

An Exploration of Factors Associated with Occupational Therapy Students' Academic, Clinical, and Professional Competence



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Introduction

In health profession education programs certain personal and learning strategies were associated with and had impact on student's clinical and academic performance. Student academic performance has been associated with the use of learning strategies (Adam et al, 2012; Chang, Kang, Ham, & Lee, 2016; Koenig, 2004; Neistadt, 1998). Executive functioning skills, such as: ability to plan, execute, monitor, and problem-solve are linked to successful performance. However, these factors have not been fully explored with respect to graduate health care student's academic and professional competence. Therefore, it is important to understand the associations between these factors to further support student academic success and professional competence.

Study aim: To identify factors related to student academic and clinical performance in Occupational Therapy Program.

Methods

Study Design: A non-experimental cohort study using a convenient sampling method.

Participants: 48 students enrolled in a three-year BS/MS occupational therapy program in a metropolitan area.

Instruments: The Executive Function Index (EFI; Spinella, 2005)

The Learning and Study Strategies Inventory, 2nd Edition (LASSI; Weinstein & Palmar, 2002)

Science courses grade point average

Fieldwork Performance Evaluation (FWPE; AOTA, 2003), at the third year.

NBCOT Occupational Therapy Knowledge Exam (OTKE; NBCOT, 2019).

First Year: EFI, LASSI, and Science GPA

Third Year: FWPE in 3 clinical rotations/settings

End of Third Year: OTKE

Results

	1 st Rotation	2 nd Rotation	3 rd Rotation	OTKE
Executive Functioning	0.52**	0.40**	NS	
Science GPA	NS	NS	0.48**	0.43**

Learning Strategies	Neuro-science	Anatomy	Kinesiology
Anxiety	0.33*	NS	NS
Information Processing	0.35*	NS	NS
Selecting main ideas	0.39**	0.38*	0.31*
Test taking	0.33*	NS	NS
Time management	NS	NS	NS

Note. Not Significant: p<0.05; ** p<0.01

Outcome Variable	Predictor Variable	Coefficients					
		B	SEB	β	t	p	semipartial r _{sp}
Average Rotation Evaluation	Executive Functioning	.420	.107	.481	3.917	.000	.477
	LASSI Test Taking Strategies	.084	.040	.260	2.116	.040	.258

R² = .577, F (2,45) = 11.201, p < .001

Outcome Variable	Predictor Variable	Coefficients					
		B	SEB	β	t	p	semipartial r _{sp}
OTKE	Science GPA	4.935	1.544	.426	3.196	.003	.426

R² = .426, F (1,46) = 10.214, p = .003

Conclusions

- Students with stronger executive functioning performed better on their first two clinical rotations.
- Students with higher GPA also performed better on their last clinical rotation and demonstrated greater professional competence.
- The use of learning strategies was associated with science course success (Bonkasen et al., 2017; Hassanbeigi et al.; Lawson, 2014; Salamonson et al., 2013).
- Executive functioning and test-taking strategies predicted student clinical performance, while Science GPA predicted better professional competence.
- The use of executive functioning and learning strategies may facilitate student's ability to build professional knowledge-base.

Implications for Higher Education

- Academic programs should consider emphasizing the use of learning strategies and executive functioning early in their curriculum to enhance instruction and assist students who do not utilize these skills.
- Further research is needed to determine the most effective curriculum to enhance student's ability to develop these skills.

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