# My Reflective Journey

This module on Research Methods and Professions has shaped me in many ways. It has sharpened my skills, broadened my knowledge, and guided my growth. I’ll reflect on this using three key areas: statistical analysis, research methods, and personal-professional development. My experiences come from practical exercises, a research proposal, and a skills assessment.

## Mastering Statistics

### **What Happened**

In Units 8 and 9, I tackled tough statistics tasks. I calculated means and medians, tested hypotheses, and ran regression models. One task stood out: analyzing patient recovery data. I used a t-test to check if a new treatment worked. I had to confirm if the results mattered in a medical setting.

### **Why It Mattered**

These tasks boosted my grasp of statistics. I learned to pick the right test for each question. At first, p-values confused me. I mixed up statistical importance with real-world impact. To fix this, I reviewed notes, watched tutorials, and talked with classmates. Persistence paid off. Now, I see how vital statistics are in research - especially in healthcare, where accuracy affects lives.

### **What’s Next**

I’ll use these skills in my dissertation. I want to test clinical treatments with solid analysis. To get better, I’ll learn advanced tools and join workshops. This keeps me sharp for future challenges.

## Diving into Research

### **What Happened**

I wrote a research proposal and reviewed existing studies. My literature review covered "Large Language Models in Healthcare." I dug into databases, judged sources, and summarized uses like decision support tools. My proposal, "A Framework for Trustworthy Clinical AI," asked: *How can a dashboard help doctors monitor AI risks in real time?* I planned a mixed-methods study and tackled ethics.

### **Why It Mattered**

This showed me how complex research can be. The literature review revealed gaps—like AI making up false answers. Writing the proposal, I struggled to focus my ideas. I solved this by zeroing in on the dashboard’s purpose. Clarity became my goal. I also saw how ethics, like privacy, matter in AI healthcare. This made me value careful planning for trustworthy results.

### **What’s Next**

I’ll build on this for my final project. I’ll refine my methods and prioritize ethics. Reading journals like *Nature Medicine* will keep me updated. This prepares me for real research problems.

## Growing Personally and Professionally

### **What Happened**

I completed a skills matrix and a SWOT analysis. The matrix showed I’m strong in data analysis and critical thinking. The SWOT highlighted my analysis skills as a plus, public speaking as a minus, AI innovations as a chance, and fast-changing standards as a risk.

### **Why It Mattered**

This opened my eyes. My data skills gave me confidence for a research career. But weak public speaking? That hit hard—I need it to share ideas. AI opportunities excite me, matching my interests. Yet, keeping up with changes feels daunting. This taught me to assess myself often. It aligns my strengths with my goals in healthcare.

### **What’s Next**

I’ve got a plan. I’ll join a debate club to boost my speaking. I’ll use my analysis skills on AI projects—like testing my dashboard idea. Updating my SWOT regularly will guide me. This keeps me growing toward my aims.

This module changed the way I approach research tasks now. It gave me tools and a mindset for the future. My stats skills, research know-how, and self-awareness have grown. I’m ready to make a difference in healthcare research. Moving forward, I’ll keep learning, seize chances, and fix my flaws.