# Research Idea Workshop

Interactive Session

Time: 60+ minutes

The following workshops are intended to help trainees formulate and receive feedback on research ideas. Two ideas for workshop sessions are provided: one session focuses on the study design, while the other session focuses on study feasibility and implementation. If using both workshop sessions, facilitators should provide adequate time (which may range from days to months) between the end of the study design workshop and beginning of the study feasibility workshop for trainees to revise their ideas.

For both workshops, trainees should be placed in groups of four accompanied by 2-3 consulting psychological scientists. Following an introduction to the session, each round will take approximately 45 minutes. We recommend including a longer (e.g., 15-30 minute) break after every two rounds. The number of rounds and/or roles may be modified depending on the number of trainees in the cohort.

Study Design Workshop

Preparation: The purpose of this workshop is to receive feedback on a study idea from a group of trainees and psychological scientists. The purpose of this workshopping time is not to refine THE question or study you will conduct. Instead, we want to practice the process of posing research questions and designing studies. To make our time together most productive, we ask that you prepare the following before arriving for the workshop:

1. Pose one theological question and how you might translate that question to an empirically testable psychological question (steps 1 and 2 below).
2. Bring some concrete ideas about measurement (e.g., a few potential measures that you found online; step 3 below) as well as potential pros and cons of these approaches.
3. (Optional): Start to jot down ideas about the other steps in the process below. Do not feel pressure to create any type of final product for these steps. Instead, we want you to be ready to launch into a robust discussion with your pre-thinking as a starting point.

An example for what initial prep might look like follows the instructions. Please read through this example as well as through this entire document.

Instructions: You will be working in assigned groups that include four trainees. Each trainee will each take a turn bringing their ideas for designing a psychology study forward to the group for discussion. You will work through the following steps for each person’s question in four, 45-minute rounds. During each round, theologians will cycle through one of the four roles:

• Presenter

• Notetaker/share to large group

• Timekeeper

• Contributor

The psychologist(s) in the group will provide input in guidance in each round.

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| Time | Instructions for Each Round |
| 3  minutes | STEP 1: First, we’re going to ask you to think of 1 theological question that interests you, maybe related to, or drawn from, your own work. (This doesn’t need to be the theological question you imagined when you applied for this grant, nor does it need to be related to a future study you are imagining). |
| 10 minutes | STEP 2: Your job now is to pretend that you are Reviewer 2. Try to poke holes in the ideas you’ve been discussing.  First, let’s start with measurement. What kinds of measures would these studies need and how could you verify their reliability and validity? |
| 7  minutes | STEP 3: Now, we’d like you to consider whether and how the methods of psychological science could be used to gain insight into these questions.  What kinds of data might you collect? What kinds of experiments or observational studies could you design to help answer these questions? Of course, the idea is not that scientific methods will directly answer theological questions. The idea is that they can provide insights that indirectly help us to answer them. (See below for an example.) |
| 5 minutes | STEP 4: Now let’s pivot to internal validity. What would you need to do to make sure that these studies actually establish what they aim to establish? If there is some key thing that they seek to estimate, how can we be sure that the estimate is accurate? If there is some effect that they seek to demonstrate, how can we be sure that we’ve observed it? Etc. |
| 5 minutes | STEP 5: Now, consider external validity. Supposing that the study really does show what it aims to, how generalizable are the results across person, place, and time? What populations would you hope to make claims about? What could you do to ensure that the studies enable such generalizations? |
| 15 minutes | STEP 6: Have the chosen speaker for your group this round ready to present. We will have a spokesperson describe the presenter’s theological question; the kind of empirical data that would be informative when answering that question; how to measure the key constructs; how to investigate in an internally valid way; and how one could then generalize from the findings. |

Example of how this might play out for a question:

Suppose we are interested in the question, “What is the purpose of prayer?” Clearly, no empirical study could directly answer that question. However, a study couldtell you a lot about how people *think* about the purpose of prayer. A study could tell you about the different kinds of motivations people have for praying, what leads them to pray for different kinds of reasons, what they hope will result from their prayers, etc. And this kind of psychological information is surely going to be relevant when answering the theological question.

One way to begin an empirical investigation would be to use qualitative methods. A researcher could, for example, visit local churches, synagogues, mosques, etc. and conduct in-person interviews. Alternatively, the researcher could recruit an online sample of adults from across the country or around the world, asking participants whether they pray and if so, why. The answers participants provide could then be classified into various themes.

After identifying some of the most commonly reported motivations for prayer, the researcher might move to quantitative methods. For example, they could develop a prayer motivation scale: a questionnaire with closed-ended questions that ask, for each of the motivations identified in the qualitative work, whether participants pray for that reason. The researcher could then test whether responses to this questionnaire correlate with other variables of interest. For example, the researcher could assess participants religious “styles” (e.g., so-called “defensive” versus “existential” religiousness”) and test for correlations.

Alternatively, the researcher could use experimental methods. For example, they might randomly assign participants to read different messages (e.g., messages that inspire hope or gloom; or messages about a loving versus wrathful God) and then later follow up (e.g., a few days later) to ask the participants about the things they’ve prayed for in the meantime.

The researcher might be especially interested in whether prayer motivations differ across religious traditions or denominations, or whether lay people and religious authorities have different views on the purpose of prayer. Hence, they might sample from certain specific populations and compare groups. There are many possibilities!

Study Feasibility Workshop

Preparation: Now that you have ideas for a research project, we want to begin considering the feasibility of these questions. This workshop session will focus on setting realistic expectations for a research project to be conducted within the confines of a small, short-term study. You should consider things like: How long will it take for you to complete the entire study? How will you recruit participants? What is feasible with a limited budget and a one-year timeframe? What are some challenges you might experience as part of the research process?

You can bring forward a revised version of the question you proposed for the prior workshop, or you can choose a new research question. The purpose of this workshop is to help you consider what you can realistically propose when working with a psychologist.

To make our time together most productive, we ask that you do the following before arriving at our Maymester meeting:

1. Pose one empirically testable psychological question (step 1 below). Have a basic idea of the design of the study (including internal and external validity concerns) and measures used.
2. Consider sources of funding and a realistic budget (if unsure, you might assume a budget of ≈ $10,00).
3. Think about what participants you’d like to recruit (step 2 below), challenges in recruiting, impact of sample size on budget needed (or vice versa).
4. Imagine a collaborator and consider delegation of roles from data collection to writing process (step 3 below).
5. (Optional): Start to jot down ideas about the other steps in the process below. Do not feel pressure to create any type of final product for these steps. Instead, we want you to be ready to launch into a robust discussion with your pre-thinking as a starting point.

Instructions: You will be working in assigned groups that include three other cross-trainees. Each cross-trainee will take a turn bringing their ideas to the group for discussion. You will work through the following steps for each person’s question in four, 45-minute rounds, cycling through these four roles:

* Presenter
* Notetaker/share to large group
* Timekeeper
* Contributor

The psychologist(s) in the group will provide input in guidance in each round.

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| Time | Instructions for Each Round |
| 10  minutes | STEP 1: pose your theological question and translate that to an empirically testable question and/or hypothesis. Describe the design of the study (e.g., correlational, experimental) and provide suggestions for measuring variables. Briefly address internal validity concerns, your sample, and external validity concerns. |
| 5 minutes | STEP 2: Where and how will you recruit participants? Given the population you wish to address and make claims about through your research, will you be able to access them efficiently, and/or gain a large enough sample size to accurately draw conclusions about them? Consider how participants will be paid for participating. Will your budget be sufficient to compensate participants? |
| 5  minutes | STEP 3: Outline plans for collaboration. Thinking about a hypothetical or real collaborator, how will you delegate responsibilities? Who will conceptualize the study? Who is the primary administrator on the project, responsible for coordinating and managing the project? Who is the primary collector of the data and is responsible for its storage and security? Who is responsible for obtaining funding? Who will conduct the statistical analysis? |
| 5 minutes | STEP 4: Discuss a rough timeline for this project. What roadblocks might arise in your data collection process? Is there anything that might be challenging to get past an IRB? What will you do if you can’t recruit enough participants? |
| 5 minutes | STEP 5: How will you approach writing the manuscript? Who will be responsible for writing sections of the paper, or will one person be responsible for writing the entire first draft? How long do you think it will take you to write a manuscript draft? Who is responsible for editing the paper? Where might you attempt to publish this paper? How long will you budget for peer review and publication? |
| 15 minutes | STEP 6: Have the chosen speaker for your group this round ready to present. We will have a spokesperson describe the presenter’s research question; plans or concerns relating to recruiting participants; a rough timeline for the project (or potential challenges one might encounter); plans for collaboration with a psychological scientist; and plans for writing the manuscript. |