

# Measuring the Effectiveness of Transfer of Learning Constructs and Intent to Transfer in a Simulation-Based Leadership Training Program

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# Background / Need for the Study

- ▶ Objective of Training
- ▶ Challenge of Christian Leaders  
(Kouzes & Posner, 2004)
- ▶ Transfer of learning  
(Holton and Baldwin, 2003; Noe, 1986; Hutchins, Nimon, & Bates, 2012; Noe & Schmitt, 1986; Seyler, Holton, Bates Burnett, & Carvalho, 1998; Tannebaum & Yuki, 1992)
- ▶ Research gap  
(Holton and Baldwin, 2003; Bates, Holton, & Hatala, 2012; Blanchard, 2007; Gegenfurtner, 2011; Klein, Noe & Wang, 2006; Kouzes & Posner (2004); Lencioni, 2007; Maxwell, 2007; Ortberg, 2007; Saks & Belcourt, 2006).

# Research Question and Hypotheses

Research Question: What is the relationship between intent to transfer and four constructs in transfer of learning (ability, motivation, work environment, and learner readiness)?

- ▶  $H_1$ : There is not a statistically significant positive relationship between intent to transfer and ability.
- ▶  $H_2$ : There is not a statistically significant positive relationship between intent to transfer and motivation.
- ▶  $H_3$ : There is not a statistically significant positive relationship between intent to transfer and work environment.
- ▶  $H_4$ : There is not a statistically significant positive relationship between intent to transfer and learner readiness.

# Theoretical Framework

- ▶ HRD evaluation research model  
(Holton, 1996)
- ▶ Learning transfer system inventory instrument (LTSI)  
(Noe, 2001; Tannebaum & Yuki, 1992)  
(Holton, Bates, & Ruona, 2000; Noe & Schmitt, 1986)  
(Noe & Schmitt, 1985, Ruona, Leimbach, Holton & Bates, 2002, Hutchins, Nimon, Holton, & Bates , 2012)

# Findings – Data Analysis

## ▶ Instrument Analysis –

Table 1

*Comparison of Transfer of Learning Results*

Transfer of learning	Items
Ability	10, 11, 14, 17, 27, 28, 29, 30, 31, 32, 33
Motivation	2, 3, 4, 6, 7, 15, 16, 34, 35, 36, 37, 38, 39
Work Environment	5, 12, 18, 19, 20, 21, 22, 23, 24, 25, 26, 40, 41, 42, 43, 44, 48
Learner readiness	1, 8, 9, 13, 45, 46, 47

# Methodology – Data Collection

- ▶ **Sample**

- 40 pre-selected mid-level managers
  - Ages, gender, experience varied
  - Ethnicity was not captured

- ▶ **Packet**

- surveys, written consent and instructions

- ▶ **LTSI Instrument and Intent to Transfer**

- 48-transfer of learning questions

- 5-demographic questions

- 4-intent to transfer questions

- LTSI : 5-point- Likert scale

- Intent to Transfer : 7-point Likert scale

# Findings – Data Analysis

## ► Bivariate correlation tested relationships

Table 2

*Descriptive Statistics on Intent to Transfer and Transfer of Learning Constructs*

Variable	N	Min	Max	Mean	SD	Skewness	Kurtosis
Intent to Transfer	22	5.25	7.00	6.33	.569	-.513	-1.07
Ability	22	2.36	4.64	3.80	.497	-.956	2.10
Motivation	22	2.85	4.69	3.53	.443	.986	1.02
Work Environment	22	2.76	3.94	3.35	.333	-.102	-.718
Learner readiness	22	3.00	4.43	3.71	.380	.004	-.468

# Findings – Data Analysis

- ▶ Research Question: What is the relationship between intent to transfer and four constructs in transfer of learning (ability, motivation, work environment, and learner readiness)?

Table 3 *Correlations Between Intent to Transfer and LTSI Constructs*

	Ability	Motivation	Work environment	Learner readiness	Intent
Ability <i>p-value</i>	.796				
Motivation <i>p-value</i>	.309 .161	.846			
Work Environment <i>p-value</i>	.359 .101	.417 .053*	.608		
Learner Readiness <i>p-value</i>	.470 .027*	.273 .219	.486 .022*	.625	
Intent <i>p-value</i>	.377 .083	.435 .043*	-.073 .748	.215 .337	.659

\*statistical significant *p* values. Alpha values are found on the diagonal.



# Qualitative Data

- ▶ Interviews
  - Post hoc
- ▶ Observations
  - Participant engagement
- ▶ Results of Qualitative Data
  - Four significant correlations

# Discussion

- ▶ **Results of Study:**

There is a significant relationship between ability, work environment, and learner readiness that suggest learner readiness may be influenced by both employee ability and a supportive work environment.

There is a significant relationship between motivation and work environment, which may suggest that employees with a supportive work environment are more highly motivated.

There is a significant relationship between motivation and intent to transfer. However, it is unclear whether employees with higher levels of motivation have more intent to transfer.

Or conversely, where there is a higher intent to transfer, there is a higher level of motivation.

- ▶ **Observations:**

Simulations engaged all learning theories and learning styles

Team member engagement, communication, motivation, and collaboration increased

The greater the motivation, then the more likely managers will apply newly acquired skills to the work environment and management practices

# Recommendations

- ▶ Larger sample size
- ▶ Test difference in male /female intent to transfer
- ▶ Explore difference in younger vs tenured employees intent to transfer
- ▶ Follow-up assessments (supervisors and peers)
- ▶ Additional research on LTSI factors and intent to transfer

# Implications for Field of Performance Improvement

- ▶ Continue research to identify catalysts and barriers to transfer of learning
- ▶ Seek interventions to address transfer barriers
- ▶ Broaden enterprise leadership skills
- ▶ Cost-effective training solutions
- ▶ Immediate transfer of KSAs
- ▶ Utilize technology (Simulation-based training)

# Implications for Christian Business Ministry

- ▶ Responsibility of Christian Business Managers
  - Promote Kingdom of God
  - Glorify God
  - Serve as a Role Model
  - Apply and support practical business applications
  - Add value to knowledge and technology management
  - Mentor diverse generations in the work environment
  - Support a learning environment
  - Individual growth and development
  - Rewarding work versus receiving rewards
  - Give praise and encouragement
  - Be good stewards of God's money through ROI
  - Change behavior for a brighter future

# Questions

