Efficacy of Online Training for Improving Camp Staff Competency

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PARKS, RECREATION AND TOURISM MANAGEMENT

This Morning

- Provide **background** on staff training
- Present a **quasi-experimental study** examining the efficacy of online training
- Describe our **key findings**
- Share **implications** for camp program providers and researchers

Background & Purpose

Challenges to Camp Staff Training

Resources

- Proper preparation requires sustained involvement from and contact with professional staff
- Lack of time and resources; What was once 5-7 days has evolved to 10-14 days
- Where does the money come from?

Competing Demands

- General and Specialized training
- What is programmatically necessary versus legally required?

Changing landscape of learning

- Online learning continues to dramatically evolve and grow
- Shifting from optional to standard practice

Why Online Staff Training?

Online staff training can benefit organizations **through cost-efficiency**, increasing available **"in person" training time**, increased availability of learning opportunities, and the opportunity to **serve more learners**.

Some emerging evidence suggests **online training is valuable** for camp staff to achieve program outcomes.

Heidgerken et al., 2005; Marquart, Rizzi, & Parikh, 2010; Means et al., 2009; Weaver et al., 2014

Our **BIG** question… **Does Online Staff Training Transfer to the Real World?**

Is knowledge (competency) from online training **sustained** over time?

Does the "real application" of online training lead to **better** sustained competency?

Method

Participants, data collection, and data analysis

Participants & Setting

Quasi-experimental design (i.e., use of treatment and comparison groups without randomization to each group from similar populations)

Treatment group = 32 camp staff employed at a university-affiliated residential summer camp in the Southeastern United States. Equal number of male and female staff (average age 20.38 years)

Comparison group = 23 demographically comparable undergraduate students not working in a residential summer camp

Treatment group **more experienced** in camp staff-like positions than the comparison group not a statistically significant difference, $t(53) = 1.44$, $p = .16$

Online Course and Test

Ticks, Tears, and Toothpaste

"A Counselor's Role in Healthcare" (CRH) available through ACA's online learning center

45-minute asynchronous online course designed to be completed as a part of **preservice camp staff training**

Content

- Staff "duty to act" in the provision of camp healthcare
- Maintenance of personal health
- Role-modeling for youth
- Staff interventions to improve youth health outcomes

Competency Test

- 10 multiple choice and 12 true/false questions that assessed competency in targeted content areas

Each of these is something a counselor can do to minimize the potential for illness among campers EXCEPT:

- ○ Have campers wash hands before eating.
- ○ Coach campers to keep their hands away from their faces.
- ○ Covering coughs and sneezes with their hands.
- ○ Sleeping head-to-toe.

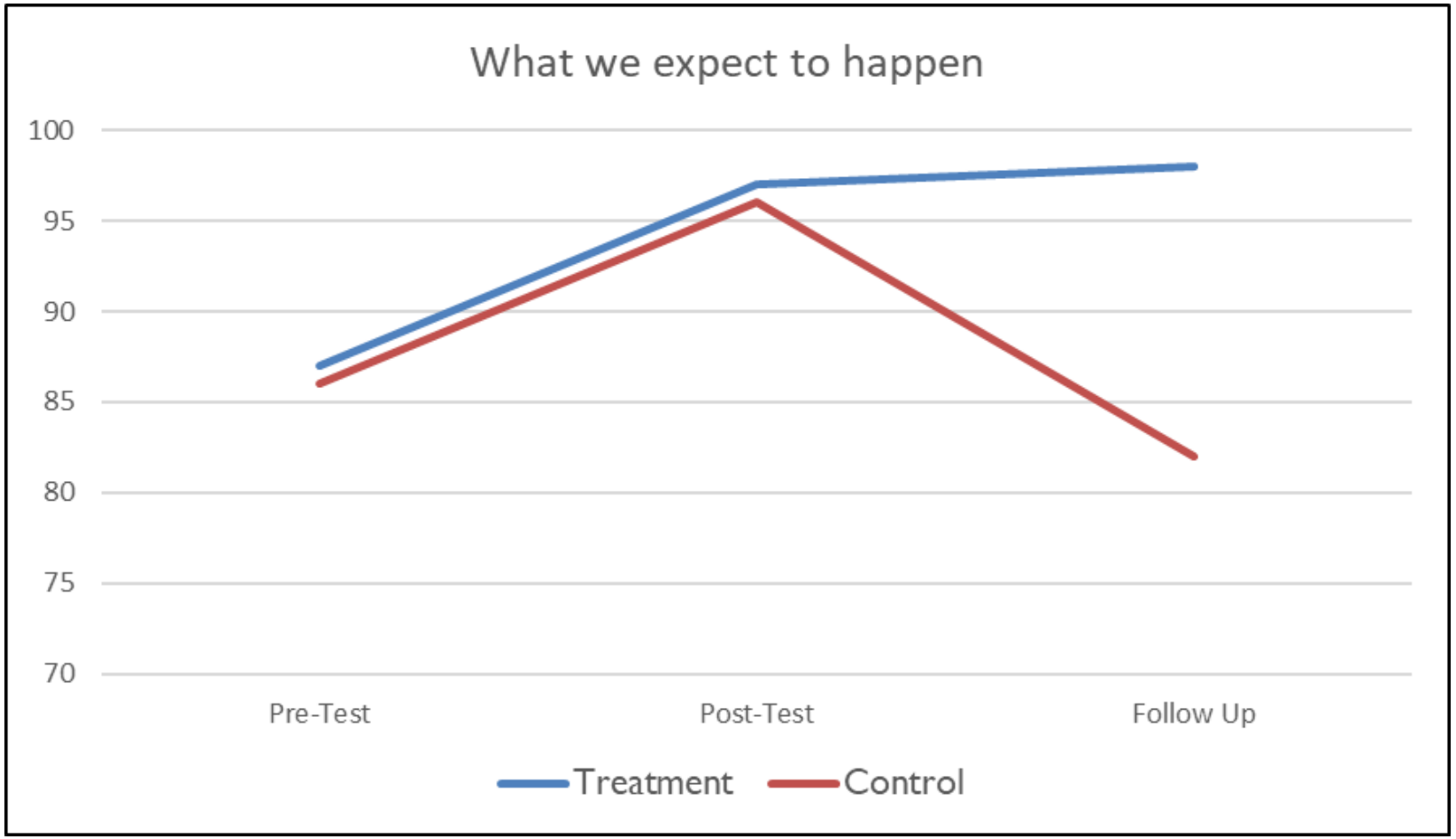
Data Collection and Analysis

- **Three** measurement occasions (T1, T2, and T3)
- Both groups: T1 (pretest) → online course → T2 within 48-72 hrs (posttest) → 45-55 days later- T3 (end of summer posttest)
- Hierarchical linear modeling analyzed the **cross-level effects between** treatment and comparison group and **within-individuals effects over time** (T1, T2, and T3)

What we expect to happen (hypotheses)

H1: Working in camp will cause staff competency test scores associated with an online course **to increase over the camp season**

H2: Staff competency test scores associated with completion of an online course would increase at a higher rate than a comparison groups



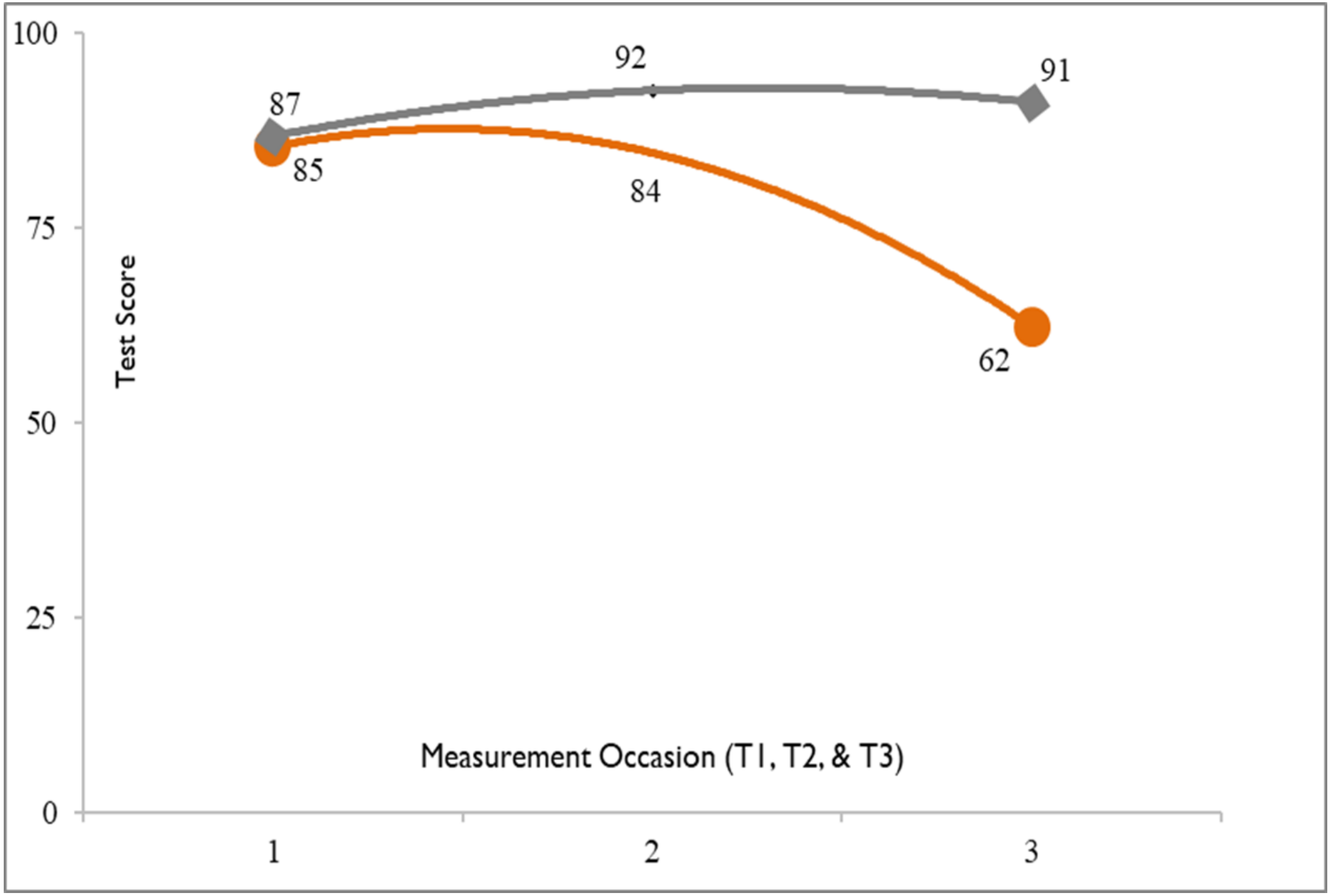
Results

Comparing groups over time

Demographics/ Descriptives

	Treatment Group		Comparison Group	
Gender*	Male 50% n = 16	Female 50% n = 16	Male 34.8% n = 8	Female 65.2% n = 15
Age	M = 20.38 yrs (SD = 1.42)		M = 20.74 yrs (SD = 1.42)	
Total Years of College	M = 2.42 yrs (SD = 1.99)		M = 2.67 yrs (SD = 1.01)	

*Participants did not provide gender data in some cases.



HLM Results

Which one is the treatment group?

Orange or Gray?

H1 and H2 not supported

- H1: Working in camp would cause staff competency test scores associated with an online course to increase over the camp season
  - **Average test scores for comparison group increased between T1 (pre-test) and T2 (post-test #1), then declined slightly at T3 (end of summer). ($p \geq .05$)**
  - **Average test scores for the treatment group remained the same from T1 and T2, then declined ($p \leq .05$) sharply at T3.**

- H2: Staff competency test scores associated with completion of an online course would increase at a higher rate than the comparison group's competency scores
  - **At T3, the difference in average test scores between groups was approx. 30 points (on a 100-point scale), with the treatment group scoring significantly lower on average than the comparison group.**

Discussion/ Implications

Using these findings!

Discussion

Possible explanations for the decline in test scores at the end of the summer for camp staff:

- **Fatigue/burnout**
- Lack of **training durability** (i.e., maintenance of learning over time)
- Lack of **memory retention**
- Limited **application opportunities** with support from peers and supervisors

Browne & Sibthorp, 2014; Gunawardena et al., 2010; Murre & Dros, 2015; Pilcher & Huffcutt, 1996

Practical Implications

Staff trainers should consider the necessity of online training, and if implemented, account for factors that may reduce online training effectiveness.

- **Fatigue:** Address staff workload and factors influencing fatigue—rest breaks, exercise, and napping (Rogers, 2008)—when scheduling staff assignments
- **Durability:** Incorporate practices that strengthen learning transfer:
  - clear purpose (Bedwell & Salas, 2010)
  - peer and supervisor feedback (Gunawardena et al., 2010)
  - opportunities for staff to practice skills learned (Machin & Fogerty, 2004)
  - In-service training to support online training

Research Implications

Identify under what circumstances, online training is effective for sustaining staff competencies

Examine the influence staff fatigue, durability of online training, and cost and benefits of online versus on-site training on staff competency

Consider the relevance of staff training components (from the perspective of staff) using an **importance-performance framework**

How to best engage staff in training components most relevant and important for their positions

Epley et al., 2017; Siniscalchi, Beale, & Fortuna, 2008

Limitations

Study conducted within the **context of a single camp**, which limits the generalizability of the findings to a broader population of camp staff

Low statistical power (i.e., the ability to detect an effect if one exists). HLM maximized statistical power compared to other approaches that would reduce sample size (e.g., RMANOVA) due to missing data

Competency test not developed with statistical analyses in mind (e.g., IRT). Possible **confounds** (e.g., fatigue) were not measured.

Conclusions

Although the findings of this study suggest more questions than answers, program providers and researchers **should pay closer attention** to an increasingly common form of staff training-- online training.

Today numerous online professional development systems and learning opportunities have arisen to meet the needs of camp staff, yet **there is still much to uncover** about effectively training staff who work in an inherently experiential field through learning opportunities that are characteristically virtual.

Questions?

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