

Executive Summary on *Research Design: Creating Robust Approaches for the Social Sciences*,  
by Stephen Gorard

By:

Kanasha Blue, Hui Cao, Amanda Recio, Cori Thurman

Niagara University

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Stephen Gorard emphasizes that research design is of critical importance in social science research, despite its relative neglect in many methods resources. He believes that people disregard such research as being important, particularly because “people do not generally die suddenly as a visible consequence of sloppy social science research or public policy decisions” (Gorard, 2013, p. 78). In this book, Stephen Gorard focused on the need for a new design in research in social sciences and tried to highlight the new approaches that can help researchers develop their project as authentically as possible using the appropriate choice of the design for the research.

A fascinating aspect of the writing is that Gorard continually points out flaws of other popular, well-published and respected researchers. One researcher of particular interest that was mentioned, is Creswell, author of our primary course text. Gorard criticizes a popular research methods resource by Creswell and Plano Clark (2007) because they were “really writing about methods issues and not about research design” (Gorard, 2013, p. 6). Additionally, Gorard disagrees with expert Robert Yin (2009), who claims that case studies are particularly good at addressing the essential research ‘how’s’ and ‘why’s’ of research. Instead, Gorard advocates that a comparison group is essential. “The problem here arises partly because of the widespread confusion between methods of data collection and research design, and partly because researchers want to find a coherent sounding reason for being ‘qualitative’ (i.e. rejecting the use of numbers)” (Gorard, 2013, p. 96).

Gorard stresses that when selecting research questions, one needs to take four steps (Gorard, 2013). The first and most obvious step is to review the literature. Reviewing the literature is a great way to distinguish the gaps that are found in the research and help narrow down a question or questions to study. Caution is needed here as there can be challenges when

completing a review of the literature. It is important to not allow the existing research to lead the question. Remembering to think broad and allow different perspectives or lens in while researching are essential to the development of research questions.

The second step, once reviewing the literature is complete, is to examine datasets in an effort to provide a secondary analysis (Gorard, 2013). Using data that has already been used in the reviewed literature can create an unnecessary bias based on the scope of the researcher's question. This is why step two is important. Reviewing datasets that are not already tied to a study can target a problem from a different angle than was previously used. Data may also provide a different question that has not been researched to date. A secondary analysis can confirm that the selected questions are the correct ones to ask.

Incorporating theory into identifying researchable questions is the third step in this process (Gorard, 2013). He argues that using a big picture theory is not needed for good research and that theories can have their limitations (Gorard, 2013, p. 30). The view from the author is that theories are "the junior partner in the research process" (Gorard, 2013, p. 31). While many agree that some theories are tentative, the idea that they are inferior is unsettling. Theories should not be taken as a sole contributor to research, but they can be advantageous. They can be used to support research or even target the area of the research that is lacking specification. For this reason, theories should always be an important part of identifying researchable questions.

The final step in this process is to synthesize the information (Gorard, 2013). This can be accomplished with a narrative if the researcher can execute it correctly. The problem with the narrative approach, in Gorard's opinion, is with using a range of evidence that is not addressing the same exact question. If the researcher can compile studies using the same questions, the author suggests using a meta-analysis (Gorard, 2013).

Gorard's theme in this section on warranting research claims was to not be like other researchers. To accomplish this, one must start with a clear and convincing argument. Many researchers have been known to increase the complexity of explanations to appear more educated. Gorard views this as incompetent and lazy (Gorard, 2013). The idea here is to make your argument readable to the audience. Knowing your audience is key for this step.

Another way to bolster your research is to have a warranted conclusion. It is important in research design to stray away from making the evidence fit the conclusion, or the conclusion fit the evidence. The key point from this section is that the "evidence must have validity and the presentation of the findings must have integrity" which in turn must make the conclusion relevant (Gorard, 2013, p. 44).

According to Gorard, there are four key elements to research design: the sample, or cases involved; the allocation of cases into sub-groups for comparative purposes; time; and interventions. Many suggestions are presented for maximizing successful claims, along with warnings of detrimental factors.

Gorard emphasizes that the best way to choose cases is through randomization, in an attempt to avoid bias as much as possible. It is very unlikely to get 100% compliance, and Gorard states that incomplete samples, even when randomly chosen, are not actually random. Non-response cases end up biasing even the best designed randomized samples, and they actually risk skewing results, potentially drastically. Gorard suggests leaving non-response in research, as it affects generalizability and the researcher's "ability to make general statements about the nature of the population on the basis of data" (Gorard, 2013, p. 166). A key takeaway was that Gorard suggests that all social science research should be required to include a detailed report regarding non-response, just as research does in medical experiments. Such a report would

indicate that the researcher was aware of the potential impacts of missing data, even when making statistical conclusions.

Gorard explains that strategically creating subdivisions among cases allows for better comparisons, which in turn, aid in producing claims that are more convincing. Gorard discusses various techniques in which data could be divided, but he recommends to decide on the sub-groups before conducting the research. A flaw of many research studies is that comparative claims are made, despite the fact that appropriate comparators are not built into the research design (Gorard, 2013, p. 94). Negative consequences of this issue have led to over-claiming, wrong conclusions being published, vagueness in problem definitions and therefore corresponding conclusions, “nonsense” claims, and “disguised or implicit comparisons” (Gorard, 2013, p. 95). Additionally, such flawed claims are continuously cited as legitimate by many other researchers, which is problematic.

Gorard emphasizes that change over time being tracked should not concern only one time period. There should be a distinction between cases that are tracked over time, with different cases at different times. Many researchers are led to make causal claims in respect to time when they notice correlation, but in reality, the claims are not justified. Even when comparators are used, it is important to realize that one recognized relationship does not necessitate that one factor caused another.

Gorard states that for research design to be considered “active,” it should involve interventions, which are changes in circumstances that are intentionally planned, that could ultimately influence outcomes (p. 124). Passive design can be a valuable way to identify causes, but at the same time, can be limiting regarding assessing causality. A recommendation for a successful active design would be to create two homogeneous groups, where one would act as

the control, not involving the variation. Gorard mentions that interventions have not been used widely enough as they should be in the area of social sciences. Increased usage would help to prevent misleading or false claims and provide an ethical way of determining whether interventions actually indeed work.

In the fourth part of the text, Gorard (2013) discusses highly advanced research design for when a true experimental design is not possible. According to Gorard (2013), when a randomized trial is not possible, passive approaches to research such as interrupted series, regression discontinuity, and instrumental variables are used as alternatives. Gorard (2013) states, “The chief problem with all alternatives is that they do not always have the same power and lack of bias as a randomized control trial” (p.146). Due to the weaker designs of all the alternatives, it is recommended to try several research designs. Research claims will be strengthened if all the results of the different designs agree, while also preventing misinformation by using one approach if the outcome differs.

Gorard additionally addresses the challenges to validity, and differences between measurements or observations. Validity is important in protecting research conclusions from biases such as errors in measurement. Gorard’s suggestion to address these types of validity is to subcontract out portions of the research, focus on getting the right answer, not a specific answer, dictate clear and concise methods and protocols, and release the data for the duplication of the research (Gorard, 2013). Even the smallest differences between measurements are worth pursuing because they could end up drastically affecting conclusions. If differences are brought to a researcher’s attention, Gorard recommends that a research report should be included explaining “why you decided to ignore or pursue the difference you found” (Gorard, 2013, p.173). The key is to explain and justify to others.

Part four concludes with the principle of research ethics, and addressing conflict of interest while conducting research. The key to ethics according to Gorard (2013), is not harming research participants. Regarding conflict of interest, the chapter looks at those who are affected by the research and the funding source of research. The evaluator of an experiment should not be a direct beneficiary does not stand to gain or lose based on the findings. Gorard points out that using an inappropriate design method, or not using a design method at all, is just as unethical as trying to hurt a participant, fellow researcher or funder during research.

In summary, Gorard concludes with the argument that a robust approach to social science research design is necessary, and offers a few guidelines for choosing a design and developing a grant application, using the principle and ideas in the book. Stephen Gorard defended the principle of the need for a robust approach to social science research design and gave good suggestions on how to choose a research design and how to write a successful research proposal.

## References

Gorard, S. (2013). *Research design: creating robust approaches for the social sciences*. London:

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