

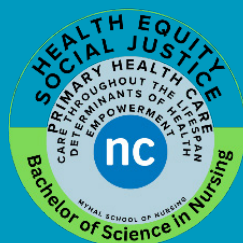
Hand Dexterity & Proficiency

Simulation-Based Training of Nursing Students

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INTRODUCTIONS

- Proficiency in liquid medication requires precision
- Hand-eye coordination is key to accuracy
- Study measured learning and retention phases
- Training effectiveness assessed over time intervals
- Findings highlight long-term skill development

METHODS

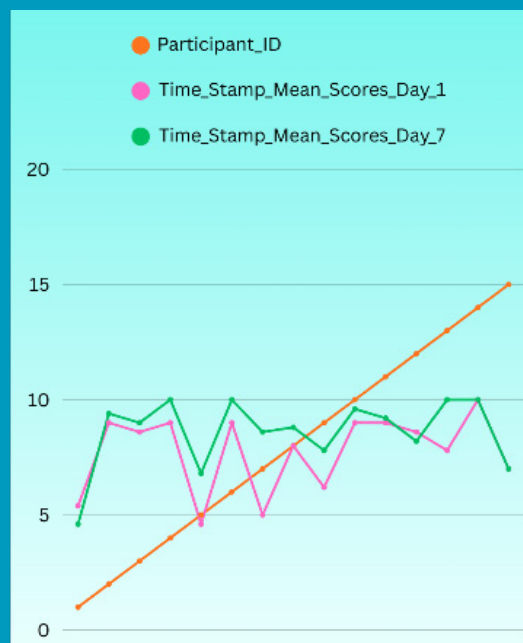
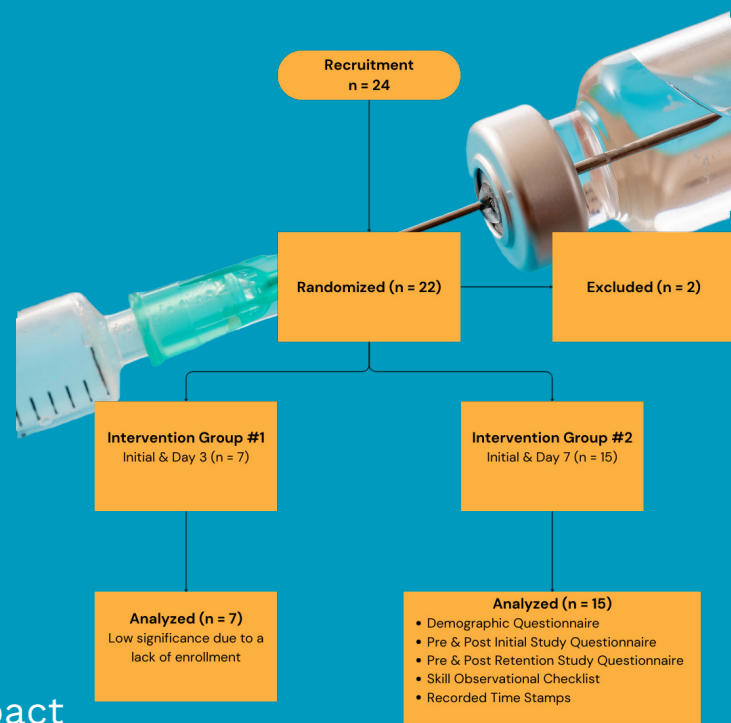
- Convenience sample of 30 nursing students
- Initial and retention phases timed with stopwatch
- Five withdrawal attempts using needle and syringe
- Randomized into Day 3 or Day 7 groups
- Data plotted to assess skill retention and training impact

RESULTS

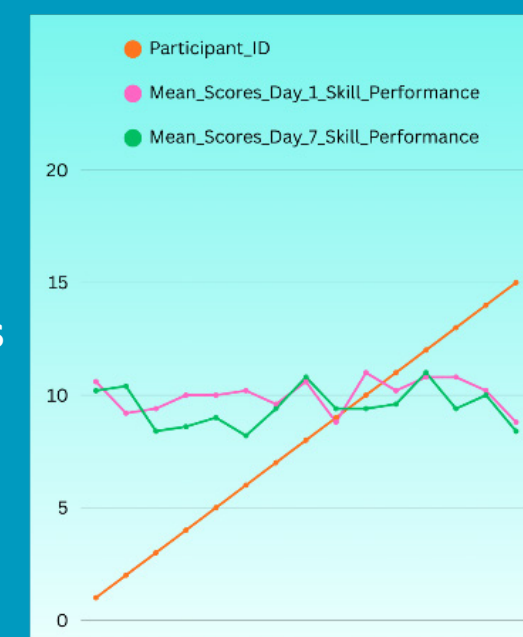
- Paired t-test showed training effectiveness link
- Positive learning curve and skill retention over 7-day period
- Repeated Measures ANOVA showed nursing students had significant proficiency gains from initial to retention phase
- Results provide correlational evidence that training programs effectively foster psychomotor skill development across repeated attempts

DISCUSSIONS

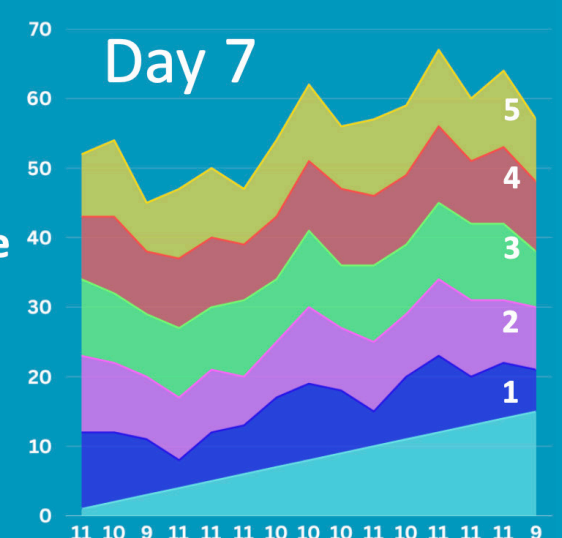
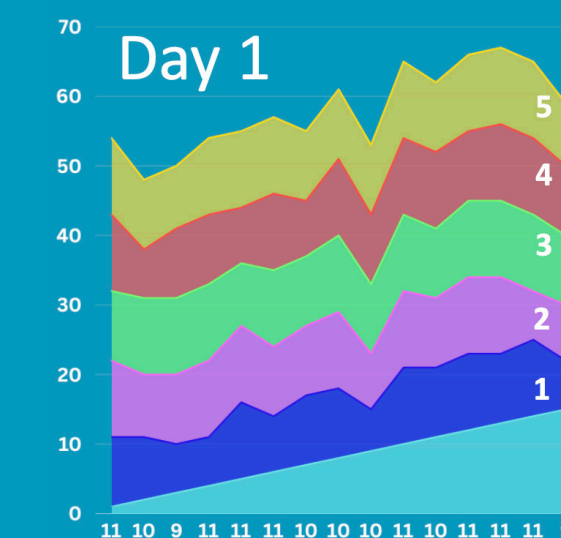
- Nursing students showed a strong learning curve
- Time per attempt steadily decreased with practice
- Simulation training enhanced coordination and dexterity
- Skills retained through repeated timed assessments
- Findings support simulation-based nursing education



Time Stamps
Intervals
paired samples
t-tests



Skill
Performance
Scores
Repeated
Measures
ANOVA

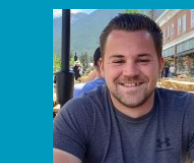


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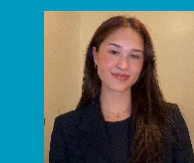
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