

Development and Evaluation of a Medication Management Training for Occupational Therapy Professionals

Leah Schroeder, OT/s, Michelle Magnifico, OTR/L, Cheryl Miller, OTR/L, DrOT, Nancy Baker, ScD, MPH, OTR/L, FAOTA

BACKGROUND

- ▶ 2 in 3 U.S. adults 65+ are prescribed ≥ 3 daily medications (Neiman et al., 2017)
- ▶ $\sim 1/2$ drugs are taken as prescribed (CDC, 2018)
- ▶ $< 1/3$ OT professionals in physical rehabilitation settings report consistently addressing medication management (MM) with patients (Schwartz & Richard, 2019)

OT professionals within inpatient rehabilitation facilities (IRFs) can increase their engagement on MM teams. To address this opportunity, the project aimed to:

- 1) Develop a training that addressed identified barriers to incorporating MM into practice.
- 2) Evaluate the effectiveness of the MM training program in terms of participant reaction & learning.

METHODS

Participants

- The training was developed & piloted with 15 OT professionals (14 OTRs, 1 FW II student) at a Boston-area IRF
- Mean duration of OT licensure: 3.5 yrs (range: 0-7 yrs)

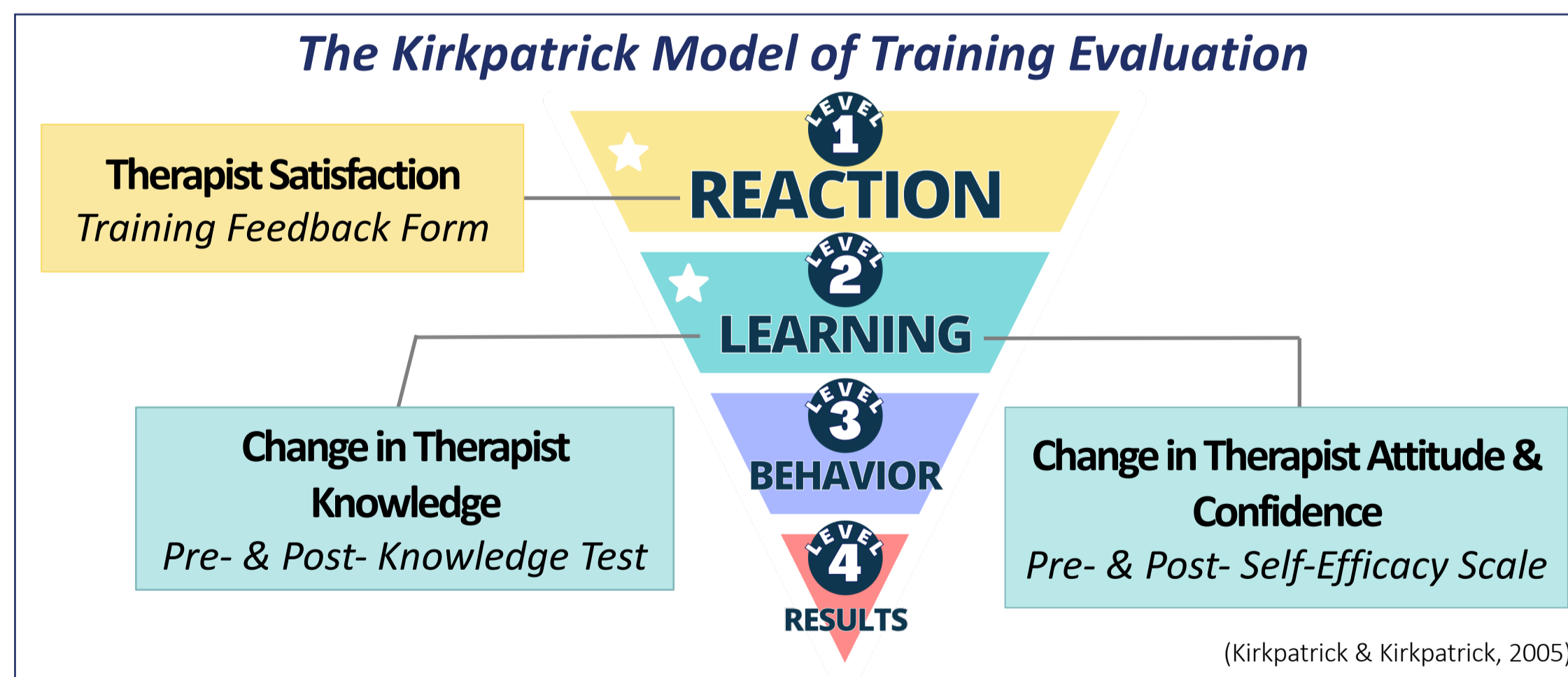
Aim #1: MM Training Development



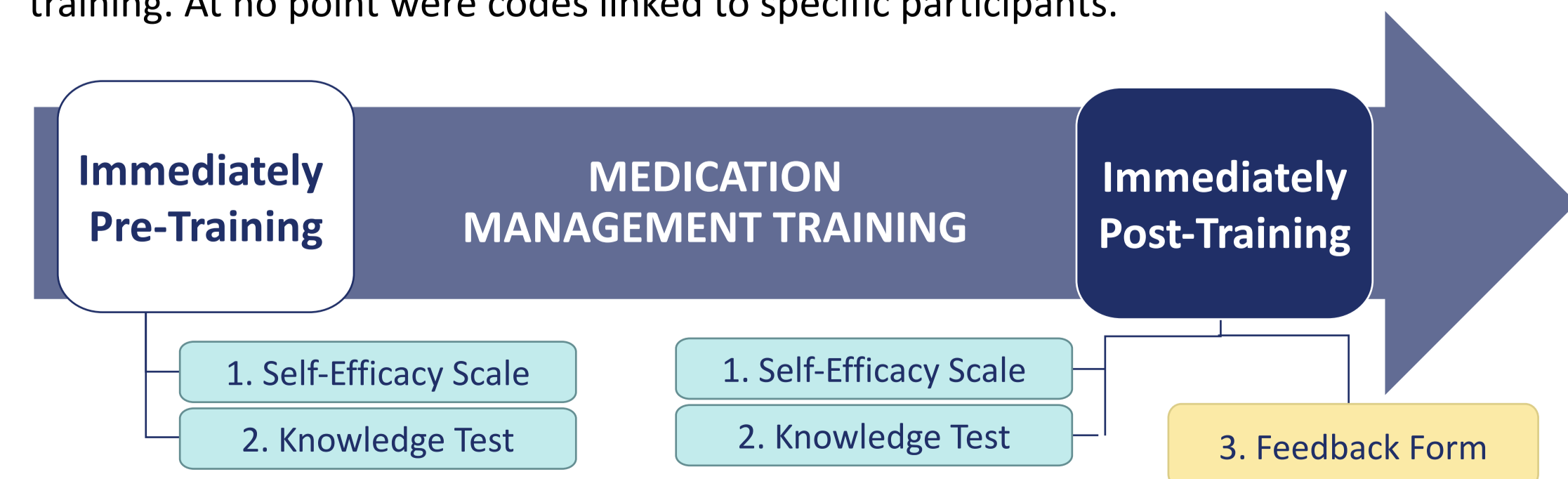
Aim #2: Evaluation of Training Effectiveness

The first author piloted a 1-hr MM training to 2 groups of OTs on 2 consecutive days (1 session per group to limit disruptions to staffing & therapy operations).

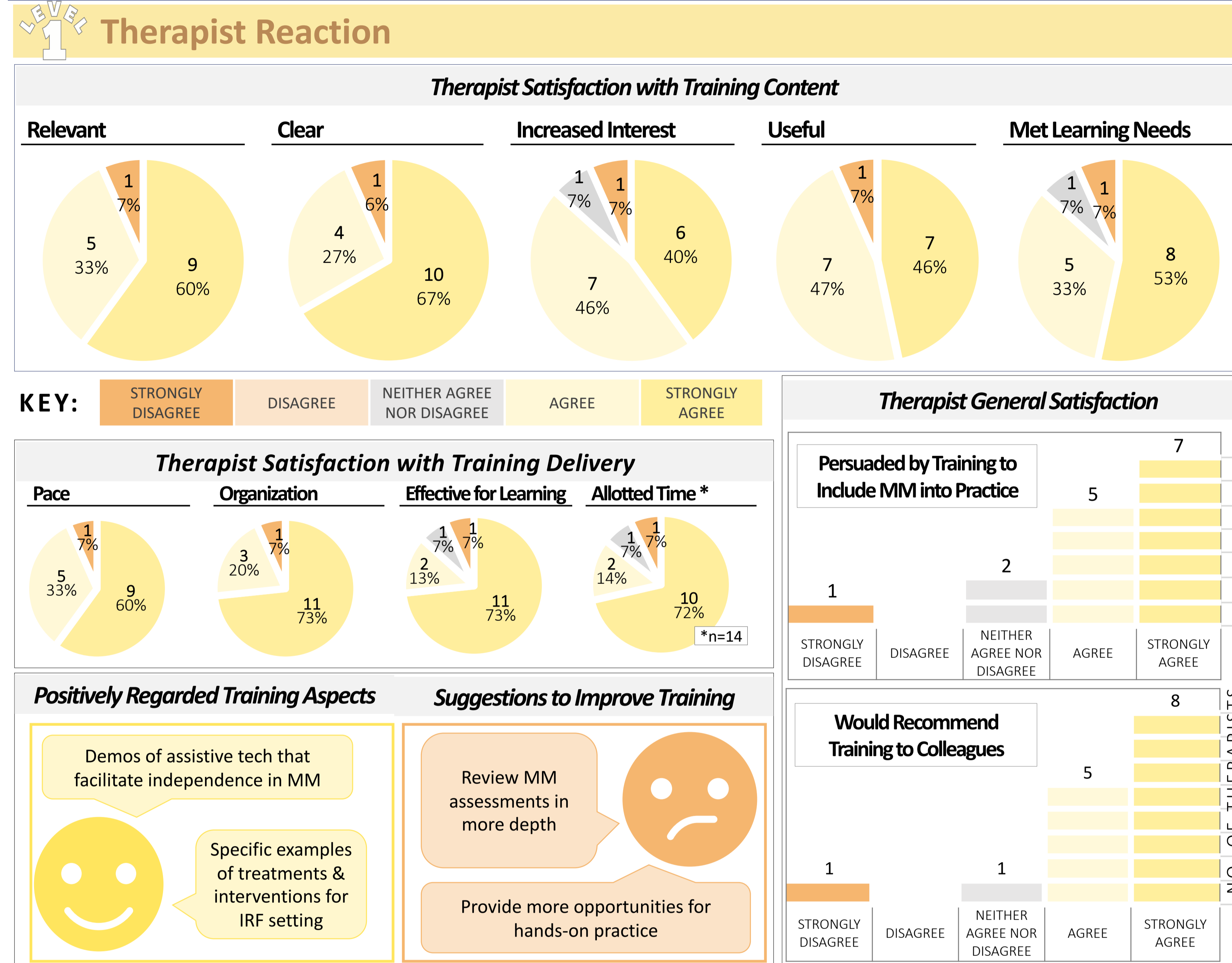
Effectiveness was measured using The Kirkpatrick Model of Training Evaluation:



Data was collected anonymously pre- & post-training using tools developed for the study. Data collection materials were coded and blindly assigned to participants prior to training. At no point were codes linked to specific participants.



RESULTS



DISCUSSION

Results suggest participating therapists found training content to be clear, relevant, & useful to practice. Most participating therapists agreed/strongly agreed the content met learning needs & increased their interest in MM, however both items received 1 neutral response, suggesting that seeking a broader range of perspectives during the development phase may be warranted. The group of therapists had a broad range of familiarity and exposure to MM assessment & treatment in practice, posing a challenge to authors as they endeavored to develop a single training that addressed the learning needs of all participants.

Results suggest participants were particularly satisfied with the pace & organization of training. By comparison, participants rated effectiveness for learning & time allotted more unfavorably. Open-ended feedback identified additional hands-on learning as area for improvement. Feedback also indicated need to employ a wider array of teaching strategies to meet the needs of all learners. To provide opportunities for hands-on learning, authors conducted "open-lab" at which MM materials, assessments, and training leader was available. Therapists were invited to practice assessments, trial adaptive equipment, review resources, and ask questions. No formal data was collected, though therapists appeared highly engaged.

Results indicate participating therapists were knowledgeable about MM's impact on patient outcomes & OT role in MM at baseline. Scores were considerably lower on items related to MM assessment, accessing MM supplies in facility, & MM treatment strategies. Overall, data suggest that therapists understand OT role in MM & significance of MM but lack practical knowledge & resources to address MM in the fast-paced IRF setting.

Between pre- & post-test, therapist knowledge increased across all 5 items. The greatest increases in knowledge occurred in items previously identified as highest need: assessment, accessing materials, & treatment strategies.

- Therapists' attitude toward addressing MM in practice increased from pre- to post-test. Attitude increased from neutral to agreement on the item "I believe I can make a difference in my pt.'s MM ability."
- In open feedback, many therapists identified demos of assistive tech & specific examples of treatment strategies as positive contributors to learning experience.
- The greatest increase in confidence was observed in terms of therapist's belief in their ability to address MM despite constraints of IRF setting, suggesting that providing practicable information to therapists may be key to increasing knowledge & attitude.

CONCLUSION

This project aimed to develop, pilot, & evaluate a MM training for OT professionals in an IRF. In development, authors gained insight on areas of existing knowledge, learning needs, & attitudes related to MM. Though beyond the scope of this project, further research is warranted to determine whether the impact of training observed in the short term, (i.e., participant reaction & learning) extends to increased implementation of MM assessment & treatment by therapists and whether improved patient outcomes result.

The training developed & piloted as part of this project was largely effective in garnering positive reactions & increasing knowledge and confidence of participating therapists. Results from this project suggest:

- 1) Delivery of training content should be varied & designed to meet diverse learning styles.
- 2) Demonstration of easily-implemented strategies & tools (with consideration to the constraints of the practice setting) may be key to improving attitude and confidence.
- 3) Training should prioritize hands-on experiences & opportunities for therapists to grow familiar with content & materials prior to integrating into practice.

Thank you to Tom Plante for his support and guidance throughout this experience. To the OTs, SLPs, and the entire 2 North staff: thank you for graciously fielding all my questions & for embracing this project.

REFERENCES

- Centers for Disease Control. (2018). Prescription drug use in the past 30 days, by sex, race and Hispanic origin, and age: United States, selected years 1988–1994 through 2013–2016 [Data set]. <https://www.cdc.gov/nchs/data/abus/2018/038.pdf>
- Kirkpatrick, D., & Kirkpatrick, J. (2005). *Transferring learning to behavior: Using the four levels to improve performance*. Berrett-Koehler.
- Neiman, A. B., Ruppert, T., Ho, M., Garber, L., Weidle, P. J., Hong, Y., George, M. G., & Thorpe, P. G. (2017). CDC grand rounds: Improving medication adherence for chronic disease management: Innovations and opportunities. *MMWR: Morbidity & Mortality Weekly Report*, 66(45), 1248-1251. <https://doi.org/10.15585/mmwr.mm6645a2>.
- Schwartz, J. K., & Richard, L. (2019). An exploratory survey of physical rehabilitation occupational therapy practice patterns. *Occupational Therapy In Health Care*, 33(1), 64-72. <https://doi.org/10.1080/07380577.2018.1547942>