

PSYCH 10 Tutorial Session · Fall 2026

Week 2 · The Sleep Lab Incident

Name	SUNet ID (the part before @stanford.edu)	Student ID number
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Please write legibly so the teaching team can log your attendance: if we can't read your name, we can't give you credit.

Turn this in to your tutorial leaders at the end of the session.

The situation

Welcome back to **Strangeford University** (motto: *Truth in Variation*), where the data are always a little strange. You are the campus's newest **data detectives**, and this morning you've been called to the Truett Sleep Lab.

It's 8:48 a.m., and lab meeting is at 9:00.

Four research assistants (RAs) each collected data from three participants: a wristband tracked each participant's sleep last night, and each participant answered a short survey this morning. Dr. Truett opened the data file and said only this:

"Something is wrong in this file. For each RA, tell me whether their rows have a problem, and back it up with specific cells from the table."

The protocol, the data table, and the four RAs' statements are on this sheet, front and back. Work through all four RAs together. You have twelve minutes.

Artifact 1 — the protocol

Truett Sleep Lab · Protocol 7 (the short version)

1. Each RA runs **three different people**. Enter exactly what the wristband shows and what the participant tells you.
2. **hours_slept**: from the wristband, to one decimal place (e.g., 7.2).
3. **chronotype**: ask "Are you a morning lark or a night owl?" Enter **1 for lark, 2 for owl**.
4. **mood**: a whole number from **1 (worst) to 5 (best)**.
5. If a participant declines to answer a question, **leave the cell blank**. Never enter a value in its place.

Artifact 2 — the data table

ID	RA	hours_slept	chronotype	mood
P01	Sam	6.4	2	2
P02	Sam	7.1	1	4
P03	Sam	5.8	2	0
P04	Jo	8.0	2	3
P05	Jo	8.0	2	3
P06	Jo	8.0	2	3
P07	Avi	7.2	1	5
P08	Avi	6.9	1.5	4
P09	Avi	8.3	2	3
P10	Mel	2.5	2	1
P11	Mel	10.5	1	5
P12	Mel	7.6	2	4

Artifact 3 — the four RAs' statements

SAM — the tidy one

"P01 through P03 are mine. All three slept under seven and a half hours, which seemed short to me, so I read each wristband twice. I hate loose ends, so there is not a single blank cell in my three rows. Every one is complete."

JO — the busy one

"P04 through P06. I had a chemistry midterm, but I ran all three, and honestly they were textbook sleepers — totally typical people. All three turned out to be owls, which is no surprise in a dorm. Nothing weird to report."

AVI — the enthusiast

"P07 through P09, all by the book. P07 woke up in a great mood and gave it a 5 without hesitating. P08 said they're *kind of both* a lark and an owl. Rule 1 says to enter exactly what the participant tells you, so I entered 1.5, halfway between 1 and 2. Math!"

MEL — the blunt one

"P10 through P12. P10 stayed up most of the night studying for a physics exam: two and a half hours of sleep, and they felt terrible this morning. P11 is on the crew team, and ten-plus hours on a rest day is normal for them. P12 wasn't sure "owl" fits someone who only stays up late on weekends, but they picked owl, so I entered a 2. I enter what the wristband shows and what the participant tells me. Read the protocol."

Your answer sheet (fill it in before the timer ends)

Here are four checks worth running on any data table. Each check is the most useful one for exactly one RA's rows, so each check number gets used once. For each RA, write the number of the check, circle yes or no under "Problem?", and list the cells that are your evidence.

#	Check
1	Variation. Do the rows differ from one person to the next? If several people have exactly the same values in every column, ask how that could have happened.
2	Range. Is every value inside the range the protocol sets for its column? Look at where each scale starts and ends, and at what the protocol says to do when someone doesn't answer.
3	Categories. In some columns, each number is a label for a category and doesn't measure an amount. Are any of those labels being treated as amounts? A number that falls between two labels doesn't correspond to any category.
4	Extreme values. An unusually large or small value isn't necessarily a mistake. Do the other values in that person's row make sense alongside it? Does anything in the RA's statement explain it? Answer both questions before you decide.

RA	Check #	Problem?	Evidence (which cells)
Sam		yes / no	
Jo		yes / no	
Avi		yes / no	
Mel		yes / no	

An answer counts only if it names specific cells. If a protocol rule or an RA's statement is part of your evidence, name that too.