

New to Hypothetical Purchase Tasks? Start Here

If this is your first time designing a Hypothetical Purchase Task (HPT), you do not need a statistics background or prior research experience to get started. This primer explains what an HPT is, how to design a price list, what to report, and how to use the results in a study.

The goal is not to make you an expert in one sitting. By the end, you should understand the basic logic well enough to draft your own HPT, ask better questions during training, and avoid the most common design mistakes. If something still feels unclear, that is normal — the details are much easier to work through once you are applying the tool to your own study.

What Is a Hypothetical Purchase Task?

An HPT asks participants what they would do at a series of prices or costs. For example, a participant might be asked whether they would buy one month of a service at ₦0, ₦500, ₦1,000, ₦2,000, and so on. Their responses are used to trace a demand curve: as cost increases, fewer people usually say yes, or people say they would buy fewer units.

***A note on currency:** The examples in this primer use Nigerian naira (₦), because the first PROMISE Labs Africa studies using this approach were conducted in Nigeria. When designing your own HPT, use the currency, cost, and context that fit your study population.*

In behavioral economics, “price” does not have to mean money. A price can be any cost that stands between a person and something they value. That cost might be money, waiting time, travel distance, effort, risk, or the number of steps required to access a service. The best HPT uses the cost that participants actually experience.

For example, one PROMISE Labs Africa researcher studied secondary-school students’ engagement with extra mathematics lessons. The students did not personally pay for lessons, so a money-based HPT would not have matched the decision they actually faced. Instead, the HPT varied **time** — hours per week of extra math lessons — and traced demand across that cost.

Two Common HPT Formats

- **Binary uptake version:** Participants see one unit of a good or service at several prices, usually 8–15 prices in increasing order. At each price, they answer a yes-or-no question such as: “In the next month, would you obtain one counseling session at ₦1,000?” The percentage who say “Yes” at each price becomes the demand curve. If this is your first HPT, this is usually the best format to start with — it is easier to explain, clean, analyze, and report.
- **Quantity version:** Participants are asked how many units they would obtain at each price, such as: “At ₦500 per session, how many counseling sessions would you obtain this month?” The average quantity at each price becomes the demand curve. Use this version when the number of units matters to your research question and you have time to clean and interpret the responses carefully.

Designing Your HPT

Step 1: Define the unit and time frame. Choose one specific good or service and one clear time window. A respondent should know exactly what they are being asked to imagine. Strong examples include “one month of health insurance coverage,” “one 30-minute counseling session this month,” or

“one monthly public toilet pass.”

Step 2: Choose the lowest and highest cost. The lowest cost should be free or nearly free, where you expect most people to say yes. The highest cost should be high enough that almost nobody says yes. If you are unsure where to set these anchors, look at similar goods or services, check local prices, or ask a few people from the study population before finalizing the survey.

Step 3: Add 8–15 costs between the anchors. Prices usually work best when they increase roughly by doubling or tripling rather than by adding the same amount each time — this is what “log-spaced” means in practice. For example, a list might move from ₦5 to ₦25 to ₦65, instead of increasing by equal steps such as ₦5, ₦15, ₦25, where each step adds ₦10. Include ₦0 as the first price if a free option makes sense in your study.

A simple binary question template is: “*In [time frame], would you obtain one [unit] at [cost]?*” Ask the same question once for each cost on your list.

Step 4: Decide how many respondents you need. More respondents make the demand curve more reliable, especially if you plan to compare subgroups (see the example on page 3). Treat patterns from small groups as suggestive, not conclusive.

What to Report

Every HPT write-up should include two basic outputs: a demand curve and at least one summary index.

1. **Demand curve graph.** Put cost on the x-axis. Put percent “Yes” on the y-axis for a binary HPT, or mean quantity on the y-axis for a quantity HPT.

2. **Summary index.** Choose the index that best fits your research question:

- **P_{50}** — use this if you care about the price where demand drops to 50%.
- **Q_0** — use this if you care about demand when the cost is lowest.
- **Zero-demand share** — use this if you want to identify people who say no at every price.
- **Area under the curve (AUC)** — use this if you want one overall demand score that summarizes the full curve.

You do not need to calculate these by hand before training. The important point for now is to understand what each output means and why you might choose one over another.

How to Use an HPT in a Study

HPT results can be combined with other survey variables or followed up with interviews and focus groups. The best use depends on your research question, budget, and timeline.

Use an HPT index as a predictor. Calculate an index such as P_{50} , Q_0 , zero-demand share, or AUC, then compare participants with a high index value against participants with a low index value on a related question measured elsewhere in the survey. For example, does higher demand on the HPT predict whether someone plans to enroll in the service next month, buy a monthly pass, or support a community levy?

Use an HPT index as an outcome. Calculate the index separately within each subgroup, then compare whether it is higher or lower across those groups — exactly what the subgroup table later in this primer does for Q_0 (for example, is baseline demand higher among women than men?). Collect these characteristics in the same survey so the subgroup definitions are clear:

- Demographics (e.g., age, gender, education, income, household size, location)
- Attitudes (e.g., perceived need, trust in institutions, risk tolerance)
- Experiences (e.g., used the product or service in the last 6 months)
- Access and resources (e.g., phone ownership, internet access, distance to service)

Add qualitative follow-up. Interviews or focus groups can help explain why the demand curve looks the way it does. You might ask, “You said yes at ₦3,000 but no at ₦4,000. Can you walk me through your thinking?” Or, “What would need to change for you to consider buying this pass at a higher price?”

Worked Example: Health Insurance HPT

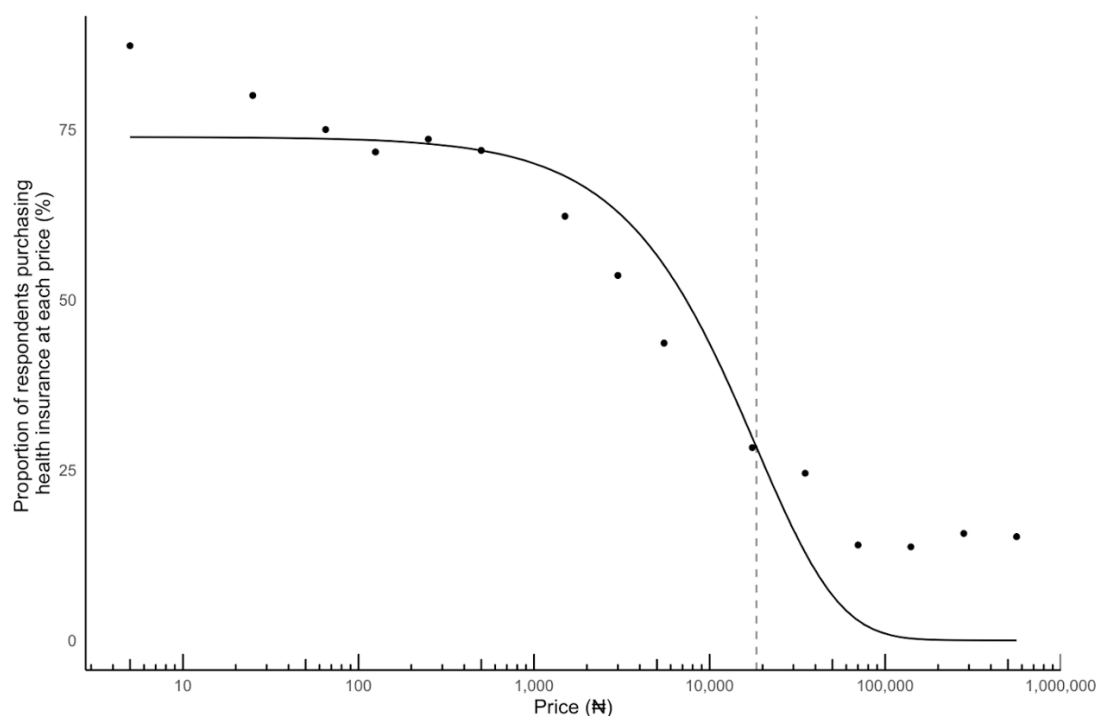
In the questions that follow, we would like you to imagine purchasing one month of health insurance coverage for yourself. Assume that the coverage is for your use only. You cannot sell it or give it to anyone else.

Researcher note: The “cannot sell it or give it to anyone else” instruction is important. It prevents participants from answering as if they could resell the item for profit. Keep an equivalent line in your own HPT when resale could affect responses.

Please answer the following questions honestly and thoughtfully. Would you be willing to purchase one month of health insurance coverage if it was offered at each of the prices below?

Price	Yes	No
₦5.00	☐	☐
₦25.00	☐	☐
₦65.00	☐	☐
₦125.00	☐	☐
₦250.00	☐	☐
₦500.00	☐	☐
₦1,500.00	☐	☐
₦3,000.00	☐	☐
₦5,500.00	☐	☐
₦17,500.00	☐	☐
₦35,000.00	☐	☐
₦70,000.00	☐	☐
₦140,000.00	☐	☐
₦280,000.00	☐	☐
₦560,000.00	☐	☐

Figure: Sample Demand Curve for Health Insurance Using the Binary Method. A demand curve for this task places price on the x-axis and percent “Yes” on the y-axis. The dashed line marks P_{50} — the point where the curve crosses 50%.



Example subgroup summary. The table below reports demand for health insurance at the lowest price, using Q_0 . In this study, baseline demand was nearly identical between open and closed economy types, but it was higher among younger respondents, women, and respondents with higher religiosity.

Subgroup	Q_0 (%)
<i>Economy Type</i>	
Open	76.28
Closed	76.27
<i>Age</i>	
≤ Median	86.31
> Median	72.49
<i>Gender</i>	
Male	75.10
Female	85.44
<i>Religiosity</i>	
> Median	81.92
≤ Median	72.42