

ASSESSING ALIGNMENT OF PEDAGOGICAL EXPERIENCE AND CONFIDENCE IN A SIMULATED TEACHING ENVIRONMENT

Research Question

After pre-service candidates use **simSchool** do their ratings of **experience** increase and become more in balance with **confidence**?

What is **simSchool**?

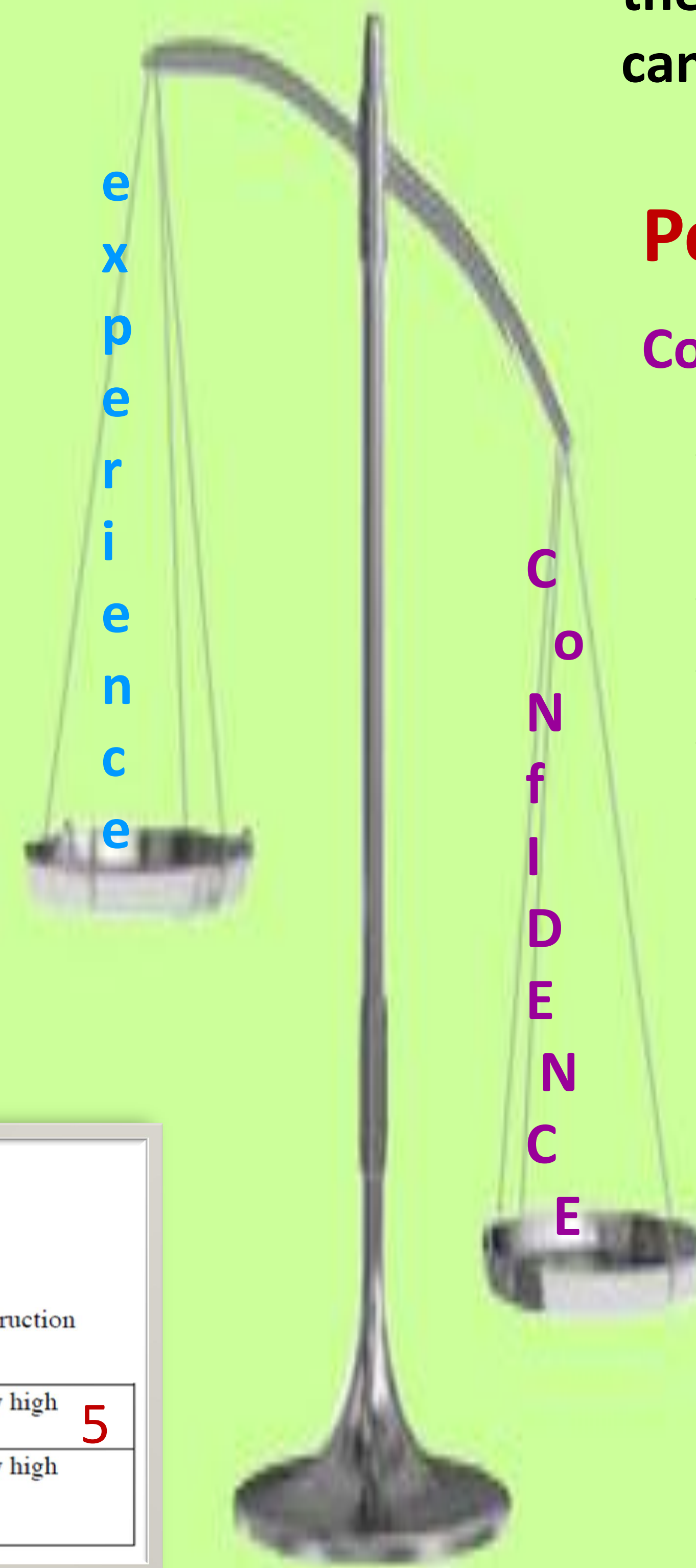
flight simulator for teachers



explore instructional strategies

practice teaching

mirror real students



Theoretical Framework

- Bandura's Theory of Self Efficacy is one's belief that they can succeed in a particular situation.
- Argyris & Schon Espoused Theory is the difference in what one thinks he can do and what he can actually do.

Pedagogical Balance

Confidence – Experience = Pedagogical Balance (PB)

- PB is the difference between a person's average **confidence** rating and average **experience** rating
- Highest **confidence** possible is 5.0
- Lowest **confidence** possible is 1.0
- The goal of pedagogical balance is to be equal to 0 so that **confidence** of pre-service teachers is aligned with **experience**.

Data Analysis

Variable	N	Mean	Std. dev.	Sig.	Effect Size
Pre E Tr	31	2.5	.80	.00	.97
Post E Tr	31	3.2	.64		
Pre E Co	27	2.73	.86	.006	.33
Post E Co	27	3.0	.78		
Pre C Tr	31	2.8	.82	.00	.76
Post C Tr	31	3.3	.49		
Pre C Co	27	3.03	.71	.00	.58
Post C Co	27	3.44	.71		

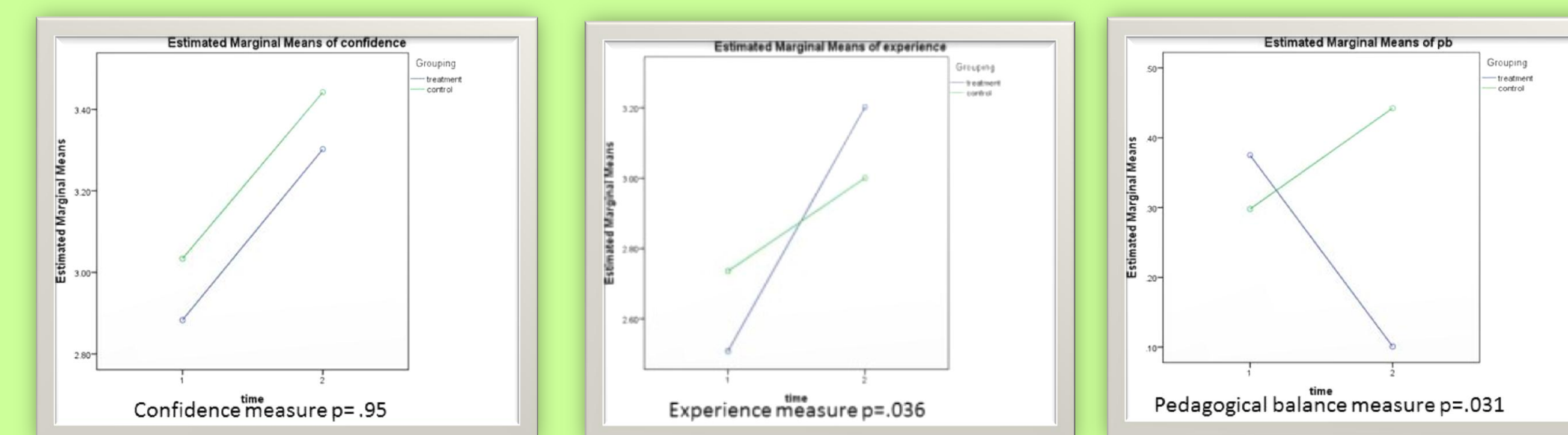
Table 1. Descriptives of pre and post test findings in experience and confidence of the treatment and comparison groups .

The lowest standard deviation was in the treatment group in post-confidence which could indicate that as a group they converged on their estimates.

Instrumentation & Participation

Survey of Teaching Skills										
Knowledge of students										
<ul style="list-style-type: none"> • Reading and using student records to make instructional decisions • Pre-planning assessment and instruction to meet individual and group needs • Observing in-classroom behavior and making inferences about adaptations needed in instruction and assessments 										
Experience Level	Very low	1	Moderately low	2	Medium	3	Moderately high	4	Very high	5
Confidence Level	Very low		Moderately low		Medium		Moderately high		Very high	

Findings



The treatment group effect size of change for both **experience** and **confidence** was stronger than for the control group.

The treatment group gained more **experience** causing the Pedagogical Balance to become more in balance.

The outcome of this study can provide one approach to validating an increase in pre-service teacher's **experience** levels in order to better prepare them for the many demands of the classroom. As **experience** aligns with **confidence** Pedagogical Balance improves.

Future research: Does having more **simSchool** use mean having more Pedagogical Balance?

2 Self-Reported Measures

Teaching **Experience**: Alpha = .94

Teaching **Confidence**: Alpha = .93

(very good reliability according to DeVellis, 1991)

58 pre-service teachers

25 UNT treatment

6 HZNU treatment

26 UNT comparison

simSchool Research Team

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