Designing your study

Printable planning worksheet | ODIN researcher guide

This worksheet brings together all researcher planning questions on the **Designing your study** page, including its expandable sections. Work through the scientific design, then the logistics. Keep unresolved decisions visible and revisit them as you prototype and test.

Study / working title: _____

Researcher / team: _____ **Date / version:** _____

How to use: Follow the numbered hierarchy. Check one option at each routing question and follow its skip rule. If a choice is Undecided, explore the detailed branch provisionally and mark it for review. Use additional sheets when an answer needs more room; identify each sheet by its question number. Repeat measurement and intervention questions for every relevant variable or arm.

Route: Everyone completes A1-A4 and B1-B4. A5-A7 are for studies considering an intervention. You can combine contextual questions, regular check-ins, and participant-initiated reports; each has its own branch.

A. The scientific design

A1. What will you measure, and in whom?

A1.1 Which variables should be followed over time?

Name the psychosocial variables and behavioral measures your study needs. Describe what you want to understand about their changes and relationships.

A1.2 Whose experience are you trying to understand?

Define the population and eligibility criteria. Consider the setting, life circumstances, and daily routines relevant to the dynamics you want to study.

A2. Which questions will quantify those variables?

For each variable, identify the question, rating, count, or brief task that will supply an observation. Repeat A2.1-A2.3 on additional sheets for each variable.

Variable / measure for this sheet: _____

A2.1 What wording and answer format will capture the variable you intend to measure?

A2.2 What do the response choices, scale points, or numerical units mean?

A2.3 Does the answer describe right now, a recent event, or a period such as "since the last check-in"?

Examples from the guide, not questions to answer here:

Current stress: "How stressed do you feel right now?" A 0-10 rating represents stress at that moment.

Time in social contact: "How many minutes have you spent talking with other people since the last check-in?" A duration represents the interval between check-ins.

A3. When will an observation carry the clearest signal?

For your population, consider the situations in which you expect the variables to change or be most clearly expressed.

A3.1 Will you ask questions in a relevant context?

☐ Yes ☐ No ☐ Undecided

Skip rule: If No, go to **A3.2** (page 4). If Yes or Undecided, complete the branch below.

A3.1.1 Which places, social situations, earlier answers, or health-related measurements make this a useful moment to ask?

A3.1.2 Should the question appear on entering a situation, leaving it, or while it continues?

A3.1.3 What could detect that context?

Connect the context to an observable signal, such as GPS, Bluetooth, a supported health measurement, or a condition that needs no physical sensor.

A3.1.3a Is a sensor needed at all?

Time, day of participation, previous answers, and an in-app button can provide context without adding a physical measurement.

☐ Yes ☐ No ☐ Undecided

Skip rule: If No, go to **A3.2** (page 4). If Yes or Undecided, answer A3.1.3b-A3.1.3c first.

A3.1.3b Which sensor or measurement can recognize the context you mean?

A3.1.3c Can people in your intended population use the required phones or devices?

Record any device requirements or barriers that your design must address.

A3. Contexts and timing, continued

A3.2 Will you include regular check-ins?

☐ Yes ☐ No ☐ Undecided

Skip rule: If No, go to **A3.3** below. If Yes or Undecided, answer A3.2.1-A3.2.3.

A3.2.1 Which questions should be asked regularly, regardless of whether a particular context occurs?

A3.2.2 How often, and at which times or within which time windows, will those observations be useful?

A3.2.3 How will regular check-ins complement the observations gathered in specific contexts?

A3.3 Are there events or experiences that participants should report on their own initiative?

☐ Yes ☐ No ☐ Undecided

Skip rule: If No, go to **A3.4** below. If Yes or Undecided, answer A3.3.1.

A3.3.1 What event will they recognize, what should the in-app button say, and which questions should follow the press?

A3.4 On an ordinary day - and on a day with many qualifying events - how many questions might a participant be asked to answer?

Consider the combined demand of contextual questions, regular check-ins, and participant-initiated reports.

A4. Will you observe change, or also intervene?

☐ Observe change only ☐ Observe and intervene ☐ Undecided

Skip rule: Everyone answers **A4.1** and **A4.2** first. If Observe change only, then go to **B1** (page 9). If Observe and intervene or Undecided, continue to **A5** below.

A4.1 Which variables do you expect to change together, or to precede changes in one another?

A4.2 What timing and repeated observations will let you examine those dynamics within people and across the population?

A5. Will the intervention vary by study arm?

☐ Yes ☐ No ☐ Undecided

Skip rule: If No, describe your single intervention protocol in **A5.1**, then go to **A6** (page 6). If Yes or Undecided, answer A5.1-A5.3 for the arms you are considering.

A5.1 What contextual rules, messages, or other support will each arm receive?

If you plan one protocol, describe that protocol. Use additional sheets for multiple arms.

A5.2 Which questions and measurements should stay common across arms?

A5.3 How will participants be assigned to the arms you want to compare?

A6. What will determine an intervention in each arm?

Consider each arm separately. More than one basis may be relevant. Repeat A6.1-A6.3 for each arm with a different intervention protocol.

Arm / protocol for this sheet: _____

A6.1 Will a message follow a fixed schedule or a specified context?

☐ Yes ☐ No ☐ Undecided

Skip rule: If No, go to **A6.2** below. If Yes or Undecided, answer A6.1.1.

A6.1.1 What makes that moment suitable for the intervention, and what message or collection of messages should be used?

A6.2 Will recent data inform an intervention decision?

☐ Yes ☐ No ☐ Undecided

Skip rule: If No, go to **A6.3** (page 7). If Yes or Undecided, answer A6.2.1-A6.2.3.

A6.2.1 Which recent answers or measurements will inform the intervention decision, and what period will they cover?

A6.2.2 What pattern or condition will qualify a person to receive a message?

A6.2.3 Will the research team review those observations or will a contextual rule trigger the response?

A6. Intervention decisions, continued

A6.3 Will an individualized forecast inform an intervention?

☐ Yes ☐ No ☐ Undecided

Skip rule: If No, go to **A7** (page 8). If Yes or Undecided, answer A6.3.1-A6.3.4, then continue to A7.

Arm / protocol for this sheet: _____

A6.3.1 Which variable should be forecast, and how far into the future?

A6.3.2 What observations from that participant will be available to inform the forecast?

A6.3.3 When is the forecast needed, and which forecast condition should lead to which intervention?

A6.3.4 What should happen when no usable forecast is available?

A7. Will arm membership stay fixed or change?

☐ Fixed ☐ Changing ☐ No arm groups planned ☐ Undecided

Skip rule: If Fixed or No arm groups planned, go to **B1** (page 9). If Changing or Undecided, answer A7.1-A7.3.

A7.1 At which planned times, or in response to which observations, should the team change arm membership?

A7.2 Will you use a crossover design?

☐ Yes ☐ No ☐ Undecided

Skip rule: If No, go to **A7.3** below. If Yes or Undecided, answer A7.2.1.

A7.2.1 For a crossover design, what conditions will each person experience, in what order, and for how long?

A7.3 Which shared questions should continue throughout, and how will you keep track of each person's membership over time?

Next: Continue to **B1** (page 9).

B. The logistical design

Everyone completes this part, including studies that will only observe change.

B1. Incentives and daily payment

B1.1 How will you incentivize participants to answer questions?

B1.2 How much can each person earn per day, and what determines that amount?

B1.3 How does the payment plan fit the expected number of questions and the study budget?

B2. Length of participation

B2.1 For how many days will each person take part?

B2.2 Is that long enough to observe the dynamics - and any intervention periods - you want to study?

B2.3 What will the daily time commitment look like for a participant?

B3. Consent

B3.1 Will participants read and sign the consent form in the app or outside it?

☐ In the app ☐ Outside the app ☐ Undecided

B3.2 Who will explain the study and confirm that consent is complete before study activities begin?

B4. Recruitment target and timeline

B4.1 What is your target number of participants (N)?

B4.2 Where will you recruit this population, and how long do you expect recruitment to take?

B4.3 Will people start together or enroll over time, and when will the last participant finish?

Finish: Bring these answers into a draft protocol connecting people and variables, questions and timing, any intervention arms, and participation arrangements. Mark unresolved decisions for your team to revisit while building and testing the protocol.

Source: ODIN researcher guide, Designing your study. Prepared 23 October 2026. The additional routing questions organize the existing planning prompts; they do not prescribe a study design.