report or dataset is relevant. While searching and reading material, evaluate the material according to quality, content and relevance to your topic.
- *Read actively and critically* and *take notes* about: the research objectives; the leading research questions posed; the context of the research; type and source of data; the research strategy adopted; and the key contribution/message(s) drawn.[16]
- During this exercise, keep working on formulating your *research scope/design*: develop your research argument, list/refine your research questions, and think about the research strategy.
- Start managing your *reference list*. You can do it either manually using *APA Style (7th Edition)* of referencing and citation or use MS Word 'References Tab' to manage your referencing and citation automatically.[17]
- Avoid *plagiarism* at all costs! It is strongly recommended that you *cite and reference* the material properly as per the given instructions in your research assignment.[18]

It has been observed that some researchers want to *avoid* the literature review at the beginning by stating that there is 'no' or 'limited' material available on the subject. This is a naïve approach! Participants need to develop skill in searching and exploring the relevant material for their research assignment.[19]

> ⟹ *NOTE: The role of the supervisor (Faculty Advisor) is critical. The supervisor will make it sure that the participants should invest sufficient time and energies in exploring the existing literature, following the debate, and developing the research scope in light of this exercise.*

A.3. Research Scope

The research scope delimits the research efforts to meet the overall objective of a research study and underscores the significance of your research. It must be developed at a preliminary stage of the research process and articulated in such a way that it provides detailed descriptions about the ***direction and dimension*** of the research. Failing to do so means ambiguity about the

[15] There are a variety of resources available such as Google Scholar, ResearchGate, e-Journals, Government documents (policies, plans, reports, official statistics), websites of academic institutes/think tanks (research papers, lectures, presentations and policy briefs), newspapers, books, magazines etc.
[16] Some researchers develop *summary table* to manage the literature they explore.
[17] Detailed instructions on *Citation and Referencing* are provided in *Annex V*.
[18] Brief guidelines on *Plagiarism* are presented in *Annexes VI*.
[19] A number of resources are available for literature search. These include Google Scholar; ResearchGate; RePEc; World Bank Open Data; UN Data; Pakistan Bureau of Statistics; PIDE; SDPI; Government policy documents, annual reports, status reports, books, newspapers etc., to name a few.

research objectives, and eventually would not lead to the desired expectations set by the participant and faculty. In order to develop a comprehensive research scope, you need to:

- Set *objective* of your research
- Work on *research problem* of your research (Statement of Problem)
- Identify the problem through *situation analysis*
- Formulate *research questions* to examine the problem
- Establish *link* with theory and/or public policy debate
- Define the *boundaries* of your research
- Highlight the *limitations* of the study

The scope, which will be presented in the Introduction section of both the research proposal and final IRP, must include ***objective(s)*** of your research with clear thoughts and arguments based on the existing literature search and debate in a public policy context. A research objective is a one-sentence statement indicating the direction and dimension of your research idea, for example:

- ✓ To examine the utility of Metro Bus System in female mobility in Islamabad-Rawalpindi.
- ✓ To explore the impact of TVET in realising social empowerment of young women in Pakistan.
- ✓ To examine the influence of aid proliferation on managing foreign economic assistance in Pakistan.

> ⟹ *NOTE: While formulating your research objectives, pick a workable research area, consider the originality aspect, deliberate upon the requirements of your research assignment, and keep the scope of research focused – should not be too broad or too narrow.*

The knowledge gained through the literature review will guide you to work on the *research problem*. This may include collection of background information, critical analysis of the existing debate, review of published material and assessment of contextual factors. This will help you to write the ***Statement of Problem***. A statement of problem (or research problem) is a short description of the issue that needs to be assessed and addressed. A well-thought and well-articulated statement will set the main argument and establish the foundation of your IRP. To identify the *research problem*, and write the statement of problem, you need to think and work on the following:

- What is to be investigated?
- Which aspect is worth exploring?
- Why it is important?

- Is the problem likely to continue?
- Challenge existing beliefs and observations!
- How large is the population affected by the problem?
- Would this study revise or extend existing knowledge?
- Is there evidence or authoritative opinion from others to support the need for this research?

While working on it, do not hesitate to raise questions, identify gaps, challenge the existing beliefs and observations, explore different dimensions and try new approaches. This will help you to clarify the problem and formulate research question(s).

Once the topic is assigned, you must start working on the ***situation analysis***. Although a comprehensive situation analysis is an integral part of the case study research method, it is a good approach to develop your research scope, especially in case of policy research; whether you intend to conduct a quantitative and/or qualitative study. The knowledge gained through the literature review will guide you to identify the *research problem*. The analysis may include collection of background information such as official statistics and status/direction of debate, mapping the network of actors, resource mobilisation, and assessment of contextual factors. This will assist you to:

- Understand the nature and scale of the problem.
- Identify root causes and risk factors.
- Define terms and concepts.
- Explore knowledge, attitude, and behaviour of actors.
- Examine resource exchange and constraint.

While working on the situation analysis, do not hesitate to raise questions, identify gaps, challenge the existing beliefs and observations, and try new approaches. This will help you to clarify the problem and formulate research question(s).

A ***research question*** is an explicit statement of purpose indicating what it is the researcher wants to explore.[20] Formulating clear, intelligible, and unambiguous research questions is extremely important in the research process, because it defines the basis of the research. The whole research process revolves around the research question(s) because it will guide your literature review and research scope, influence your choice of research methodology, data collection and analysis approach, and guide the writing-up and presenting your research findings and policy recommendations. Typically, all steps of the research process are designed

[20] In quantitative research, you need to develop *hypotheses* instead of research questions, depending on your research scope.

and completed in such a way to answer the research question. In other words, poorly formulated research questions would lead to a difficult research journey.

There are broadly four steps in *formulating research questions*: (a) identifying *concerns* in the research area, (b) consider *variations* in concerns, (c) *list* all questions you find thought-provoking while developing your research idea, reviewing the literature, and refining your research objective, and (d) *select* specific research questions; must relate to the research topic, research objective, and should have some connection with established research and/or public policy. Each research question must be a *single sentence* statement, not too broad and not too narrow, and end with a question mark. Following are some examples of research questions:

- ✓ How the female travellers perceive Metro Bus System in term of accessibility, safety, affordability, and reliability?
- ✓ Does TVET give young women the confidence to interact, argue and bargain in social interactions?
- ✓ How does aid proliferation affect the capacity of the Pakistan government to manage foreign aid?

> ⟹ *NOTE: In case of more than one research question, make sure that they should be linked to each other in such a way that they collectively address the research objective.*
>
> ⟹ *REMEMBER: Research questions are not always easy to formulate. If you find yourself stuck about how to formulate research questions, it is recommended that you must read more published material on the topic. Think about personal experiences, consult your advisor and colleagues, and look for a few interesting articles and assess if that research might be tested in a new setting.*

Once you are done with the research objectives and situation analysis, there are *three* important considerations remaining which you must not ignore to complete the research scope:

- *Establish link* between your research objectives and public policy: Clearly state *why* your research is worth reading/considering; and *what* contribution your research would make to the public policy.[21]
- *Define boundaries* of your research! Describe in detail what your research will be about such as population, context, aspect of an issue, time and space, etc. This will allow you to execute your research on specific issue or aspect of a policy.
- *Share research limitations*: It is recommended that you should not hesitate to share the limitations of your research. It might include time and resource constraints, challenges related to access and dependence, non-availability of quality or complete

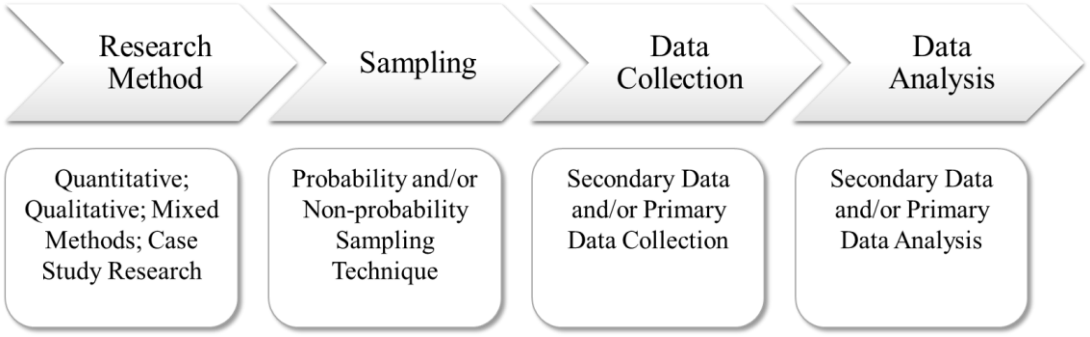
[21] In academic research, *conceptual framework* is considered as a key feature of the research design. It comprised of concepts, assumptions, beliefs, theories and relevance to public policy that inform your research. Here you are only required to establish link of your research with public policy.

secondary data, or some aspect of the research you missed to include in the research scope but found it interesting enough to be included at the later stage.

3.2. RESEARCH DESIGN

Research design is the second step of the research process (*see figure 1*). It refers to the research structure of an enquiry that integrates the method of data collection and analysis of data in a coherent and logical way. In simple words, it means *how to plan your research study*. Any study needs a well-developed research design comprised of well-thought *research method(s)*, *sampling* of cases, method of *data collection* (e.g., questionnaire, observation, document analysis), and *data analysis* approach (e.g., content analysis, thematic analysis, narrative analysis).

Figure 3: Contents of a research design



Source: Khan (2022)

This enables the participants to meet the research objectives, find answers to the research questions, and address the research problem in a systematic manner.[22] An early decision about preferred research method(s), data collection approach(es) and analysis technique(s) is highly recommended.

This section provides instructions about formulating the *research design* (*see figure 3*) that includes: (B.1) adopting research strategy, (B.2) choosing sampling technique, (B.3) selecting method of data collection, (B.4) selecting data analysis approach, and (B.5) managing time and resources.

B.1. Adopt Research Method

To carry out a research study, the research design demands a decision to adopt a holistic research methodology. A good research design entails a coherence between the research scope

[22] It is important to understand that the *research scope* determines the type of research design a researcher should use, not the other way around!

and the research methodology.[23] Once you know *what you want to find out* (as you would outline this in your research scope), the methodology about *how you will get that information* would help to describe your research design. For instance. if structured (numerical) information is required to answer the more mechanistic '*what*' question, quantitative research methodology seems the right approach. By contrast, if an in-depth and contextual understanding is required to answer '*why*' and '*how*' questions, then qualitative research methodology is recommended. Similarly, if you want to conduct a detailed, intensive, and context-specific analysis of a case (or phenomena/situation in a policy process) to develop a holistic understanding of a subject, the case study research – often mixed methods approach – would be the most appropriate methodology.

> ⟹ *REMEMBER: There are no right and wrong strategies. The aspect worth consideration is: how appropriate your research methodology is to your research topic and scope? To get more clarity on this, search and read online/published material, consult your advisor (sponsor DS), and seek feedback from your colleagues and/or people from academia.*

> ⟹ *NOTE: You must describe in detail your 'research methods' in the research proposal and justify why the proposed method was considered appropriate to answer the research question(s) posed in your study.*

B.2. Choose Sampling Technique

Sampling is a process of selecting units[24] from a target population and/or policy sector of interest. Since studying a whole population or policy sector is highly unlikely due to time and resource constraints, a (representative) sample helps to study phenomena which fairly allows to generalise the results back to the population. The selection of sampling technique depends on the research objective. Some select samples to maximise in-depth contextual understanding, while others are concerned to make inferences about a whole population using a representative sample. In the latter case, the decision about the sample design demands ***probability (random) sampling*** to study a larger sample (used in quantitative research), while in the former case it requires ***non-probability (non-random) sampling*** to study a smaller sample more intensively (used in qualitative research).

> ⟹ *REMEMBER: Sampling is mostly required if your research design includes collection and analysis of primary data. If your research design seeks to collect and analyse secondary data or document analysis, then you may skip sampling from your research plan. Nevertheless, it is important to identify/cite the source and authenticity of secondary data.*

[23] *Research design* and *research method* are often used as synonymous, but are distinct terms. Research design represents a structure that guides the execution of a research method and the analysis of the subsequent data (Bryman, 2012).

[24] The type of object of interest, e.g., individuals, households, universities, cities, firms, etc. The term '*unit*' is used because it is not necessarily people who are being sampled.

Once you have defined/selected your research population, there are two important considerations underlining sampling: sampling approach and level of sampling.

- *Sampling approach* denotes whether you need to collect primary data using probability sample or non-probability sample; for quantitative or qualitative research, respectively.
- *Level of sampling* refers to the context of sample (e.g., location, group, entities) and sample participants (individuals, actors, households).

Sampling techniques in quantitative research primarily involve random selection (or probability sampling) approach in order to draw a representative sample and generalise results back to the population. Some popular probability sampling techniques[25] used worldwide include: Simple random sampling; Stratified random sampling; Systematic sampling; Cluster sampling; and Multi-stage cluster sampling.

Sampling techniques in qualitative research revolve around the notion of *purposive sampling* (or non-random selection). Purposive sampling technique is preferred when a specific (limited) number of individuals carry the most relevant information that is sought. Adopting this technique allows the researcher to select the most productive sample to answer the research questions. It involves individuals who are best placed in the system to provide the required information based on their expert knowledge and position in the system.[26]

> ⟹ *NOTE, you must describe in detail the 'sampling technique' used to draw the sample in your research and justify why the proposed technique was considered appropriate to meet the research objective of your study.*

B.3. Select Method of Data Collection

It is essential that the researcher identifies the type of evidence[27] required to answer the research question(s) in a convincing way. Once it is clear what kind of information is required, the selection of data collection method (or instrument)[28] should be selected and designed to complete the research design. The research design would be incomplete without knowing what method will be used to collect the required information.

The decision about the ***selection of data collection methods*** primarily depends on the research question of your study, but it may also be influenced by the research design such as context, methodology and timing of the study.

[25] For details, see Khan (2022).
[26] For details, see Khan (2022).
[27] Documents, published material, official statistics, primary and/or secondary (quantitative and/or qualitative) data.
[28] Such as survey (structure) questionnaire, semi-structured questionnaire, topic guide interview or focus group discussion. These instruments are discussed in Section 3.3 (C.2).

The most important consideration in selection of an appropriate method is '*where*' the required data exist: policy documents, research reports, official correspondence and proceedings, official statistics, or carried by specific community, households and/or individuals. The second consideration is '*how*' to access and/or record that required information. In the case of secondary data, you may need to seek access to the data files owned by respective organisation such as education enrolment, child mortality rate, or Pakistan Social and Living-Standards Measurement (PSLM) survey data. It is important that you should consider the following criteria while selecting your secondary data:

- *Date of publication*: should not be too old, otherwise lack relevance
- *Reliability of the source*: should be hosted/published by a known organisation
- *Quality of data*: should have adequate coverage/rich discussion available
- *Relevance of data*: should carry relevant information for your study
- *Credibility of data*: should be validated, if required

In the case of primary data collection, you would need to draw sample from the target population and get close to the sample to be able to record the first-hand information (raw/primary data). Two considerations would be required: selection of probability or non-probability sampling technique, and selection of the level of sampling (context and participants of your research). These considerations will help you to choose the most appropriate method of data collection. A detailed discussion about the methods of secondary data collection and primary data collection is presented in Section 3.3.

> ⟹ *REMEMBER: Primary data collection is not compulsory for all types of research studies. For instance, if you plan to do a desk study such as document analysis, you will skip this step from your research plan.*

> ⟹ *NOTE: In your research, you must describe in detail the 'method of data collection' selected to collect the primary data and elaborate why the proposed method was considered appropriate to meet the research objective of your study. In case of secondary data, justify selection of type and source.*

B.4. Select Data Analysis Method

Analysis of data plays crucial role in reaching conclusions and stating recommendations. At the research design stage, before proposal submission, the researcher needs to select and specify the method to analyse the data. There are a number of methods to analyse the data depending upon whether the data were *secondary or primary*, as well as whether it is *qualitative or quantitative*. A detailed discussion about the secondary data analysis and primary data analysis is presented in Section 3.4.

> ⟹ *NOTE: In your research, you must describe in detail the 'data analysis method' selected to process the primary data and elaborate why the selected method was considered appropriate to meet the research objective of your study.*

B.5. Managing Time and Resources

Most research activities are constrained by time and resources. There is no point in working on a research topic (or assignment) which you cannot complete in given time and available resources. Having said that, it does not mean that research assignments cannot be conducted and completed in a given timeframe. The challenge here is to manage the time and resources available to you.

To manage the time, it is recommended that you should workout the *timeframe* at the outset of your research assignment. A *Gantt chart* can be useful here. The timeframe should indicate all the different stages of your research, and the weeks/dates each activity would start and finish. Once you generate the timeframe of your research, it is essential that you should monitor the performance so that there is an early warning of slippage.

> ⟹ *NOTE: Deadlines (dates/time) of activities for IRP such as research scope, proposal submission, first and second drafts submission, and final paper/presentation submission will be communicated by the T&C Section.*

To *manage the resources*, it is of foremost importance to know what resources are available to you, and whether they are at your disposal or not? For instance, access to workstation, printing, and photocopying, stationary, telephone and recording equipment, and travel funding. These will enable you to establish how financially feasible and practical your research design would be. In addition to these, it is suggested that you should also work on the human and intellectual support aspect.

> ⟹ *REMEMBER: Try your level best to formulate a convincing and well-planned research design keeping in view your research question(s) and methodology adopted. From an examiner's point of view, the research design (or methodology) section of your research proposal/research paper would be the most crucial part. A well-designed methodology confirms the validity, reliability, and credibility of any research.*

3.3. DATA COLLECTION

Data collection is the third step of the research process (*see figure 1*). This is a critical stage of the research process in collecting the information needed to answer the research question. ***Data*** mainly include numerical values (*quantitative data*) and textual record (*qualitative data*). It can be raw information (*primary data*) or presented as facts and figures (*secondary data*). Processing of data leads to the generation of knowledge and understanding of the phenomena under examination. This section provides instructions about secondary data collection and primary data collection.

C.1. Secondary Data Collection

Secondary data are type of data that has already been collected, processed, and published by someone else for a purpose other than yours. Studies in which secondary data are required to answer the research question, researchers need to:

a) identify the *type*, such as documents and/or official statistics,

b) *locate* the data, knowing the source of data and access options,

c) evaluate the *relevance* of data, considering background details of data such as population, sample size, time of data collection, collection mode, questions asked, and form of data, and

d) assess the *credibility* of data, exploring if the data were collected, processed and used by a credible published research, and whether it can be validated.

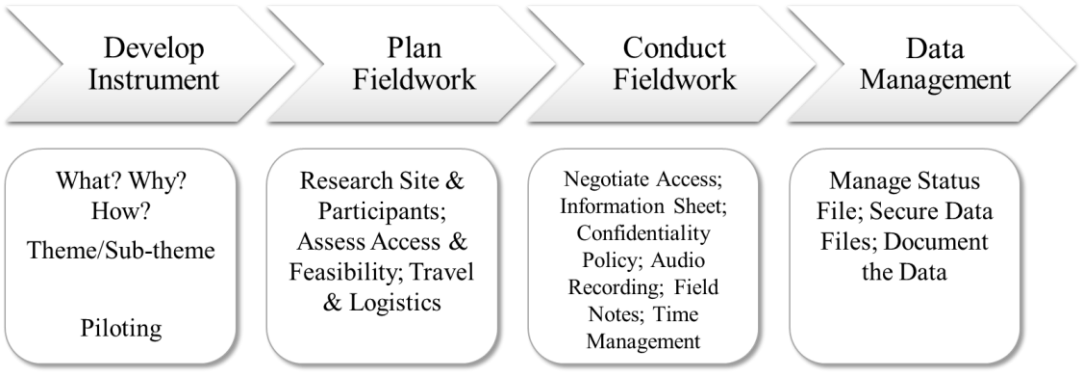
Secondary data collection is time and cost effective as compared to the primary data which requires a lot of effort, time and finances. The secondary data may be of higher quality, depending on the sampling technique, size, statistical precision, and may contain a wide variety of variables. By contrast, the researcher has no control over its quality, the data may not help to address a particular research question, or lack depth and knowledge about the survey strategy.

There is an abundance of *data sources* available on most of the mainstream topics. These include Pakistan data portal; population census, Pakistan social and living standard measure (PSLM), national accounts, social statistics, agriculture statistics and labour force survey of the Pakistan Bureau of Statistics; Pakistan economic survey of the Ministry of Finance; Status of public sector development expenditure of the respective planning ministry/departments; world development indicators of the World Bank; human development index of the UNDP, etc.

C.2. Primary Data Collection

Primary data collection needs different methods to collect quantitative and qualitative data. ***Quantitative data collection*** methods aim to collect numerical values using structured questionnaire with closed-ended questions. ***Qualitative data collection*** method records non-quantifiable observations such as words, behaviour, feelings, etc., using semi-structured or unstructured interview schedule. The choice of quantitative or qualitative methods of data collection depends on the area and scope of your research. Nevertheless, it needs a great deal of preparations: instrument development, piloting, resource management. *Figure 4* presents four steps involved in data collection process.

Figure 4: Data collection process



Source: Khan (2022)

> ⟹ *NOTE: Primary data collection is NOT compulsory. If you plan to conduct a desk study and your research design does not include collection of primary data, then you will skip this from your research plan.*

In studies involving primary data collection, researchers need to develop a well-thought data collection *instrument* such as questionnaire, interview schedule or topic guide.[29] This is the *first step* of the data collection process. Interviews are the most widely used method of data collection. Three major categories of interviews can be identified: the *structured* (formal or standardised) interview; the *unstructured* (informal or un-standardised) interview; and, the *semi-structured* (semi-standardised or focused) interview.

Structured interview is similar in format to a 'pencil-and-paper' survey. It is designed to collect standardised numerical data in large surveys using closed-ended questions. ***Unstructured interview*** comprises of a 'topic guide' including a list of themes, sub-themes, and issues to be discussed in a free-flowing discussion with an individual or group. The ***semi-structured interview*** is a mix of both structured and unstructured interview. It mainly consists of both closed and open-ended questions, and topics. *Table 2* presents distinctions between these.

It is always desirable to test the instrument (questionnaire) prior to conduct the survey/fieldwork so that any limitations could be addressed, or desirable changes be made in advance. This testing is called ***piloting***. The main objective of piloting is to observe whether the questions asked were clear and understandable to the respondent, flowed well in the discussion, and allowed the researcher to collect the required data.

[29] *Questionnaire* are used in survey research to collect quantitative data, while *Interview schedule or topic guide* are the formats used in the fieldwork to collect qualitative data.

Table 2: Types of interviews

STRUCTURED INTERVIEW	SEMI-STRUCTURED INTERVIEW	UNSTRUCTURED INTERVIEW
Used to collect Quantitative data	Used to collect Qualitative (and Quantitative) data	Used to collect Qualitative data
Instrument: Survey Questionnaire	*Instrument*: Interview Schedule	*Instrument*: Interview/Topic Guide
Data collection mode: Survey, Census, Online	*Data collection mode*: Face to Face Interview, Fieldwork, Online Survey	*Data collection mode*: Face to Face Interaction, Focus Group Discussion, Observations
Interviewer follows scripted questions; No deviation from question order. → Closed-ended questions	Asymmetrical structure; Questions may be reordered during the interview; → Both open and closed-ended questions	Completely unstructured; Free-flowing conversation; No set order to any question; → Open-ended questions
Working of each question asked exactly as written	Interviewer initiates questions and poses probes in response to Interviewee's descriptions	Both interviewer and interviewee initiate questions and discuss topics
No adjusting of level of language	Level of language may be adjusted	Level of language may be adjusted
No clarifications or answering of questions about the interview	Interviewer may answer questions and make clarifications	Interviewer may answer questions and make clarifications
No additional questions may be added	Interviewer may add or delete probes to interview between subsequent subjects	Interviewer may add or delete questions between interviews

Source: Khan (2022); Berg (2004).

> ⟹ *REMEMBER: It is suggested that you organise your questionnaire/interview thematically (in different sections) and arrange questions in a flowing discussion order. This will help you to conduct the interview efficiently and enable you to manage the raw data for further processing (analysis).*

Once the instrument is ready, ***planning the fieldwork*** is the *second step* of the data collection process. A number of considerations are required here. It is suggested that you must *research the site* of your data collection: explore the locality, language, social and cultural norms, history and politics, and the climate. *Research your participants*: explore their background, expertise, and their social/professional networks. Evaluate the *feasibility* of your fieldwork: calculate time and resources, and plan travel and logistics.

> ⟹ *NOTE: It is expected that your fieldwork might take longer duration and require more resources as you planned. So, do think about a contingency plan beforehand.*

The next step is to conduct the ***fieldwork***. The biggest challenge here is to *negotiate access* to the social setting such as office or household. Access refers to the ability of the researcher to get close to people and situations, to be able to find out what is really happening below the rhetoric. Negotiating access is most difficult in case of *expert interviewing*.[30] Arranging interview sessions and conducting face-to-face interviews with experts is often quite challenging. In such scenarios, to negotiate access, you may want to send a formal request for an interview to the potential research participants. An *approach letter* and the *participant information sheet* would be required to approach your participant.[31]

> ⟹ *REMEMBER: Experts/senior officials are quite busy individuals and often have tight schedules. It may be quite challenging to convince them to schedule an appointment. You may face lack of interest from some officials. Some might turn down your request straightaway, while others may delay scheduling interview and later stop answering your phone calls or emails. It is therefore suggested that you should utilise your contacts in the network to facilitate the process. In qualitative research, you may want to replace cases (participants) using snowball sampling technique, even when you have chosen your initial sample purposively; purposive-snowball sampling. Do indicate this in your methodology.*[32]

Audio recording is often recommended during the interviews with the consent of the respondents. However, *field notes* can be used where the participants refuse to give consent due to whatever reason. Recordings are used to promote accuracy and detail in transcripts. Interviews without audio recording take longer duration and are of lesser quality as compared to the audio files; since writing notes sometimes led to losing concentration, missing interesting points, or capturing exact phrases and language used by the respondents.

Although ***data management*** is the *final step* of the data collection process, it begins as the fieldwork starts. Data management means that the researcher must check whether there are any obvious flaws in the information collected. It is suggested that a *status file* must be developed to keep a track record of every conversation and commitment during the fieldwork – such as invitation letter, follow-up telephone call, email reply, interview schedule status, date and time of interview, and location of interview. Data management requires *documenting the data*. This includes recording the data; transcribing the (qualitative) data; and summarising the data in such a way to construct a new reality.[33] Data files must be saved and organised in separate folders according to sample groups. This will allow the researcher to track the data file/transcript for further cross-referencing and analysis. After the data are collected, you will be ready to proceed to the next step of the research process: the data analysis.

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[30] In *expert interviewing*, the interviewees are of less interest as a person than their knowledge and capacities as an expert in a specific field of activity.

[31] The *participant information sheet* usually describes: the purpose of the study; areas covered in the research; a request for a face-to-face interview; and clearly stated policy on confidentiality.

[32] Published material and online resources are widely available on interviewing skills and techniques.

[33] *Summarising* means synthesising the information collected in the interview such as recording the data, writing up interview notes as soon as possible, identify key responses/issues highlighted by the majority, capture verbatim quotes, and group similar results under themes/sub-themes.

3.4. DATA ANALYSIS

The *data analysis* stage is fundamentally about data reduction. Without reducing the large volume of gathered information, it is highly unlikely to interpret the material, make sense out of it, and generate knowledge for better understanding. Although this remains a challenging stage of the research process, it is also exciting considering the raw information is to be transformed into facts and knowledge; revealing the results.

> ⟹ *NOTE: It is critically important that you must compare your research findings to the existing findings of the literature review; for both qualitative and quantitative research. This comparison will confirm or contradict the existing beliefs and observations. This is the main rationale of conducting any research.*

The consideration in data analysis is that it refers to the analysis of either primary or secondary data. In the latter case, analysis may include document analysis and/or analysis of official statistics. This section provides instructions about conducting secondary data analysis and primary data analysis.

D.1. Secondary Data Analysis

Secondary data analysis involves further processing of existing data, collected by someone else for a distinct purpose. This involves discussing common and contrasting patterns of beliefs and observations within the secondary data related to the research question. Secondary data analysis mostly involves *document analysis* and/or the *analysis of official statistics*.

Although the ***document analysis*** is not very common in social research, but it is highly relevant in policy sciences research; studying stages of the policy process, conducting research of/for policy. The term '*documents*' includes a wide variety of different documentary sources: from personal diaries, letters, and mass media material, to official documents deriving from the state such as national development plans, sectoral policy, research reports, proceedings and official correspondence, etc. In either case, you need to ensure the quality of documents: authenticity and credibility. The problem with document analysis is that sometimes the necessary parts of documents are not available, not accessible, or just missing.

> ⟹ *REMEMBER: It is strongly recommended that you should rely on published or non-classified official documents for your analysis. Using unpublished or classified information would raise questions related to authenticity and credibility of data/ documents.*

Official statistics are statistics published by a state agency or public organisation, such as Pakistan Bureau of Statistics, as a public good. The usage and analysis of official statistics for policy research and public sector decision-making has been in practice globally for centuries. For *research purpose,* use of official statistics for secondary data analysis is considered time and cost effective, and it is often reliable and credible too. You just need to ensure the quality standard of the data.

⟹ REMEMBER: It is important that you rely on one (published) data set for your research as it might lead to complexity if you try to mix/match two or more sources of data to process your analysis. For instance, if you want to study education enrolment rate in Punjab, then rely on either PSLM, or MICS, WDI, HDI, Alif Ailaan! It is recommended because every study selects different sample, indicators & time.

D.2. Primary Data Analysis

After the collection and documentation of raw information, the data are to be coded and analysed to elicit findings. In *qualitative* studies, data analysis involves arranging data thematically, identifying patterns within and across responses, and analysing them critically in order to answer the research question. Contrary to this, data analysis for *quantitative* studies entail critical analysis of numerical values, interpretation of trends, and attempts to find rationale underlining the main findings using theoretical framework. The results will then be reviewed and summarised in such a manner that would scientifically and logically explain the phenomena under investigation.

The process of ***coding*** is an essential first step in the analysis of primary data. Coding is the operation by which data are broken down, conceptualised, and put back together in a new way. Coding in qualitative research is a somewhat different process from coding in relation to quantitative data. With the latter, coding is more or less solely a way of managing data using a statistical programme; whereas, in qualitative data analysis, coding is an important first step towards the generation of theory.[34]

In qualitative research, the ***coding process*** begins with the text, coding categories, and moving on to identify trend and themes. The purpose of this is to simplify the transcript data and to achieve simple conceptual schema. Initially the data is to be transcribed and reviewed line by line. A close reading through the transcripts would help to identify themes or categories to which the data related, and which is relevant to the research focus. It is necessary to evaluate and explore the data in relation to the distribution of opinion across groups and individuals; groups often carry different opinions and viewpoints. It is critical to capture these distinctions in order to explore the dynamics of the social setting. Besides this, the interview questions and conceptual framework can also be used to generate a number of pre-existing themes, subthemes and codes.

Unlike quantitative data analysis, there are a no clear rules and procedures for analysing qualitative data. The preference of analysis method selection depends on the nature of qualitative enquiry and rationale developed in the research scope. A number of qualitative data analysis methods are available for consideration. Here, we discuss the most commonly used thematic analysis, narrative analysis, and content analysis for qualitative research.[35]

[34] See Bryman (2012)
[35] See Bryman (2012); Khan (2022); Ritchie & Lewis (2003)

Thematic analysis: is the most common approach to analyse the qualitative data. The method involves the identification of key themes, concepts or categories. In this approach, the researcher starts with some general themes derived from the literature review and add/merge themes and sub-themes as he/she goes along. This method of data analysis is highly recommended to study qualitative cases and phenomena in policy and social sciences.

***Narrative analysis*:** identifies the basic story, which is being told, focusing on the way an account or narrative is constructed, the intention of the teller and the nature of the audience as well as the meaning of the story or plot. In simple words, the narrative analysis focuses on the attention shift from *what actually happened* to *how do people make sense of what happened*, and *to what effect*.

***Content analysis*:** is an approach that analyse both the content and context of documents and texts. In this method, researcher identifies themes, seeks to quantify content and the frequency of its occurrence. The content analysis helps to present the processed information in percentages, averages and in ranges.

The application of content analysis comprised of three distinct approaches: conventional, directed, or summative. In *conventional* content analysis, coding categories are derived directly from the text data. The *directed* approach starts with a theory or relevant research findings as guidance for initial codes. While, a *summative* content analysis involves counting and comparisons, usually of keywords or content, followed by the interpretation of the underlying context.[36]

3.5. WRITING RESEARCH

Writing research is the *final* stage of a research process. Through this, you will disseminate the findings of your research and convey policy recommendations to the relevant audience. The foremost thing you would need to do is to start organising your material and create the outline of your research. Once the tentative structure of your study is in front of you, start filling the sections with the material. This will lead you to your *zero draft*. You then need to work in and across sections, critically reviewing and formatting your material and produce the *draft*. Get feedback on that from your Faculty Advisor and make revisions towards the *final* product and submit.

Detailed guidelines for writing research proposal and individual research paper is presented in *Annex I*. The annex provides specific guidelines about: proposed contents/structure of the research document, writing & presentation style to be followed, procedure to complete and submit the research assignment, and criteria based on which the evaluation will be made. Guidelines for Current Issue Presentation, Case Study Research, and Simulation Exercise are presented in *Annex II, III and IV*, respectively. Detailed guidelines for Citation and Referencing

[36] See Hsieh & Shannon (2005)

style, both manually and automatically using MS Word, are presented in *Annexes V*, followed by *Annex VI* that briefly outlines Avoiding Plagiarism. Finally, *Annex VII* highlights some key considerations for producing a good quality research.

RECOMMENDED READINGS & ONLINE SOURCES

RECOMMENDED READINGS

- BECKER, S., BRYMAN, A. & FERGUSON, H. (eds). 2012. *Understanding Research for Social Policy and Social Work: Themes, Methods and Approaches*. Bristol: The Policy Press.
- BERG, B. L. (ed.). 2007. *Qualitative research methods for social sciences.* New York: Pearson Education, Inc.
- BRYMAN, A. 2012 & 2021. *Social Research Methods* (4th & 6th Editions), Oxford: Oxford University Press.
- FLICK, U. 2009. *An Introduction to Qualitative Research.* London: Sage.
- KHAN, F. J. 2022. *Policy Research Methods: A Step-by-Step Guide from Start to Finish for Students and Practitioners*. Islamabad: PIDE-RASTA. Available online: https://pide.org.pk/research/policy-research-methods-a-step-by-step-guide-from-start-to-finish-for-students-and-practitioners/
- RITCHIE, J. & LEWIS, J. 2003. *Qualitative Research Practice.* London: Sage.
- SILVERMAN, D. 2005. *Doing Qualitative Research.* London: Sage.

RECOMMENDED ONLINE RESOURCE

- Research process
  https://research-methodology.net/research-methodology/research-process/
- Research methods
  https://research-methodology.net/research-methods/
- Sampling
  https://research-methodology.net/sampling-in-primary-data-collection/
- SAGE research methods
  http://methods.sagepub.com/
- APA, MLA, Chicago Style – Automatically format bibliographies
  https://support.office.com/en-us/article/apa-mla-chicago-%E2%80%93-automatically-format-bibliographies-405c207c-7070-42fa-91e7-eaf064b14dbb
- QUALITATIVE AND QUANTITATIVE RESEARCH: GLOSSARY OF KEY TERMS—WRITING@CSU (COLORADO STATE UNIVERSITY)
  https://writing.colostate.edu/guides/guide.cfm?guideid=90

ANNEX I: GUIDELINES FOR INDIVIDUAL RESEARCH PAPER (IRP)

ACTIVITY TYPE	Individual activity
PROCESS / PROCEDURE	▪ Each participant will be allocated a RESEARCH TOPIC during the initial weeks of the course. ▪ A Faculty Advisor (Syndicate DS) will be allocated to all participants for research supervision. ▪ Each participant will be required to submit the following deliverables: o Research Scope o First Draft o Second Draft * o Final IRP ▪ Your initial tasks will be to submit a RESEARCH SCOPE (500-800 words max) to your Faculty Advisor. Once reviewed and approved by your Faculty Advisor, you will be allowed to work on your IRP data collection, analysis and writeup. ▪ Participants are encouraged to interact with guest speakers and sector specialists, and also consult experts during Local Visits and Inland Study Tour wherever relevant to the topic/ subject of their IRP. ▪ The FIRST IRP DRAFT should be able to share the preliminary findings of your research. ▪ The SECOND IRP DRAFT should be able to share the key findings of your research, draw main conclusions and recommendations, and identify key messages coming out of your research. *NOTE: For MCMC, the T&C may decide to skip submission of the second IRP draft due to time constraint.* ▪ Before submitting the FINAL IRP, revise the first and second drafts in light of the comments suggested by your Faculty Advisor. Revisit your Introduction section to make any final changes and write an Abstract. A good ABSTRACT includes: purpose of research (objectives); main phrases from your Introduction section (scope); very briefly state your research methodology; share key findings (conclusions) and important policy recommendation. You can divide the abstract in two paragraphs. In the *first para*, include abstract from the introduction, scope and methods used. In the *second para*, articulate the key findings and recommendations coming out of

	your research. Make sure that there is consistency between the information presented in the abstract and in the research write up. Before the final submission, please make sure that you have edited the whole IRP carefully for an effective, harmonious, and an error-free copy. It should be coherent in structure, systematically organised, and free of errors of expression, spellings, punctuation and grammar. Finally, make sure that your final IRP is within the prescribed word count. You are now ready to submit your final IRP. *NOTE: Submission deadlines (dates/time) of IRP deliverables such as research scope, research proposal, first and second drafts, and final paper/presentation will be communicated separately by the respective T&C Section.*
CONTENT / STRUCTURE OF INDIVIDUAL RESEARCH PAPER	**SAMPLE CONTENTS / STRUCTURE OF AN INDIVIDUAL RESEARCH PAPER (IRP)** The structure of a research paper can be divided into four parts: (i) preliminary matter, (ii) main body, (iii) references, and (iv) annexure. The Title Page or Cover Page is the first page (face) of your paper that is usually designed according to a specified specimen of the publisher (*see Annex I-A*). This is followed by the preliminary matter that includes abstract, dedication (optional), table of contents, list of abbreviations, tables and figures. The main body part of your research paper is the longest part starting from the Introduction section to the conclusion and policy recommendation sections. The main body is followed by a list of references and annexures, if any. ▪ Preliminary matter (Initial pages) o Abstract (*300-400 words max*) o Dedication (optional) o Table of Contents o List of abbreviations/Definition of terms o List of tables/figures ▪ **Introduction** (approx. 20% of main body text) ✓ Introduce your topic; briefly talk about the background/ context; clearly state your research argument, why this research is important and what's new about it – present some evidence (existing debate or secondary data) to support your argument. ✓ Research Scope must include aim/objective(s) of your research; statement of problem; research question(s); establish link/relevance with the existing public policy debate;

	significance of research, and define boundaries of your research. ▪ **Review of Literature** (approx. 10% of main body text) ✓ *See Section 3.1 (A.2)* ▪ **Research Methodology** (approx. 20% of main body text) ✓ State your research methodology in detail. Tell why the chosen method(s) was considered appropriate for your study. *See Section 3.2 (B.1)* ✓ In case primary data collection was involved in your research methodology, share the *sampling technique* used in your study. State how the sample was drawn from the target population, and what was the criteria of selection. *See Section 3.2 (B.2)* ✓ Clearly indicate the *data sources* (especially in case of secondary data) and/or state in detail the *data collection* process (especially in case of primary data). *See Section 3.2 (B.3) & 3.3*, respectively. ✓ Indicate how did you plan to manage the data and what *data analysis approach* was used to elicit findings. *See Section 3.2 (B.4) & 3.4*, respectively. ▪ **Findings and Discussion** (approx. 40% of main body text) ✓ This section is your data interpretation and analysis section; can be divided into sub-sections as per your research requirements. *See Section 3.4*. Where needed, divide/arrange your analysis thematically into more than one section. In each (thematic) section, arrange your findings and discussion under subthemes. ▪ **Conclusion** (approx. 5% of main body text) ✓ It is suggested to briefly restate your objective/research questions and reemphasise the contribution of your research. ✓ The conclusion of your research should be a brief of 'key messages' coming out of your research, rather just a summary of your study. State clearly 'what did your research find' and 'how relevant are your findings with the existing debate/understanding'. ✓ Avoid writing new information, data or source in your conclusion. Stick to your scope, key findings and the takeaway. ▪ **Policy Recommendations** (approx. 5% of main body text)

<table>
<tr>
<td></td>
<td>

✓ Based on your research findings, make (actionable) suggestions keeping in view the ‘how’ part. For instance, you may like to suggest “there is need to improve governance in the public sector”, but this statement lacks “how to improve governance in the public sector.”
✓ Instead of creating a long wish-list, concentrate on a few, but concrete policy recommendations. They should be actionable, with precise, practical implementation strategy.

References

✓ Add a List of References at the end of the paper, after the Conclusion and Recommendations. Follow the APA style. (See Annex V for APA Citations and Referencing guidelines)

<u>NOTE</u>: Adding annexes at the end of IRP are not recommended. However, if unavoidable, add only the relevant material such as data, tables, questionnaire/interview schedule/ topic guide of your research.
</td>
</tr>
<tr>
<td>WRITING & PRESENTATION STYLE</td>
<td>
WRITING STYLE FOR IRP (AND OTHER REPORTS) WRITE UP USING MS WORD
TEXT FONT: Times New Roman (TNR)
TEXT SIZE & ALIGNMENT:

Heading 1: TNR 16 Bold, Centre aligned
Sub-Heading 2: TNR 14 Bold, Left aligned
Sub-Heading 3: TNR 12 Bold, Italic, Left aligned
Text (main body): TNR 12, Justified
Text (bullet points): TNR 12, Left aligned
Text (table): TNR 11, Left aligned/Justified
Text (footnote): TNR 10, Left aligned
Text (table/figure source): TNR 10, Italic, Left aligned

LINE SPACING:

1.5 Line spacing for main body text
1.15 Line spacing for text in table
1.0 (single) Line spacing for text in footnote

PARAGRAPH SPACING:

12 before & 12 after for main body text
6 before & 6 after for bullet points and table
0 before & 0 after for text in footnote

<u>NOTE</u>: Although main Headings (Heading 1) and Sub-headings (Heading 2) must be numbered (such as 1 and 1.1), other sub-headings (Heading 3, 4, etc.) and paras must NOT be numbered!
</td>
</tr>
</table>

TABLES & FIGURES:

Tables and figures (such as map, flow chart or diagram) should be numbered consecutively, but separately in their own categories. In case of more than one table and/or figure inserted, separate lists of tables and figures must be added at the beginning (after the list of contents) in the document. Sources should be given immediately below the table and figures. Like any other kind of secondary data source, these need to be properly cited.

USE OF ACRONYMS:

Acronyms are usually used to avoid repeating the same word or phrase throughout the same piece of writing. It is recommended that when you use an acronym in your document for the first time, complete words or phrase should be written out with a short-form placed in brackets immediately after. For example, Ministry of Foreign Affairs (MOFA) or National School of Public Policy (NSPP). This way, it would be clear to the readers exactly what the letters 'MOFA' and 'NSPP' mean. In case of technical terminology or concept, you may want to briefly define/explain it in the footnote when used first time.

REMEMBER: In case of using more than 4-5 different acronyms in a single document, a list of abbreviations/acronyms must be added.

FOOTNOTES:

A *footnote* is a reference, brief explanation, or brief explanatory comment placed at the bottom of a page corresponding to the item cited in the main body text above. Participants may use footnotes (not Endnotes) to define a concept/terminology, explain a phenomenon, and/or add an explanatory comment. For citations in the paper, in-text citations are suggested; please follow instructions for Citations given in *Annex V*.

PAGE NUMBERS:

Page numbers must be used for all the pages (at the bottom of the page, center aligned) except the title page. Roman numerals must be used for all the pages in preliminaries/initial pages, except the title page.

MARGINS & PAGE SIDES

Select 'normal' margins for your paper/report:

- Top 2.54 cm
- Bottom 2.54 cm
- Left 2.54 cm
- Right 2.54 cm

NOTE: Take print on both sides of the page.

CITATION & REFERENCING:

	Detailed guidelines are provided in *Annex V*. **DATE & TIME FORMAT:** Two 'DATE' formats are recommended: [01 January 2019] and [January 01, 2019]. Similarly, two 'TIME' formats are recommended: [3:10 PM] and [1510 Hrs]. *NOTE: Whichever date and time format/style you choose, it should be used consistently throughout the document.* **PRESENTATION STYLE FOR IRP WRITE UP (USING MS POWERPOINT)** Follow presentation instructions given in *Annex II*.

ANNEX I-A: SAMPLE TITLE PAGE OF INDIVIDUAL RESEARCH PAPER

Use respective NIM Logo

14 TNR, Centre aligned, UPPERCASE Text

INDIVIDUAL RESEARCH PAPER

TITLE OF THE INDIVIDUAL RESEARCH PAPER

18 TNR, Centre aligned, UPPERCASE Text

by

16 TNR, Centre aligned, Sentence case Text

Full Name of the Participant

Service Group

Number of your MCMC/SMC Course

99th Mid Career/Senior Management Course
National Institute of Management, City

City of your respective NIM

A paper submitted to the Faculty of the National Institute of Management, Lahore, in partial fulfilment of the requirements of the 99th Mid Career/Senior Management Course.

I declare that this paper is the end-product of my own efforts, research and writing and has not, in whole or in part, been submitted elsewhere for assessment and its contents are not plagiarised. The paper reflects my own views and are not necessarily endorsed by the Faculty or the Institute.

11 TNR, Justified, Sentence case Text

12 TNR, Left aligned, Sentence case Text

Signature: _____
Date:
Paper Supervised by:
Full Name of Faculty Advisor
Designation, Institute

Title page should NOT be numbered

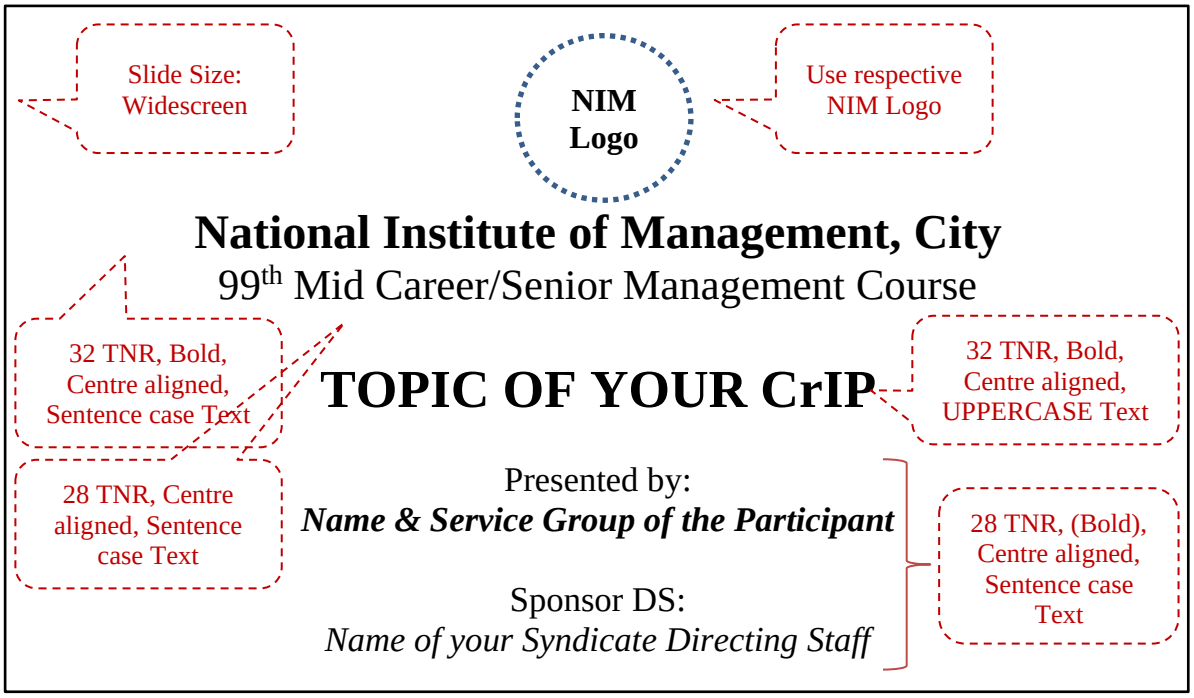
ANNEX II: GUIDELINES FOR CURRENT ISSUE PRESENTATION (CrIP)

ACTIVITY TYPE	Individual Activity
PROCESS / PROCEDURE	▪ The aim of Current Issue Presentation (CrIP) is to encourage the participants analysing a current issue impinging upon the socio-cultural, economic, political and/or any other facet of life in Pakistan which has serious policy implications with a view to promote their understanding about the strategizing the implementation of public policy. ▪ CrIP topic should relate to Pakistan and to a policy issue in current public debate. ▪ Each participant will be allocated a CrIP topic during the first term of the course. ▪ Participants are required to submit the soft and hard copies of the Current Issue Write-Up (CrIW) and the Current Issue Power Point Presentation (CrIP) to the T&C Section positively before the specified date and time. ▪ Schedule of the presentations will be reflected in the weekly programme. T&C Section will issue the schedule and instructions accordingly. ▪ Participants are required to make PowerPoint facilitated presentations before the participants and faculty in the classroom. ▪ Duration of each CrIP will be of 30 minutes including 20 minutes for the presentation and 10 minutes for review/Q&A. ▪ Participants are required to take notes of the comments/ suggestions made by the reviewer.
CONTENT / STRUCTURE OF CrIP	**SAMPLE CONTENTS / STRUCTURE OF CrIP PRESENTATION** ▪ Title Slide (*see Annex II-A*) ▪ Sequence of presentation (*Contents slide; see Annex II-B*) ▪ Currency of the topic (*news clipping*) ▪ Introduction ▪ Scope (*including Statement of Problem*) ▪ Analysis of issues & challenges ▪ Conclusion ▪ Recommendations *NOTE: Rehearsal prior to the final presentation is recommended.*

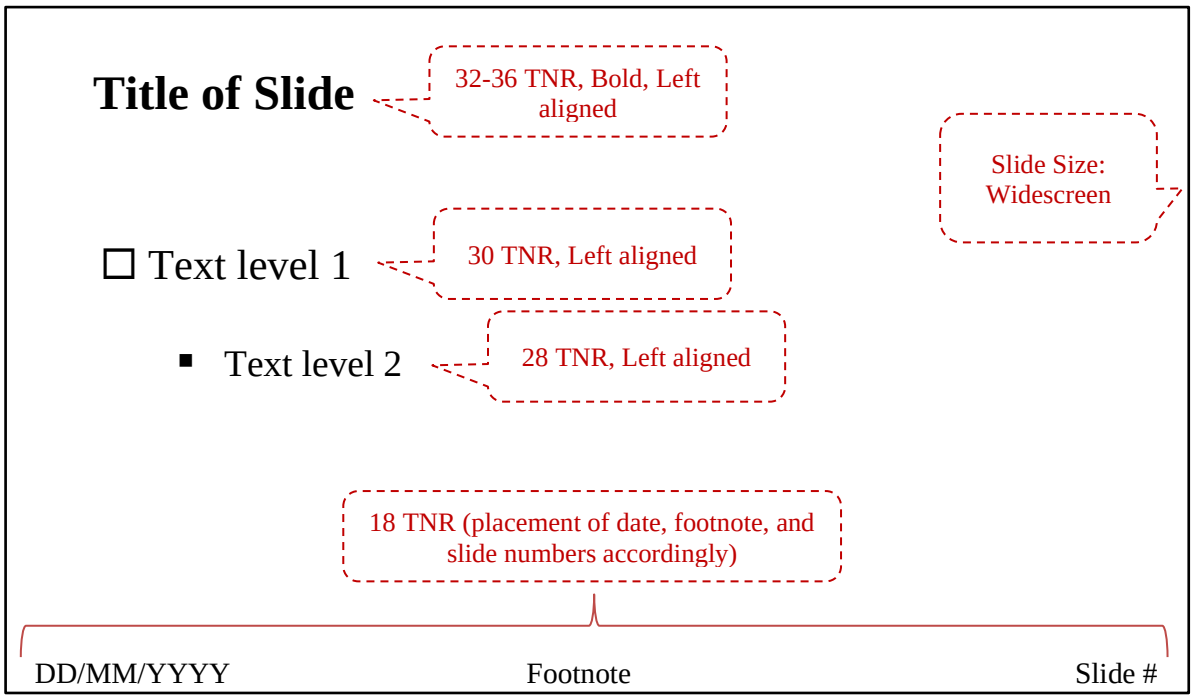
	SAMPLE CONTENTS / STRUCTURE OF CrIW (WRITE UP) ▪ Title Page (*see Annex II-C*) ▪ Introduction ▪ Scope (*including Statement of Problem*) ▪ Analysis of Issues & Challenges ▪ Conclusion ▪ Recommendations ▪ References *<u>NOTE</u>: The page limit for CrIW is 5-6 pages. This does not include the title page. There is no need to include Table of Contents and Annexes.*
WRITING & PRESENTATION STYLE	**STYLE FOR CrIP PRESENTATION (USING MS POWERPOINT)** ▪ The presentation should be in line with the write up submitted. ▪ Text on the slides should be clear & legible. ▪ Font size 28-30 for TEXT (in slide) and 32-36 for HEADINGS (top of the slide) should be used. Stick to one Text Font/Theme throughout the presentation. 'Times New Roman' (TNR) font is recommended. ▪ Suitable colour scheme and background should be used. Avoid dark and/or shocking colours. Avoid too many Animations and Transitions. ▪ Give proper citation wherever required. Adopt in-text or use Footnotes to add citation. ▪ Insert 'Slide Number' and 'Date' at the bottom of all slides, except for the Title Slide. **STYLE FOR CURRENT ISSUE WRITE UP (CrIW) (USING MS WORD)** ▪ Follow writing instructions given in *Annex I*.
INSTRUCTIONS	▪ CrIP should be based on the CrIW, and vice versa. ▪ The issue has to be current, evident from the newspaper clipping – one is enough – that is not more than 60 days old, counted from the last date of submission of the CrIP topic as notified by the T&C Section. ▪ APA citation and referencing style (7th Edition) should be followed both in the CrIP and CrIW. ▪ Facts, figures and important statements/claims should be properly cited/referenced. Participants are advised in their own interest that giving facts and figures or making statements and claims without

	giving reference of the source(s) will adversely affect the grading/evaluation of the CrIP/CrIW. ▪ Use ‘Times New Roman’ text font throughout the CrIP & CrIW.

ANNEX II-A: SAMPLE TITLE SLIDE OF CrIP (PRESENTATION)



ANNEX II-B: SAMPLE CONTENT SLIDE OF CrIP (PRESENTATION)



ANNEX II-C: SAMPLE TITLE PAGE OF CrIW

Use respective NIM Logo

14 TNR, Centre aligned, UPPERCASE Text

CURRENT ISSUE WRITEUP

TITLE OF THE CURRENT ISSUE

18 TNR, Centre aligned, UPPERCASE Text

by

16 TNR, Centre aligned, Sentence case Text

Full Name of the Participant

Service Group

Number of your MCMC/SMC Course

99th Mid Career/Senior Management Course
National Institute of Management, City

City of your respective NIM

12 TNR, Centre aligned, Sentence case text

Sponsor DS:

Name of your Syndicate DS

Title page should NOT be numbered

ANNEX III: GUIDELINES FOR CASE STUDY RESEARCH (CSR)

ACTIVITY TYPE	Group Activity (*Syndicate*)
PROCESS/PROCEDURE	▪ Case Study Research (CSR) training material (Participants' Guide) will be given to all participants as per the weekly programme issued by the T&C Section. ▪ All participants will be required to assemble in their respective Syndicates and read the Participants' Guide thoroughly. ▪ The Sponsor DS of respective Syndicates will administer the initial group discussion. Detailed instructions and submission deadline will be provided in the Participants' Guide. ▪ Individual report of each participant/sub-group should not exceed two pages, while the final CSR report should not exceed 3,000 words or seven (07) pages, excluding title page, table of contents, and references. ▪ Each Syndicate (Case Study Research Group) will be required to submit the following deliverables: o CSR Report (*to be compiled and edited by the Secretary and Chairperson*) o Original reports of all Sub-groups or individuals (*to be submitted by the Chairperson, along with the final CSR Report*)
CONTENT / STRUCTURE OF CSR REPORT	**SAMPLE CONTENTS / STRUCTURE OF A CASE STUDY RESEARCH REPORT** ▪ Initial pages o Title page (*see Annex IV-A*) o Table of Contents o List of abbreviations o List of tables/figures ▪ Introduction o Background and Introduction o Situation Analysis (based on document analysis/ literature review) ▪ Research Methodology o Research design o Data sources and collection method/process o Data analysis technique ▪ Case Study Analysis o Question 1/Thematic analysis (sub-group I) o Question 2/Thematic analysis (sub-group II) o Question 3/Thematic analysis (sub-group III)

	○ Question 4/Thematic analysis (sub-group IV) ▪ Conclusions & Policy Recommendations ▪ References *<u>NOTE</u>: The word limit of a CSR Report does not include initial pages and references. The 'Case Study Analysis' section is your thematic analysis section. This section should be divided into sub-sections as per the number of sub-groups assigned as per specific (CSR) research questions.*
CONTENT / STRUCTURE OF CSR PRESENTATION	▪ Title slide ▪ Composition of CSR Group ▪ Sequence of Presentation ▪ Introduction ▪ Scope ▪ Research Methodology ▪ Analysis of Issues, Challenges & Response ▪ Conclusion ▪ Policy Recommendations *<u>NOTE</u>: All CSR group members be given equitable chance to present parts of the report and/or to respond to the questions.*
WRITING & PRESENTATION STYLE	Follow the writing instructions given in *Annex I*. Follow the presentation instructions given in *Annex II, II-A & II-B.*

ANNEX III-A: SAMPLE TITLE PAGE OF CSR REPORT

Use respective NIM Logo

NIM Logo

City of your respective NIM

NATIONAL INSTITUTE OF MANAGEMENT, CITY

99th Mid Career/Senior Management Course

16 TNR, Centre aligned, *NIM*: Bold, Uppercase Text; *Course*: Sentence case text

Case Study Research #

14 TNR, Centre aligned, Sentence case text, Add #

TITLE OF THE CASE STUDY RESEARCH

12 TNR, Centre aligned, Sentence case text, Date underlined

(From DD/MM/YYY to DD/MM/YYY)

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Composition of the CSR Group			
Sr.#	**Name**	**Service Group**	**Role Assigned**
1	Name	Service Group	Role assigned
2			
3			
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Sponsor DS: ***Name of your Syndicate DS***

Title page should NOT be numbered

ANNEX IV: GUIDELINES FOR SIMULATION EXERCISE (SE)

TYPE	Group Activity (*assigned Syndicates & RGs*)
PROCESS / PROCEDURE	▪ Simulation Exercise (SE) training material will be given to all participants on the day as per the schedule issued by the T&C Section. ▪ The Sponsor DS will brief the participants about the aim, objectives, scope, requirements, and timeline of the Simulation Exercise. Detailed instructions will be provided in the training material. ▪ Participants will be allocated specific groups (Syndicate and Research Group-RGs) and assigned specific roles as per the requirement of each research group activity. ▪ Syndicates and RGs will be allocated to Faculty members (*Supervising DS*), who will supervise the research activities. ▪ After the SE briefing, all participants will be required to assemble in their respective Syndicates and RGs, and read/ discuss the training material thoroughly. Respective Syndicate/ RG leaders are required to plan their activities accordingly. *REMEMBER: Every participant is required to fully understand and adopt the role assigned to him/her.* ▪ Each Syndicate/RG will be required to submit the following deliverables: I. *Individual Writeup*: Each member of the Syndicate/RG shall submit his/her Individual Report to the concerned Chairman of the Syndicate/RG and to the concerned DS. II. *Group Report*: The Chairman of the Syndicate/RG shall do the following with regard to the individual reports: (a) Consolidate all individual reports into a final group report and submit it to T&C with a copy to the Covering DS both through email and/or e-portal, and (b) Forward through email all individual reports to the T&C and the Covering DS well before the cut-off date & time. III. *Group Presentation*: Each Syndicate/RG shall prepare and deliver a PowerPoint Presentation before the whole MCMC/ SMC batch in the presence of the faculty and review panellist. The duration and schedule for each presentation will be available in the Guidelines for each SE to be issued by the T&C Section at the start of the SE.

	IV. *Post Presentation Final Submission of the SE Write Up*: The Group leaders shall submit the final report of the SE after incorporating the comments/suggestions/observations of the review panellist, and of the faculty, along with the compliance report highlighting the changes made in the final report.
CONTENT / STRUCTURE	**SAMPLE CONTENTS / STRUCTURE OF A SIMULATION EXERCISE REPORT** ▪ Title page (*see Annex IV-A*) ▪ Executive Summary (*one page*) ▪ Table of Contents ▪ List of abbreviations ▪ List of tables/figures ▪ Section I: Introduction o Introduction and Background o Review of literature/Document analysis o Scope (*TORs*) o Organisation of the Report ▪ Section II: Research Methodology o Research design o Data sources and collection method/process o Data analysis technique ▪ Section III: Situation Analysis o Historical evolution o Policy and Institutional Arrangement o Status and Comparison (*Secondary data analysis*) ▪ Section IV: Analysis (of Issues & Challenges) & Findings ▪ Section V: Way Forward o Strategy Formulation o Action Plan (*Goals, Targets, KPIs, Executing Agency, Timeframe, Costing and Assumptions for solving problems*) o Contingency Plan (Shift of Focus) ▪ References ▪ Annexures *NOTE: Length of the Report must NOT exceed 20 pages. Length of individual reports should not exceed four (04) pages. Title page, initial pages and references pages will NOT be counted. Annexes are NOT encouraged, nevertheless if used, will be counted towards page limit. Report and presentation should be properly cited and referenced.* **SAMPLE CONTENTS / STRUCTURE OF A SIMULATION EXERCISE PRESENTATION** ▪ Title slide

	▪ Composition of Syndicate/RG ▪ Sequence of Presentation ▪ Introduction ▪ Scope ▪ Research Methodology ▪ Situation Analysis ▪ Analysis of Issues, Challenges & Response ▪ Key Question ▪ Action Plan ▪ Contingency Plan *NOTE: All Syndicate/RG members be given equitable chance to present parts of the report and to respond to the questions.* *NOTE: The schedule of SE presentations will be issues separately by the T&C Section.* *REMEMBER: Time management is an important performance indicator during the SE. Meet the deadlines and group presentation rehearsal prior to the final presentation is recommended.*
WRITING & PRESENTATION STYLE	Follow the writing instructions given in *Annex I.* Follow the presentation instructions given in *Annex II, II-A & II-B.*

ANNEX IV-A: SAMPLE TITLE PAGE OF SIMULATION EXERCISE REPORT

Use respective NIM Logo

NIM Logo

City of your respective NIM

NATIONAL INSTITUTE OF MANAGEMENT, CITY

99th Mid Career/Senior Management Course

16 TNR, Centre aligned, *NIM*: Bold, Uppercase Text; *Course*: Sentence case text

Simulation Exercise #

14 TNR, Centre aligned, Sentence case text, Add #

TITLE OF SYNDICATE / RG ASSIGNMENT

12 TNR, Centre aligned, Sentence case text, Date underlined

(From DD/MM/YYY to DD/MM/YYY)

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Composition of the Syndicate / RG #			
Sr.#	**Name**	**Service Group**	**Role Assigned**
1	Name	Service Group	Role assigned
2			
3			
4			
5			
6			
7			
8			

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Sponsor DS: ***Name of your Syndicate DS***

Title page should NOT be numbered

ANNEX V: GUIDELINES FOR CITATION AND REFERENCING (APA Style – 7th Edition)

This section presents the guidelines related to citation and referencing. ***Referencing*** is an acknowledgement that you have used a published or unpublished material belonging to other authors in your assignments or written work. This serves two purposes: (a) acknowledgement of the source, and (b) allows the reader to trace the source. When you use another author's work, referring to ideas and/or findings, you must include the author's or editor's surname and indicate the year of publication in the text of your work. This acknowledgement is called ***Citation***.[37] At the end of your assignment or written work, you must add a list of all the relevant sources of information that you have used to complete your study.

> *NOTE: APA (American Psychological Association) Style 7th Edition is the recommended style of citation and referencing at the NSPP/NIM for all written/presentation submissions.*
>
> ***Online support for APA Style is available here:* https://aut.ac.nz.libguides.com/APA7th**
>
> *REMEMBER: Strictly follow the instructions of your faculty (CI & DS T&C) regarding the Citation and Refencing style recommended at the Institute! Use APA style for all research activities including the current issue presentations, individual research paper, case study research, simulation exercises, LFV and IST reports/presentations, and tutorial discussions. It is important to understand that if you ignore other authors' work in your study, you could be accused of plagiarism.*

Proper citation and referencing are crucial to carry out a successful research, hence it is important to know how to cite and reference a source. You can either insert citations and references manually or use EndNote and/or MS Word (References Tab) to insert your citations and produce a reference list within no time; the latter is recommended at NSPP. This annexure presents both approaches: to cite and reference manually (using APA), and to manage sources in MS Word.

V-A. Managing Citations Manually (APA Style)

You are required to adopt the following rules for APA Style relating to ***citations*** depending on the number of authors, and if you are citing a direct quotation.

A.1.	Citing one author	▪ A recent study investigated the effectiveness of micro-finance tools in alleviating poverty (Aslam, 2015). ▪ Aslam (2015) has investigated the effectiveness of micro-finance tools in alleviating poverty.

[37] Citations are usually in-text and are different from the Footnotes and Endnotes; the former are placed at the bottom of the page while the latter are placed at the end of the document.

A.2.	Citing two or three authors	▪ The aid architecture has changed fundamentally since the aid landscape now includes new players (Fengler & Kharas, 2010). ▪ Recent research indicates that the extent of poverty has decreased substantially over the last decade (Nayab, Khan and Siddique, 2016).
A.3.	Citing four or more authors	*If the source has four or more authors, the abbreviation 'et al.' should be used after the first author's surname. This can also be used in the case of use three authors.* ▪ Acharya *et al*. (2006) used the OECD-DAC data on net official development assistance to measure aid proliferation. ▪ Civil service reform is crucial for improving the public sector capacity and performance in Pakistan (Haque, *et al*., 2007).
A.4.	Citing group authors	▪ EAD (2020) used the State Bank of Pakistan data on project loans and grants to measure debt sustainability. ▪ The State Bank of Pakistan published the data on project loans and grants to measure debt sustainability (EAD, 2020)
A.5.	Citing more than one work by the same author(s) in same year	▪ Policy network theory provides theoretical groundings to explore how actors interact and exchange resources to achieve broader network objectives (Khan, 2016a; Khan 2016b).
A.6.	Citing more than one work by the same author(s) in different years	▪ The aid literature has rarely considered the policy process and the influence of complex networks on managing decisions in an aid recipient country (Khan, 2016; Khan 2017).
A.7.	Citing short quotation (*fewer than 40 words*)	*You should add double quotation marks (") and page number if you quote directly from a published work, paraphrase specific ideas or explanations, or use a media file in your own work such as image, illustration, diagram, table, photograph or figure from a source.* ▪ Mavrotas (2010, p. 4) states "In the early 1990s, following the collapse of the Soviet Union and the end of the Cold War, many observers predicted an end of history for aid." ▪ "In the early 1990s, following the collapse of the Soviet Union and the end of the Cold War, many observers predicted an end of history for aid" (Mavrotas, 2010, p. 4).

		▪ A low tax-to-GDP in Pakistan was also noted and highlighted by the International Development Committee (IDC, 2010) of the House of Commons in their Tenth Report of Session 2012-13: "If the Pakistan Government is unwilling to take action to increase its revenues and improve services for its people, it cannot expect the British people to do so in the long run." (p. 43) *NOTE: when citing a single page, use 'p.' For a range of pages, use 'pp', for example: 'p.7' or 'pp.20-29.' If the page numbers are in Roman numerals, do not include 'p.', for example: (Asim, 1998, iv).*
A.8.	Citing long quotation (*40 or more words*)	*Specific editing is required for long quotation. The long direct quote must be presented in a double-spaced, indented block (with no quotation marks). Example:* Other studies provide evidences of positive social responsiveness: A rich paradigm in developmental psychology is based on the stranger reaction. The children diagnosed with autism between two and five years old were compared with non-autistic children of the same age. In view of the general belief of the inability of autistic children to form attachments, they were surprised to find no differences in the behaviour of both groups with strangers. (Frith, 2001, p. 146).
A.9.	Citing from works with missing information: author and/or date	*To cite a piece of work which does not have an obvious author, mostly happens in the case of government policy and/or other official documents, you should use a 'corporate' author (name of the organisation) or use 'Anon' for anonymous author.* ▪ In Pakistan the tax-to-GDP ratio is very low: it varied between 8.5 and 9.5 percent during 2008-2009 to 2013-2014 (Economic Survey of Pakistan, 2013-2014). ▪ A study by the World Bank (2012) notes that Pakistan's tax-to-GDP ratio was one of the lowest globally, primarily due to an inefficient tax administration, complex and obsolete legislation, and a non-transparent tax system. *To cite a piece of work which does not have an obvious date (year), simply write "n.d." for no date. For example, Khan (n.d.)*

V-B. Managing Referencing Manually (APA Style)

A ***reference list*** is a list of citations used in the body of your work. A reference list should be organised alphabetically by the surname of the author(s)/editor(s).

To develop a list of references, you need different bits of information about each work used in your research work. These bits of information are called 'references'. For all types of references, you need to start with author(s)/ editor(s) name, date of publication, and title of the work used/consulted. Depending on the type of material, you will also need more information such as: journal title, journal issue and volume number, page numbers, report number, title of report or conference proceeding, book or conference title, book editor, publisher, place of publication, website address, date of access, etc.

The reference list must be inclusive showing all the reference materials listed alphabetically in one list, NOT in separate lists according to source type. If you have to reference more than one piece of work by the same author(s), arrange sources in date order, beginning with the most recently published work.

The reference list should be on a new page (at the end of the document) after the main text of the report. All lines following the first line of each reference should be indented 0.5 inch from the left-hand side of the page. For the main text, use 12pt and Times New Roman Font throughout the whole document.

Illustration of APA Reference Style

Proper referencing is an important part of your research work. To develop a ***reference list***, you are required to adopt the following rules using APA Style:

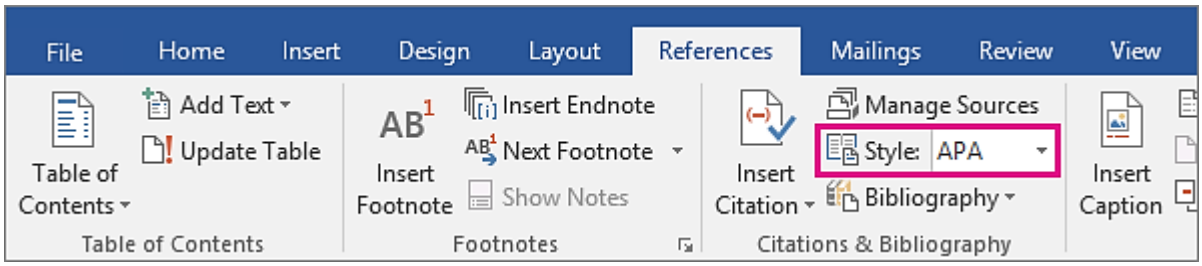
STYLE	CITATION	REFERENCE
Book & ebook with DOI	(Ewert et al., 2014) or According to Ewert et al. (2014)	Ewert, E. W., Mitten, D. S., & Overholt, J. R. (2014). *Natural environments and human health*. CAB International. https://doi.org/10.1079/9781845939199.0000
Book & ebook without DOI, ebook without DOI from research databases	(Foxall, 2018) or According to Foxall (2018)	Foxall, G. R. (2018). *Context and cognition in consumer psychology: How perception and emotion guide action*. Routledge.
Article with DOI from research databases	(Washington, 2014) or Washington (2014) stated that	Washington, E. T. (2014). An overview of cyberbully in higher education. *Adult Learning*, 26(1), 21–27. https://doi.org/10.1177/1045159514558412
Article without DOI: From research databases, or From a Print journal	(Moody, 2019) or Moody (2019)	Moody, M. S. (2019). If instructional coaching really works, why isn't it working? *Educational Leadership*, 77(3), 30–35.
Open access journal article without DOI	(Dayton, 2019) or Dayton (2019)	Dayton, K. J. (2019). Tangled arms: Modernizing and unifying the arm-of-the-state doctrine. *The University of Chicago Law Review*, 86(6), 1497–1737. https://bit.ly/2SkWwcy
Webpage, no date,	(Athletics New Zealand, n.d.) or	Athletics New Zealand. (n.d.). Form a new club. http://www.athletics.org.nz/Clubs/Starting-a-New-Club

STYLE	CITATION	REFERENCE
	Athletics New Zealand (n.d.)	
Webpage, with a date	(Monaghan, 2019) or Monaghan (2019)	Monaghan, E. (2019, December 10). *5 reasons modern slavery at sea is still possible in 2019*. Greenpeace. https://bit.ly/2PIXjqc
YouTube video or other streaming video	(MSNBC, 2020) or MSNBC (2020)	MSNBC. (2020, January 7). *Julián Castro endorses Elizabeth Warren* [Video]. YouTube. https://www.youtube.com/watch?v=Uk2Tzc8H5po
Conference paper	….act of curation works with unique set of factors (Mason & Missingham, 2019) or … according to Mason and Missingham (2019)	Mason, I., & Missingham, R. (2019, October 21–25). Research libraries, data curation, and workflows [Paper presentation]. *eResearch Australasia Conference, Brisbane, QLD, Australia*. https://bit.ly/2RGcFdn After the title, include a label in square brackets that matches the description of the presentation e.g. [paper presentation]. Create a short URL using https://bitly.com
One author	….(Pilger, 2006) or Pilger (2006) stated that …	Pilger, J. (2006). *Freedom next time*. Bantam.
Two authors	(Shaw & Eichbaum, 2008) or Shaw and Eichbaum (2008) …	Shaw, R., & Eichbaum, C. (2008). *Public policy in New Zealand: Institutions, processes and outcomes*. Pearson Education.
3 or more authors, up to 20 authors.	(Watson et al., 2019) or Watson et al. (2019) stated that … List the first author followed by et al.	Watson, S., Gunasekaran, G., Gedye, M., van Roy, Y., Ross, M., Longdin, L., & Brown, L. (2003). *Law of business organisations* (4th ed.). Palatine Press. List all authors up to and including 20. The last author's surname is preceded by an ampersand (&).
21 or more authors	(Loannidis et al., 2016) or Loannidis et al. (2016) stated …. List the first author followed by et al.	Loannidis, N. M., Rothstein, J. H., Pejaver, V., Middha, S., McDonnell, S., Baheti, S. Musolf, A., Li, Q., Holzinger, E., Karyadi, D., Cannon-Albright, L., Teerlink, C. C., Stanford, J. L., Isaacs, W. B., Xu, J.,Cooney, K., Lange, E., Schleutker, J., Carpten, J. D., … Weiver, S. (2016). Revel: An ensemble method for predicting the pathogenicity of rare missense variants. *American Journal of Human Genetics*, 99(4), 877–885. https://doi.org/10.1016/j.ajhg.2016.08.016 List the first 19 authors, then insert three dots (ellipsis …) and add the last author's name
Group (corporate) author with abbreviation	*First citation*: (New Zealand Health Information Service [NZHIS], 2003).	New Zealand Health Information Service. (2003). *Report on maternity: Maternal and new-born*

STYLE	CITATION	REFERENCE
	Subsequent: (NZHIS, 2003) … Use the full name throughout in your in-text references if there is no formal abbreviation of the group author.	*inequalities in Aotearoa New Zealand*. Otago University Press. Do not include an abbreviation for a group author in a reference list entry.
Author in secondary citations	… showed in the study (Seidenberg & McClelland, 1990, as cited in Coltheart et al., 1993) or Seidenberg and McClelland (1990, as cited in Coltheart et al., 1993) showed … Include the original work and the date, and the citation for the source where you found the information.	Coltheart, M., Curtis, B. Atkins, P., & Haller, M. (1993). Models of reading aloud: Dual-route and parallel-distributed-processing approaches. *Psychological Review*, 100, 589–608. Enter the reference list for the source you have read (secondary source).

V-C. Manage Citations & References Digitally (using MS Word)

Managing sources using MS Word is a modern and convenient way to insert citations and produce references list.[38] To manage your sources in MS Word, follow the instructions given below:[39]

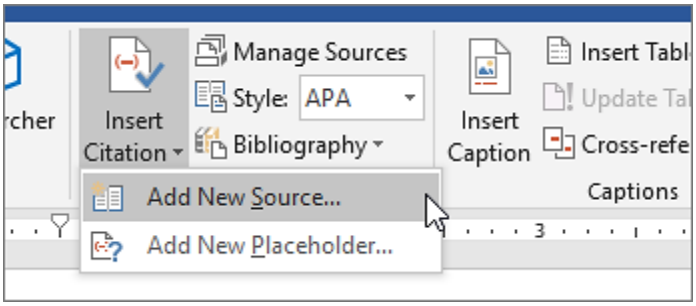


Add a Citation (using MS Word)

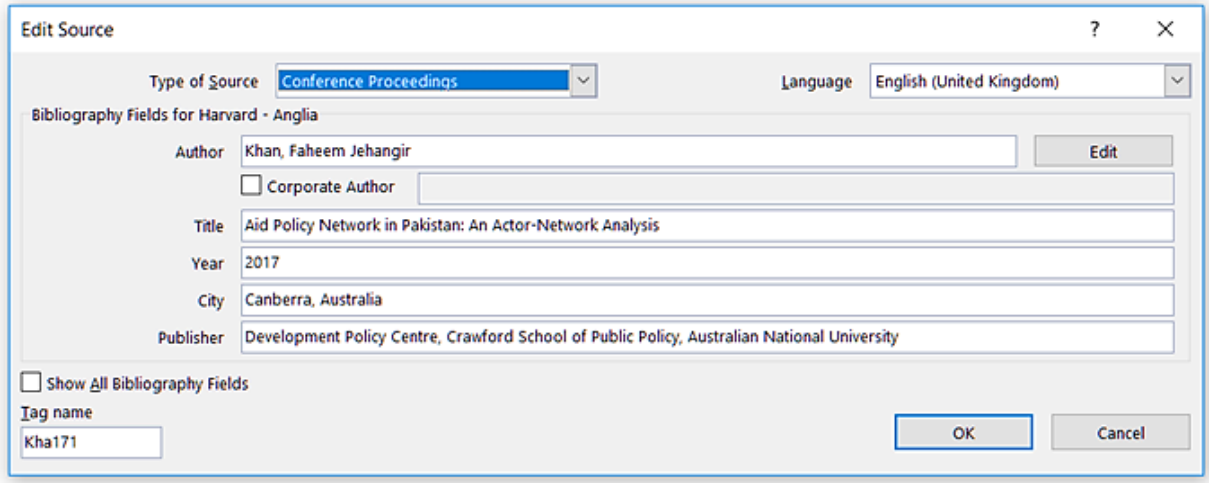
1. On the **References** tab, in the **Citations & Bibliography** group, click the arrow next to **Style**.
2. Click the (recommended) style that you want to use for the citation.[40]
3. Click at the end of the sentence (in text) that you want to cite.

[38] Visit this link for more detailed instructions: https://support.office.com/en-us/article/apa-mla-chicago-%E2%80%93-automatically-format-bibliographies-405c207c-7070-42fa-91e7-eaf064b14dbb#ID0EAABAAA=Newer_versions [Accessed on 2nd August 2019]
[39] Instructions are available on MS Office Support website for both newer, older and web versions.
[40] Available style options include APA, MLA, Chicago, Harvard, Turabian etc. Select the one which is recommended by your faculty, i.e., APA Style!

4. Click **Insert Citation** and then select **Add New Source**.



5. In the **Create Source** box, type in the citation details, and then click **OK**. Remember to fill in complete details of the source by checking the box 'Show All Bibliography Fields'.

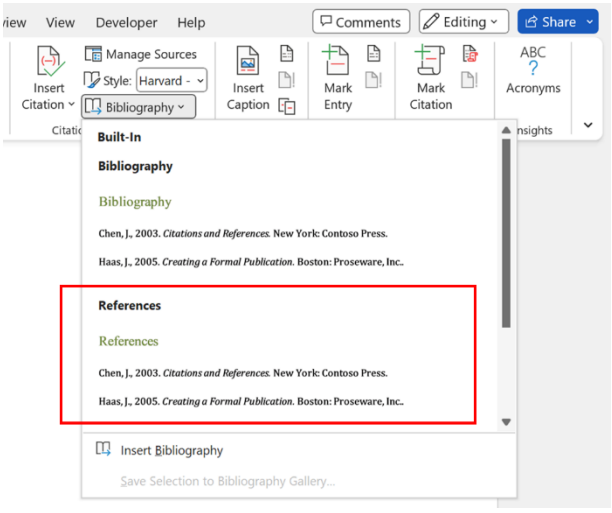


When you have completed these steps, a citation is added to the list of available citations. The next time you need this reference, you don't have to insert all details of the source again, just click **Insert Citation** and select the citation from the list you want to use. Repeat this from step 1-5 for all new sources to manage your list of sources. You can always edit/update and/or delete your sources.

Add Reference List (using MS Word)

With cited sources in your document, you can create a list of references anytime. To automatically generate the Reference list using MS Word, do the following:

1. Click the place in the document where you want to insert a bibliography. Usually, it is at the end of a document.
2. On the **References** tab, in the **Citations & Bibliography** group, click **Bibliography** and choose a format or simply click **References**.



ANNEX VI: AVOIDING PLAGIARISM

Plagiarism is an intellectual theft! You cannot simply copy-paste published material (ideas and thoughts of another author) into your piece of work without acknowledging it properly. So, it is essential that you do not just copy-paste anything. Either you write it in your own words, or you cite and reference the material used accordingly (Khan, 2022). In research, plagiarism is a common (and often misunderstood) problem that is often the result of a lack of knowledge and skills.

It is also important to understand the difference between 'Plagiarism' and 'Similarity Index'. Plagiarism refers to the use of ideas/work of another author without referring (citing) and presenting that in a way that these ideas/work are your own. This is a serious crime under intellectual property rights. All sources used should be cited/referenced properly in your work. In this context, Plagiarism is never allowed even 1%. Whereas, the Similarity Index means similarities in text, which you have produced, to other material in the database. This may vary according to the standards required by different entities. For instance, most research journals and universities accept similarity of 15% or lower similarity.

To understand 'what is plagiarism' and 'how to avoid it in your research', participants are recommended to visit and explore the following websites:

- ***The Little Book of Plagiarism: What It Is and How to Avoid It***

  http://hec.gov.pk/english/services/faculty/Documents/Plagiarism/Little%20Book%20of%20Plagiarism.pdf [Accessed on 14th October 2022].

- ***Higher Education Plagiarism Policy***

  http://hec.gov.pk/english/services/faculty/Documents/Plagiarism/Plagiarism%20Policy.pdf [Accessed on 14th October 2022].

At the National School of Public Policy, participants are strongly recommended to ***avoid plagiarism at all costs!*** Plagiarism is an intellectual theft, and there are penalties and disciplinary action(s) for it – against the individual found guilty of the offence. It is therefore suggested that you must cite and reference the material properly in all research products such as Individual Research Paper, Current Issue Presentation (Write Up and Presentation), Case Study Research Report, Simulation Exercise Report etc.

For any further guidance on the topic, please consult your Syndicate DS and/or DS (T&C).

ANNEX VII: ESSENTIALS OF A GOOD QUALITY RESEARCH

To qualify as good policy research, the research process must have certain standards and characteristics to be followed. Some characteristics of a good quality research are listed below:

CLARITY	A research work must be free of ambiguities and should have clarity in all aspects. In simple words, the research problem should be well-formulated, and the purpose of study should be clear enough. It is one of the main essences of research, without which all efforts are useless.
USEFULNESS	A good research should have some practical relevance (or linkage) to the existing debate and/or public policy problem. Identifying what exactly the research is about and what impact/contribution it could make are critical to its usefulness. Researchers are therefore suggested to clearly state the research problem and spell-out how in practice they expect their research work to contribute towards a problem-solving situation.
USE OF DATA/ INFORMATION	Collection and use of primary/secondary data and information are key inputs to research and analysis. Researchers are suggested to clearly cite sources and specify methods of data-collection and indicate limitations in the quality of available data. Secondary sources such as official statistics and/or existing public policy debate may be used to build the research argument and formulate the scope.
RESEARCH ETHICS	Principles of research ethics ask that researchers should avoid harming participants involved in the research process by treating all equally and respecting and taking into account their values and decisions (Flick, 2009). Following ethical considerations must be kept in mind during research process: ▪ HONESTY: Honestly report data, results, methods and procedures, and publication status. Do not fabricate, falsify, or misrepresent data. ▪ OBJECTIVITY: Strive to avoid bias in research design, data analysis, data interpretation, peer review, personnel decisions, and other aspects of research. ▪ CAREFULNESS: Avoid careless errors and negligence; carefully and critically examine your own work and the work of your peers. Keep good records of research activities. ▪ OPENNESS: Share data, results, ideas, tools, resources. Be open to criticism, feedback and new ideas. ▪ RESPECT FOR INTELLECTUAL PROPERTY: Honour copyrights and other forms of intellectual property. Do not use unpublished data, methods, or results without permission.

	Give credit (cite the source) where credit is due. Never plagiarise! ▪ RESPONSIBLE PUBLICATION: Publish in order to advance research and scholarship, not to advance just your own career. Avoid wasteful and duplicative publication. ▪ HUMAN SUBJECTS PROTECTION: When conducting research on human subjects, minimise harms and risks and maximise benefits; respect human dignity, privacy, and autonomy. ▪ RESPECT: Respect the opinions of your colleagues and research participants, and treat them fairly. Be respectful towards their views knowing that those are subject to their own experiences and perceptions. In addition to the above, researchers are suggested to take every care to ensure respondents' confidentiality and anonymity of individuals and their institutional affiliations. CONFIDENTIALITY is an active attempt to remove from the research records any elements that might indicate the subject's identities, while ANONYMITY means that the subjects remain nameless. In the former case, protect confidential communications, such as personnel records, government/military secrets, and official (classified) records. *NOTE: As part of the requirement, participants may be asked to list the name/designation/organisation of respondents who took part in research activities such as CSR and Simulation Exercise.*
CONCLUSION & POLICY RECOMMENDATIONS	A good research must implicate the key messages (*what went wrong, why and how*) in the 'conclusion' section and articulate 'policy recommendations' (*what should be done and how*) in a way that do not require too much further interpretation. These should be expressed in a rather simpler language and related to the audience's known concerns. Policy recommendations should not be a wish-list, rather actionable steps that should also highlight the implications.