

Improvement of Self-Efficacy, Attitude and Belief Systems of Undergraduates Working with Children with Disabilities

Adriana Sandoval, Erin Siebert, Jessica Hamm, Jennifer Morgan, & Joonkoo Yun, School of Biological and Population Sciences, Movement Studies in Disability, Oregon State University

Introduction

- ◆ Individualized Movement and Physical Activity for Children Today (IMPACT) program has been serving children with disabilities for over 31 years to promote physical activity of children with disabilities.
- ◆ IMPACT provides undergraduate student volunteers the opportunity to create relationships with children with disabilities, while participating in physical activity through their commitment, enthusiasm, and support.
- ◆ Fichten, Cutler, and Schipper (2005) found that individuals who volunteered with children with disabilities reported a more positive attitude and increased their comfort level. Personal experiences and interactions with relevant others may influence attitudes.
- ◆ Self-efficacy is believed to be an important determinant of human behavior (Bandura, 1997). An individual with low self-efficacy is more likely to avoid tasks in which they do not perceive themselves to be competent (Bandura, 1993). Identification of factors that improve self-efficacy are important for volunteers working with individuals with disabilities because they will play a vital role in creating a more inclusive society.
- ◆ However, there is a gap in knowledge on how to improve the self-efficacy and attitudes of volunteers in campus based programs that are focused on individuals with disabilities. Therefore this study examined the factors that influence self-efficacy and attitude.



Purpose

The purpose of the project was to examine the factors that influence the self-efficacy and attitude beliefs of IMPACT volunteers.

1. What factors influence the improvement of self-efficacy?
2. What factors influence the change of attitude?



Methods

Participants

- ◆ 72 participants for Question # 1.
- ◆ 62 participants for Question # 2.
 - ▶ Volunteers at a college program for individuals with disabilities.

Instruments

- ◆ Modified version of Self-Efficacy Survey developed by Taliaferro et al. (2011).
- ◆ Modified version of the Attitude Survey developed by Taylor and Yun (2012).



Analysis

- ◆ Hierarchical Multiple Regressions
 - Factors influencing Self-Efficacy
 - DV: Change in Self-Efficacy
 - Level 1 IV: Mastery Experiences (ME), Vicarious Experiences (VE), Verbal Persuasion (VP), Physiological State (PS)
 - Level 2 IV: Age, Gender, Major, Number of Terms Volunteering in IMPACT (Terms)
 - Level 3 IV: Disability Related Classes (Class)
 - Factors influencing Attitude
 - DV: Change in Attitude
 - Level 1 IV: Personal Experiences (PE) and Group Leader Experiences (GLE)
 - Level 2 IV: Age, Gender, Major, Number of Terms Volunteering in IMPACT (Terms)
 - Level 3 IV: Disability Related Classes (Class)

Procedure

- ◆ Pre-test at the beginning of the term on attitude and self-efficacy
- Five weekly surveys measuring potential factors affecting self-efficacy and attitude
- Average scores of weekly measures were used to track potential factors affecting attitude and self-efficacy
- Post-test was administered the last week of the term to measure attitude and self-efficacy of volunteer's working with individuals with disabilities

Results

- ◆ Change in Self-Efficacy: Mean = -0.29, SD = 1.23
- ◆ Change in Attitude: Mean = 0.12, SD = 0.98
- ◆ Change in Self-Efficacy
 - Level 1 R = 0.19, R² = 0.4
 - Level 2 R = 0.35, R² = 0.12
 - Level 3 R = 0.37, R² = 0.14



	IV	b	Beta	t
Level 1	ME	-.13	-.06	-.30
	VE	.37	.15	.69
	VP	.32	.12	.74
	PS	.10	.06	.34
Level 2	ME	-.01	-.00	-.02
	VE	.29	.12	.53
	VP	.42	.16	.92
	PS	-.01	-.00	-.20
	Age	-.15	-.21	-1.60
	Gender	-.21	-.09	-.69
Level 3	Major	.10	.13	.93
	Terms	.08	.11	.78
	ME	-.10	-.04	-.23
	VE	.17	.07	.30
	VP	.62	.24	1.27
	PS	-.02	-.01	-.077
Level 3	Age	-.17	-.23	-1.76
	Gender	-.19	-.08	-.63
	Major	.09	.12	.87
	Terms	.08	.11	.84
	Class	-.00	-.15	-1.08



Results (cont.)

- ◆ Change in Attitude
 - Level 1 R = 0.37, R² = 0.14
 - Level 2 R = 0.49, R² = 0.24
 - Level 3 R = 0.49, R² = 0.24

	IV	b	Beta	t
Level 1	PE	-.51	-.33	-2.1*
	GLE	-.1	-.06	-3.8
	PE	-.73	-.45	-2.9**
Level 2	GLE	-.03	-.02	-.13
	Age	.11	.20	1.6
	Gender	.02	.01	.07
	Major	-.07	-.13	-.99
	Terms	-.08	-.14	-1.1
	PE	-.74	-.47	-2.9**
Level 3	GLE	-.02	-.01	-.10
	Age	.11	.19	1.4
	Gender	.02	.01	.09
	Major	-.08	-.14	-1.0
	Terms	-.08	-.14	-1.1
	Class	.00	-.04	-.34

Discussion

- ◆ Results indicated that the factors hypothesized did not significantly influence self-efficacy of the IMPACT volunteers.
 - One potential reason for the lack of significant findings is the ceiling effect.
 - Another potential reason for a decrease in self-efficacy may be due to realization of the level of difficulty of task.
 - Or the tool utilized for assessment may not have been relevant for this program.
- ◆ The results of this study indicated that the participant's attitude toward individuals with disabilities was affected by the hypothesized factors with 24% of the variance explained. Also, the results indicated that daily personal experiences are a significant contributing factor for changing attitude. However, other variables did not have a significant effect.
- ◆ Based on the results of this study, it is important to create an environment to improve personal experience in order to improve the volunteer's attitudes.

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