



## Workshopping Empirical Research Questions

Time: 45 minutes per participant

### Pre-workshop instructions:

As you can see below, we are going to go through several rounds workshopping potential study designs for a question each cross-trainee will bring with them to our meeting. The purpose of this time is 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 for our meeting:

- Pose one theological question and how you might translate that question to an empirically testable psychological question (steps 1 and 2 below).
- 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.
- (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 is attached with these instructions. Please read through this example as well as through this entire document.

### Workshop instructions:

You will be working in assigned groups that include several cross-trainees. Each cross-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
<b>3 minutes</b>	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).
<b>10 minutes</b>	<p>STEP 2: Your job now is to pretend that you are Reviewer 2. Try to poke holes in the ideas you've been discussing.</p> <p>First, let's start with measurement. What kinds of measures would these studies need and how could you verify their reliability and validity?</p>
<b>7 minutes</b>	<p>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.</p> <p>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.)</p>
<b>5 minutes</b>	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.
<b>5 minutes</b>	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?
<b>15 minutes</b>	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 for attachment to pre-workshop instructions:**

### **A. TRANSLATING A THEOLOGICAL QUESTION**

One question I am wrestling with in my research is whether patience is a universal virtue. Virtues on the framework I use are defined partly by their ability to promote human flourishing. If possessing patience can undermine flourishing for certain groups of people, should we think of it as a moral virtue?

While empirical research cannot settle this question, it could unsettle confidence that patience is a virtue. Do people who exhibit patience in difficult circumstances experience better wellbeing outcomes than those who do not?

Perhaps an easier first step would be to find out what most people believe about the connection between virtues and flourishing. Do people think patience is a less desirable or admirable trait if it leads to poor outcomes?

### **B. IDEAS ABOUT MEASUREMENT**

One kind of measure of whether someone has trait patience is a self-report measure: The Patience Scale-10/ PS-10 (Schnitker and Emmons 2007); items include

- Most people would say I am a patient person
- Waiting in lines does not bother me
- I believe that when it comes to getting along with others, patience is an important factor

3-Factor Patience Scale (Schnitker 2012); items include

- In general, waiting in lines does not bother me
- I am able to wait out tough times
- I am patient with other people

Other valuable inputs could be self-controlled behavior and emotion regulation:

Brief Self-Control Scale (Tangney et al.2004) and Emotion Regulation Scale (ERQ; Gross & John, 2003), with items like:

- I control my emotions by changing the way I think about the situation I'm in (cognitive reappraisal)
- I keep my emotions to myself (emotion suppression)

State Patience (Sweeny 2023); items following scenario include

- reframe the situation to see it in a more positive light
- distract yourself from thinking about or paying attention to the situation
- suppress feelings or thoughts about the situation
- suppress physical reactions to the situation
- suppress rude or impatient comments about the situation
- remain calm
- take deep breaths

Some of the well-being outcomes I would think could be undermined by patient behaviors are captured in two subscales of the BBC Well-being Scale: Psychological wellbeing and Relationships.

### C. IDEAS ABOUT PROCESS

One potential issue is that a cross-sectional, rather than longitudinal, study would not likely separate out people who have the virtue of patience from those who happened to exhibit patient behaviors if we use the state measures.

Another potential issue is social desirability bias in the self-report trait measures of patience. Do we have good reason to think that truly patient people will rate these items highly about themselves? Are there other reports we could use to confirm or triangulate?

Finally, is there a proportion of bad outcomes we would expect a virtue not to tolerate? How would we set that ratio so we could formulate a hypothesis about when exercising a virtue was so “bad” for a person that it should not count as a virtue for them?