

INTRODUCTION

Research competency is a cornerstone of PM&R residency. This project aims to enhance academic productivity and increase the research level of comfort among PM&R residents.

The barriers identified included:

- Lack of early research guidance and limited exposure to diverse scholarly activities.
- Perceived research complexity leading to anxiety and delayed engagement.

METHODS SECTION

To address these barriers, we developed a PGY2 Research Bootcamp. The key points of the curriculum were identified through an analysis of alums’ research output and resident feedback:

- Alums from the 2022 class showed wide discrepancies in research productivity, highlighting a lack of consistent engagement.
- Residents reported feeling unprepared and overwhelmed, often delaying research engagement until later in residency.

To address these gaps, the PGY2 Bootcamp curriculum focused on:

- Introducing core research skills specific to PM&R.
- Providing an overview of research resources and opportunities within and outside the department and institution.
- Early introduction of our structured point system to track, diversify, and incentivize scholarly activity.

Evaluation of effectiveness:

- Pre- and post-surveys were administered to assess residents' confidence and preparedness (Table 1).
- These surveys captured quantitative changes in key competencies and provided qualitative feedback to refine future iterations of the Bootcamp.

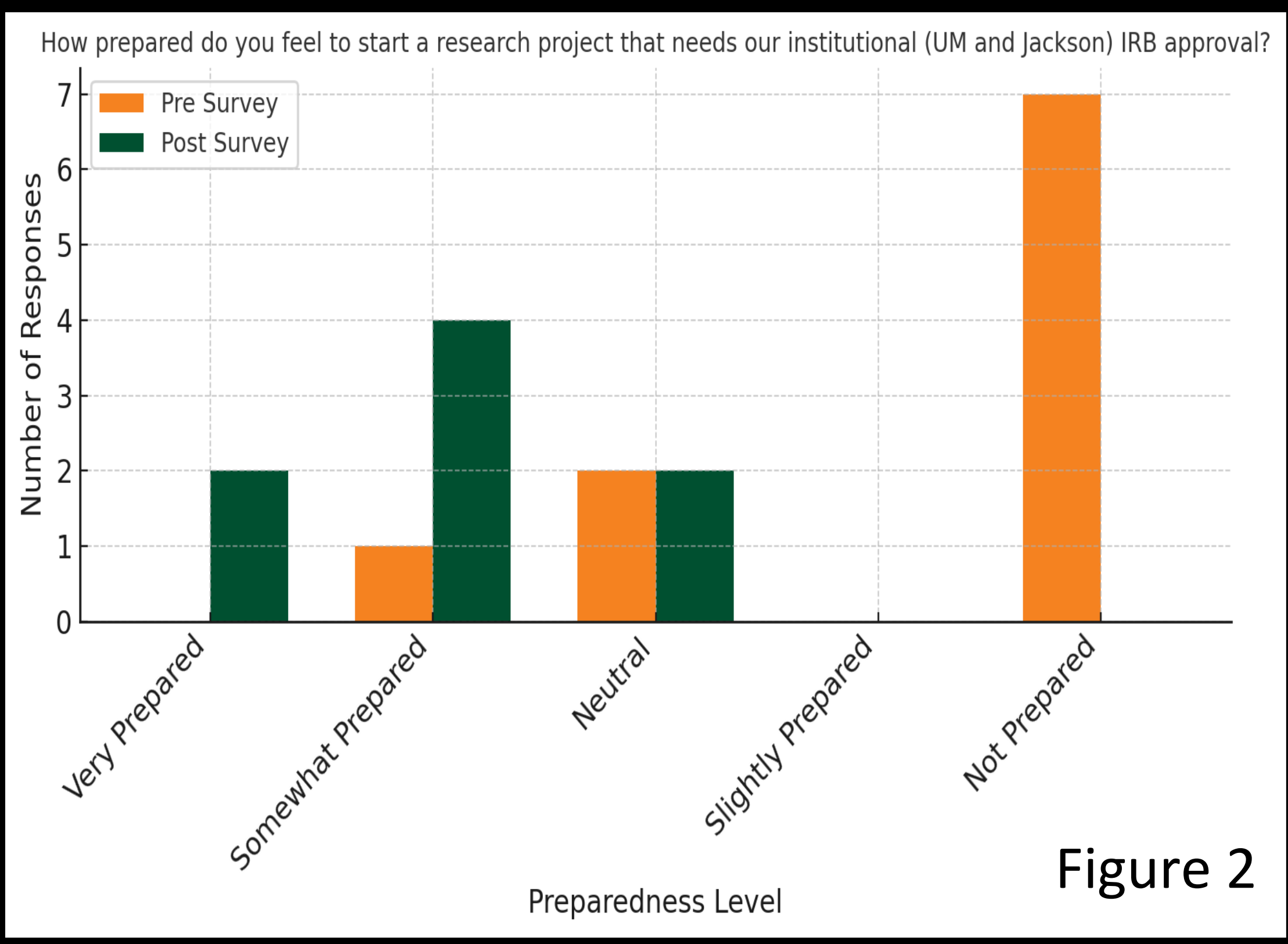
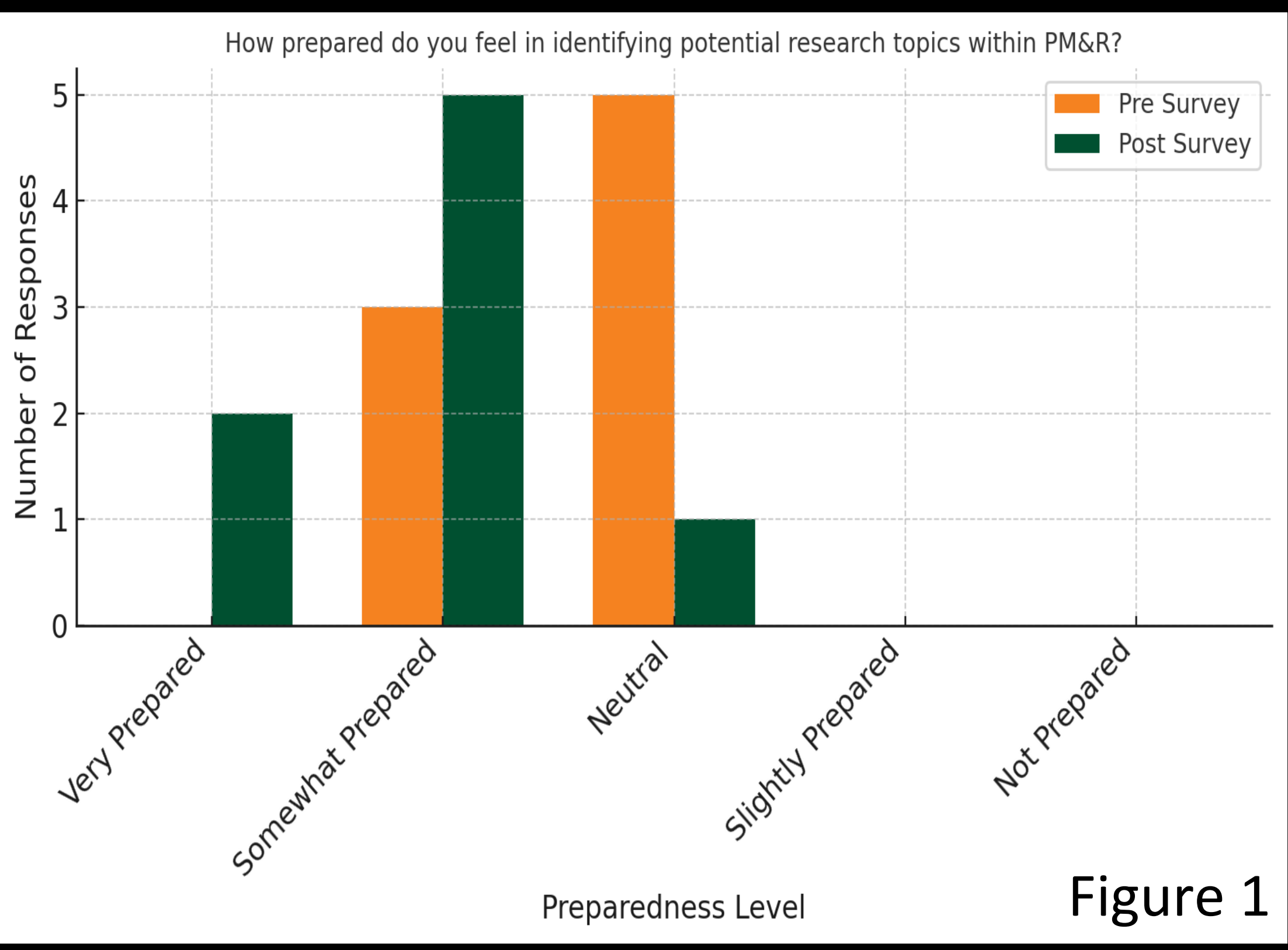
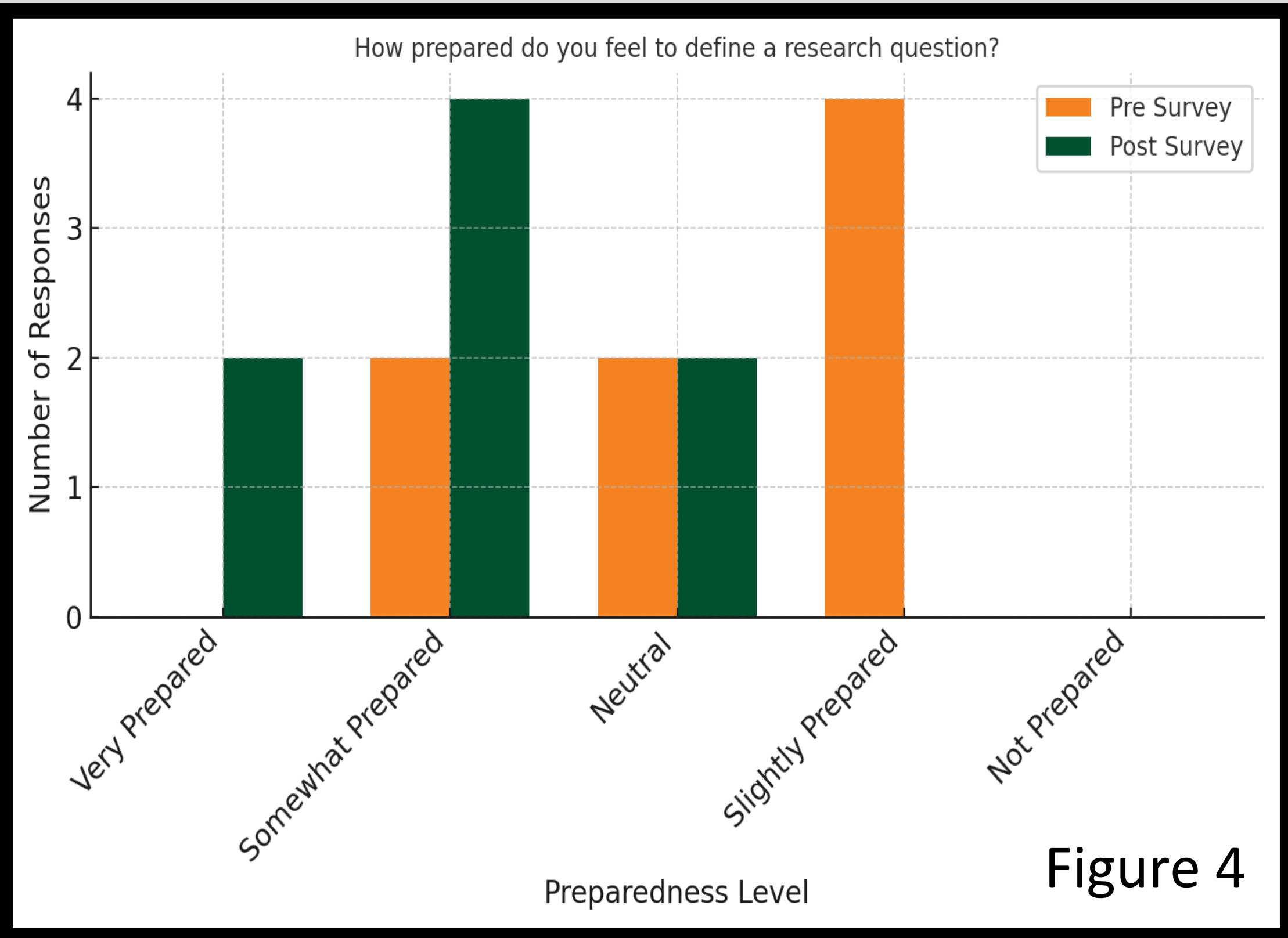
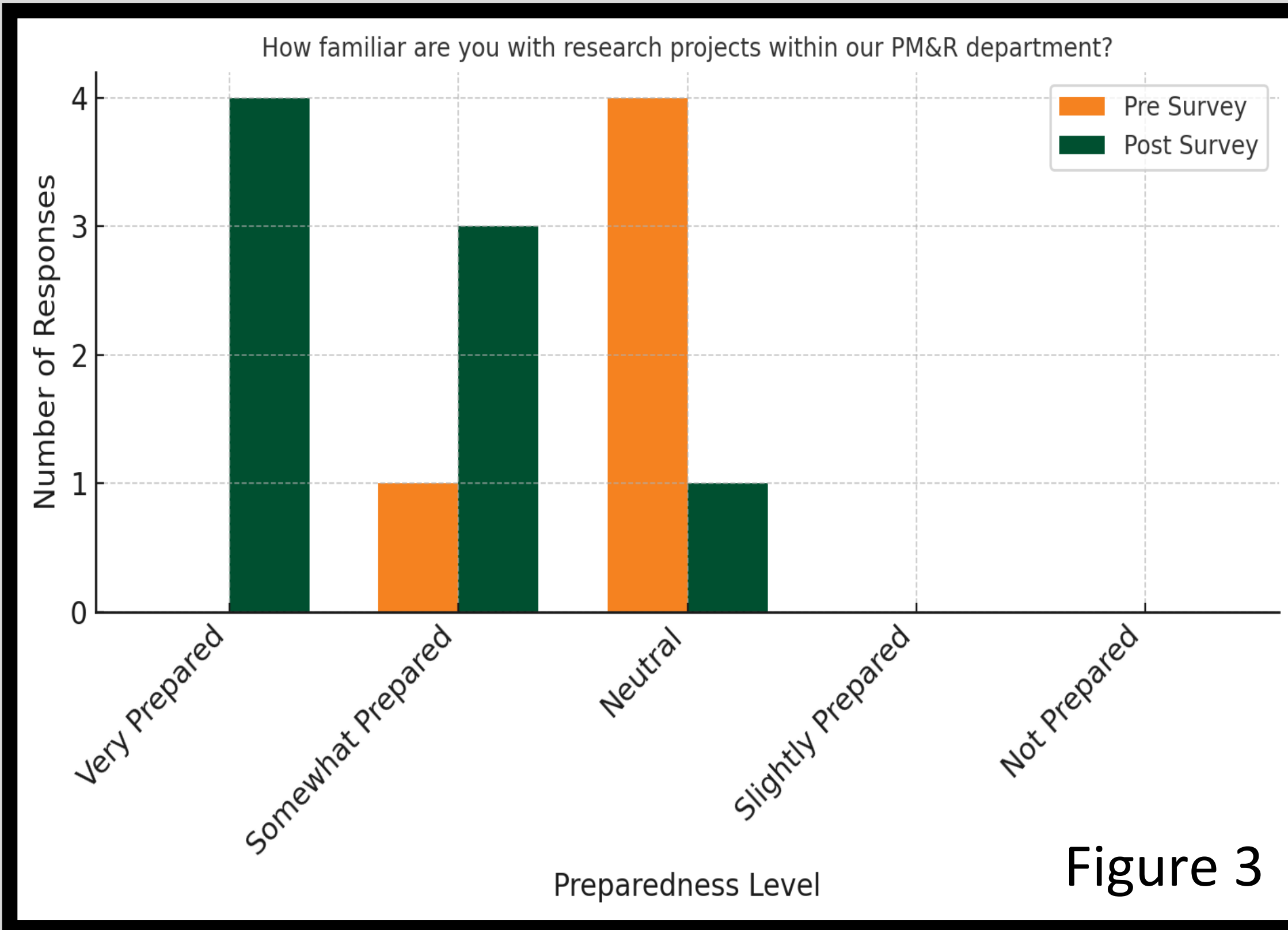


Table 1

How prepared do you feel identify clinical cases appropriate to submit for poster presentation?	How prepared do you feel in identifying potential research topics within PM&R?	How prepared do you feel to start a research project that needs our institutional (UM and Jackson) IRB approval?	How prepared do you feel to define a research question?
How prepared do you feel utilizing research databases (e.g., PubMed, Cochrane) and conducting a literature review?	How prepared do you feel developing a structured abstract?	How prepared do you feel selecting appropriate research methodologies (e.g., RCT, case-control, cohort)?	How familiar are you with research projects within our PM&R department?



RESULTS & DISCUSSION

The PGY-2 Research Bootcamp significantly improved residents' confidence and preparedness for research. The most substantial gains were observed in four key areas (Figures 1-4):

- Familiarity with departmental research opportunities.
- Starting projects requiring IRB approval.
- Defining research questions.
- Identifying potential research topics.

Moderate improvements were also observed in other domains, increasing proficiency in applying research methodologies, developing abstracts, identifying clinical cases for posters, and conducting literature reviews.

These results highlight the Bootcamp's effectiveness in reducing barriers to research engagement. By equipping residents with these critical skills, we anticipate the Bootcamp will improve residents’ academic productivity. These findings underscore the importance of foundational training while identifying areas for refinement in future sessions.

The Bootcamp has established a foundation for fostering a culture of inquiry. Future data collection will include longitudinal tracking of scholarly activities to assess the sustained impact of the Bootcamp on academic productivity and resident research engagement.

CONCLUSION

The PGY-2 Research Bootcamp effectively addressed barriers to research engagement by fostering early exposure and diversifying scholarly opportunities. Significant improvements in resident preparedness and confidence reinforced its impact on research training.

While the residency program had made strides in research engagement, the Bootcamp formalized these efforts, creating a sustainable framework for long-term improvements.

Future data collection will focus on measuring the Bootcamp's impact on long-term academic activity and sustained scholarly output.