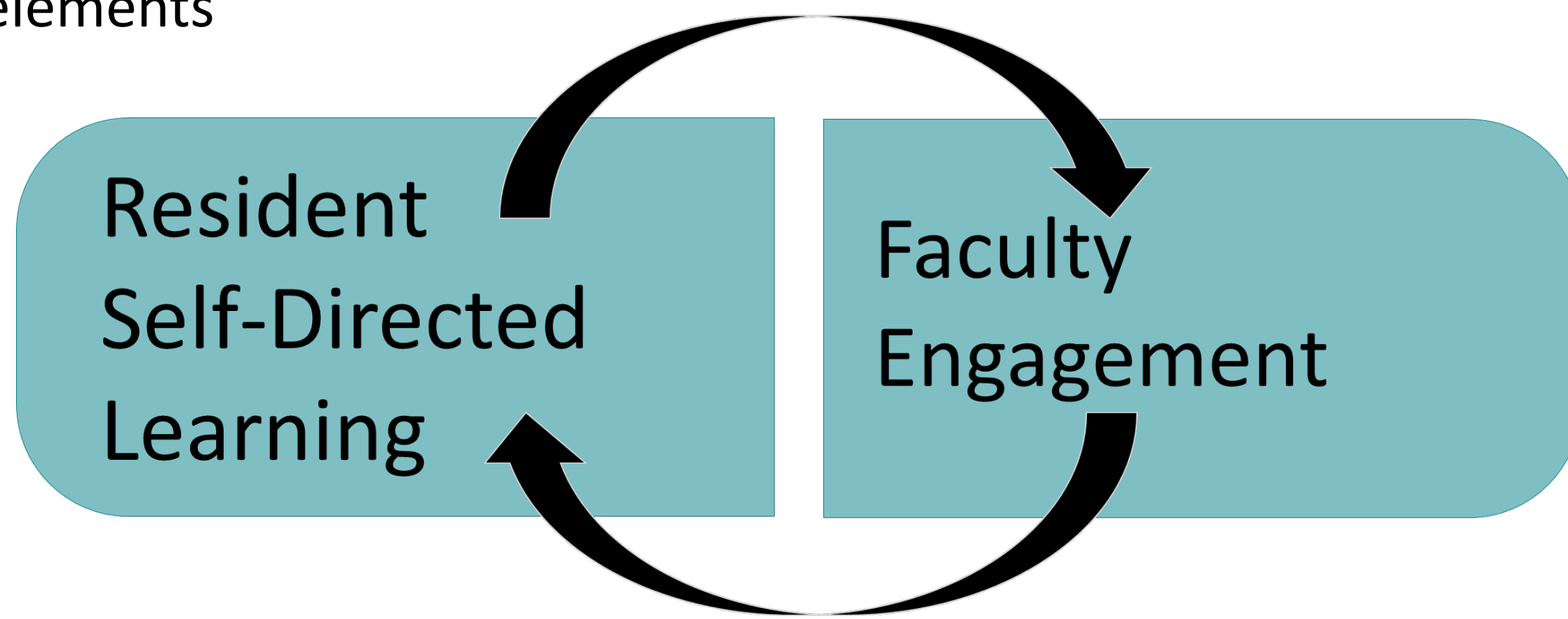




# The effect of a weekly, resident-initiated didacticism on self-directed learning and faculty engagement

## Background and Design

Faculty engagement and self-directed learning are inextricably coupled and educational programs should be designed to concurrently enhance both elements



**Objective:** The proposed project submits the implementation of a resident-initiated didacticism, with the goal to improve faculty participation in resident learning while simultaneously promoting resident inquiry and self-directed learning, with limited additional time burden.

**Methods:** All UNM-Lovelace PM&R residency rotations were required to incorporate a 30-60-minute, weekly didactic session as follows:

- At the beginning of the rotation block, principal faculty identified and set aside a consistent time for presentation(s) each week
- Residents selected a topic to present (drawn from a list of milestone-based topics)
- Residents presented their topic in a manner of their choosing
- Residents and relevant faculty were expected to attend all sessions or reschedule

### Outcome Measures:

#### Assessment of Resident Self-Directed Learning

Autonomous Learning Scale	
1. I identify my learning needs	2. I decide on the order of my learning
3. I decide on my own what to learn	4. I arrange my learning environment according to my learning
5. I use sources that support my learning	6. I find out appropriate material for my learning
7. I use various sources, when my learning isn't as desired	8. I prepare a list of my learning objectives
9. I use different methods during my learning process	10. I evaluate what and how I learn during my learning process
11. I evaluate the time of my learning	12. I evaluate my own learning
13. I evaluate to what extent I've reached my learning objectives	14. I evaluate to what extent my learning materials have supported my learning

*On average over the past month, how many hours per week did you spend in:*

1. Independent study of medical texts and journals?
2. Medical discussions with colleagues (outside of scheduled didactics)?
3. Performing computer literature searches?

#### Assessment of Faculty Engagement

Modified Clinical Teaching Evaluation Instrument	
1. The faculty establish a good learning environment	2. The faculty stimulate me to learn independently
3. The faculty organize time to allow for both teaching and care giving	4. The faculty clearly specify what I am expected to know and do during their rotation(s)
5. The faculty regularly ask questions that promote learning	6. The faculty incorporate research data and/or practice guidelines into teaching

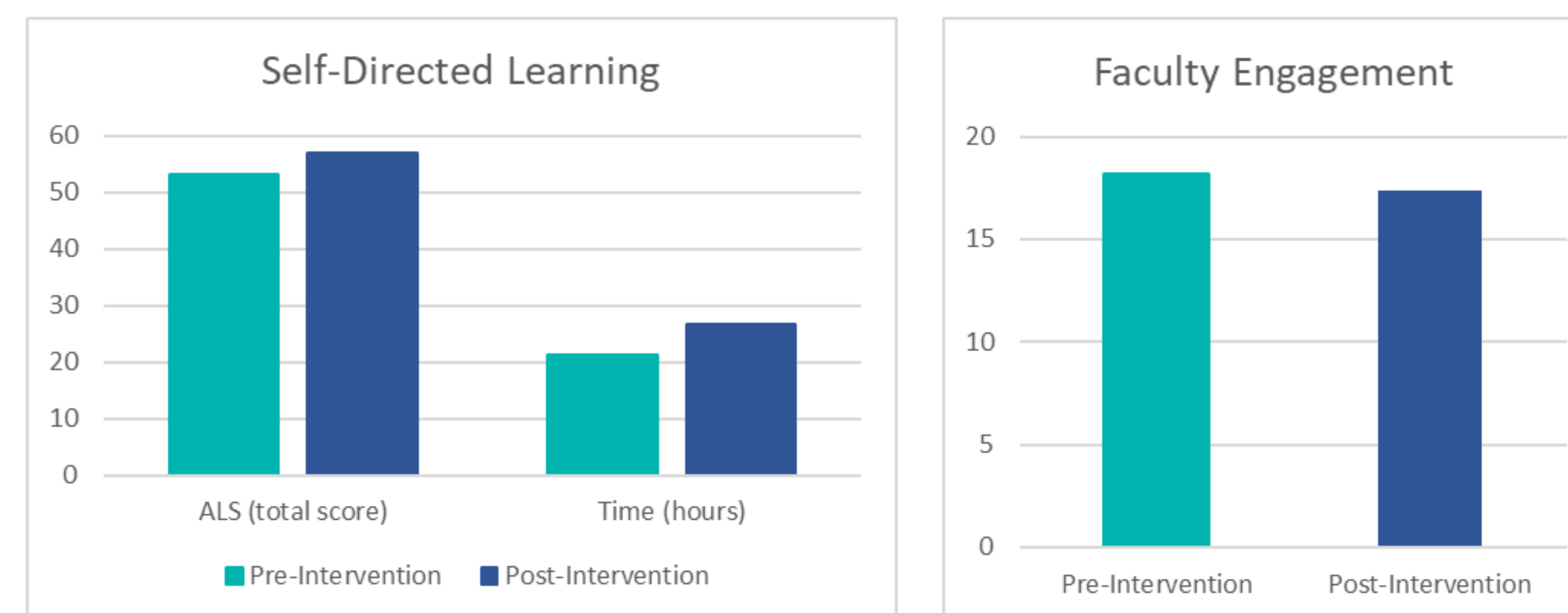
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Internal Mentor: Gehron Treme, MD<sup>1</sup> External Mentor: Monica Verduzco-Gutierrez, MD<sup>2</sup>

## Results

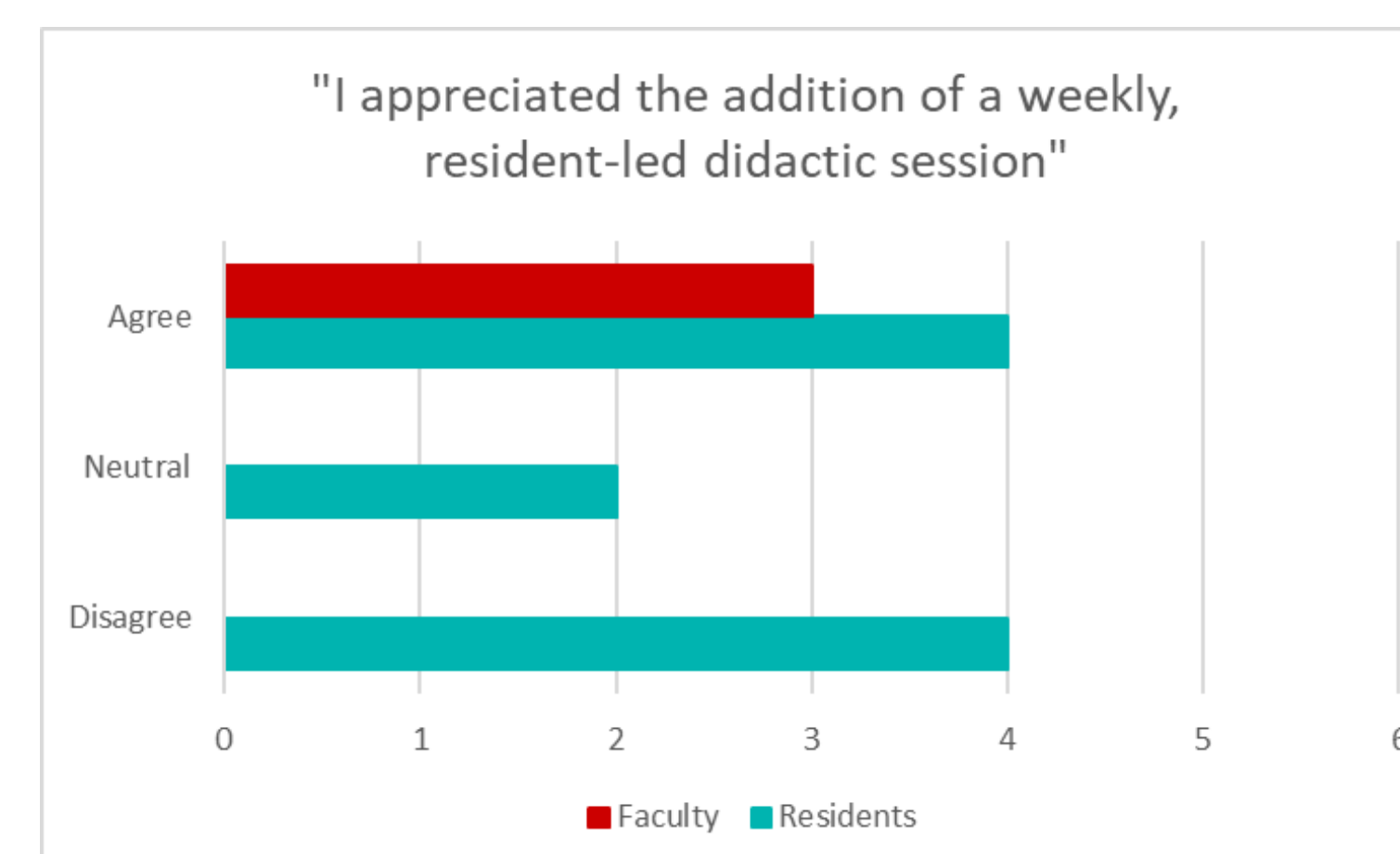
### Resident-Perceived Self-Directed Learning and Faculty Engagement

- Self-directed learning scores (as measured by the Autonomous Learning Scale (ALS)) and time spent engaging in scholarly pursuits (independent study, medical discussions with colleagues, and literature searches) increased following implementation of the resident-led didactic sessions.
- Perceptions of faculty engagement did not change pre- and post-intervention



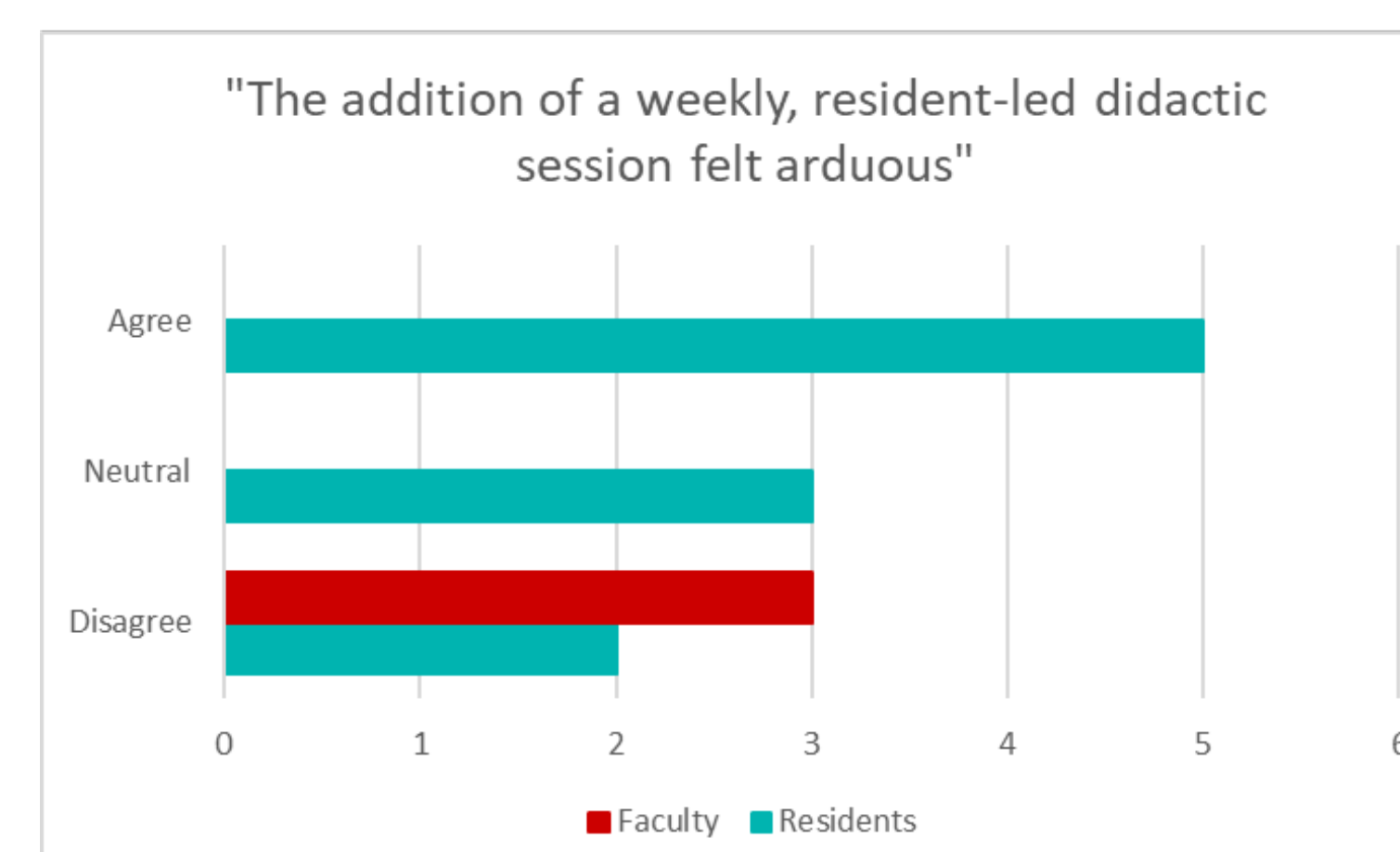
### Overall Satisfaction:

- All faculty respondents (n=3) indicated strong satisfaction with the sessions.
- Residents were divided regarding satisfaction: 40% appreciated the sessions, while another 40% did not.



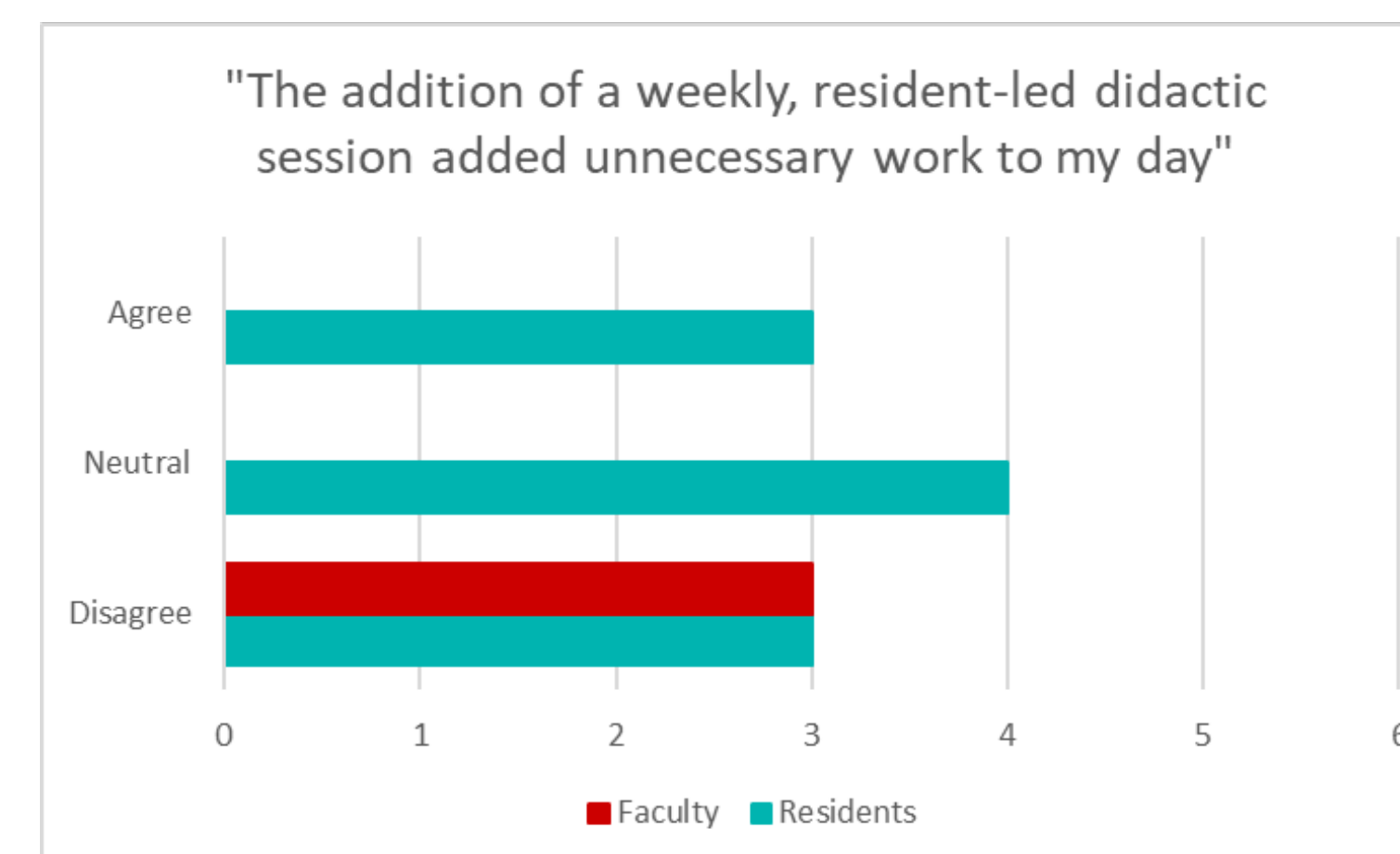
### Time Commitment:

- No faculty respondents found the sessions to be arduous or disruptive
- Resident feedback was mixed with regards to time burden. Half of the residents found the sessions to "arduous" while another 30% felt they added "unnecessary" work.



### Other Findings:

- 5 residents reported 100% compliance with the sessions.
- 3 residents reported less than 50% compliance, missing 6-8 sessions during the 10-week study period. Data trends did not change significantly when these residents were excluded from analysis.



## Feedback

*[The sessions] prompted more discussion and more academia.*

*Improved resident familiarity of the subject and feedback.*

*I think having a list of topics specific to the current rotation helped me evaluate my own knowledge gaps which incentivized me to research the topic more.*

*I believe that the assignments are appropriate, which help with our learning but don't pressurize our day.*

*Resident led group sessions to get through Cuccurullo as sort of a book club might be a better strategy.*

*I already participate in self-directed learning, and have a logical study plan. However, with the self-directed learning, plus [other assignments], I oftentimes do not get to spend as much time learning about a topic relevant to my rotation and instead know more about just one specific topic as opposed to being well versed in more topics.*

*Dr. 'X' did not participate in resident led discussions.*

## Conclusion and Future Directions

The implementation of a weekly, resident-initiated didacticism may improve resident self-directed learning. Nonetheless, the sessions did not significantly impact resident perceptions of faculty engagement. The sessions were generally perceived as a valuable addition by faculty, and were not felt to impose a significant time burden. However, resident satisfaction with the sessions was more variable.

### Future Directions

The UNM-Lovelace PM&R Residency Program intends to more regularly incorporate resident-initiated learning sessions during core rotations. Future considerations should include:

- Policies to improve faculty and resident compliance with such sessions
- Alternative approaches to enhance overall resident satisfaction as well as resident perceptions of faculty engagement

## References

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