



# Perceived Competence and Promoting Physical Activity Among Preservice Teachers

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## BACKGROUND

- Preservice elementary school teachers are capable of effectively delivering physically active lessons targeting academic content (Kibbe et al., 2011).
- Preservice teachers who have more positive experiences with fitness tests had more positive attitudes toward promoting physical activity (Keating et al., 2002).
- The willingness of teachers to promote physical activity (PA) may be inhibited by their perceived competence.

## OBJECTIVE

To examine preservice elementary school teachers perceived competence and teachers' attitude toward promoting school physical activity.

## METHOD

- Participant** A total 233 preservice elementary teachers (N female = 194; 90.2%) comprised of 47.2% Hispanic, 31.3% White, 8.2% Asian, 3.4% Black, 1.3% other).
- Instruments:**
  - The School Physical Activity Promotion Attitudes Questionnaire (SPAPAQ) and School Physical Activity Promotion Competence Questionnaire (SPAPCQ) were administered via survey. A 5-point likert scale ranging from 1 = 'Strongly disagree' to 5 = 'Strongly agree' was utilized for all responses (Webster, Monsma, & Erwin, 2010)
- Procedure:**
  - SPAPAQ were used to measure for individual characteristics toward PA : 1) PA behavior (i.e., I am physically active), 2) PE behavior (i.e., My elementary physical education experiences were positive), 3) PA attitudes (i.e., Elementary classroom teachers should play a major role in physical activity programs at school), and 4) PA competence (i.e., Integrate physical activity into classroom lessons).
  - SPAPCQ were used to measure for teaching attitudes toward PA: 1) TE Fitness/PA (i.e., To develop components of Health-Related Fitness), 2) TE Social (i.e., To develop social awareness and concern), 3) TE Motor skill (i.e., To develop motor skill proficiency), 4) TE Self concept (i.e., To develop personal growth).
- Data analysis:**
  - Pearson's correlation (see Table 1)
  - Multiple linear regressions for teaching attitudes while controlling for BMI, age, gender, race, and years in school (see Table 2)

## RESULTS

**Table 2. Results of Multiple Regressions on Teacher Attitudes**

Predictor	R <sup>2</sup>	β	t Value	P-value
<b>Teacher Attitude toward Fitness</b>				
	<b>0.21</b>			
PA Behavior		0.139	1.894	0.060
PE Behavior		0.022	0.313	0.755
PE Competence		0.061	0.919	0.359
PA Attitude		0.343	5.100	0.001 **
<b>Teacher Attitude toward Social Skill</b>				
	<b>0.18</b>			
PA Behavior		0.047	0.628	0.531
PE Behavior		0.023	0.318	0.751
PE Competence		0.066	0.987	0.325
PA Attitude		0.380	5.548	0.001 **
<b>Teacher Attitude toward Motor Skill</b>				
	<b>0.28</b>			
PA Behavior		0.206	2.945	0.004 *
PE Behavior		0.064	0.947	0.345
PE Competence		0.053	0.833	0.406
PA Attitude		0.340	5.280	0.001 **
<b>Teacher Attitude toward Self-concept</b>				
	<b>0.17</b>			
PA Behavior		0.067	0.910	0.364
PE Behavior		-0.016	-0.228	0.820
PE Competence		0.056	0.847	0.398
PA Attitude		0.399	5.895	0.001 **

Abbreviations: PA, physical activity; PE, physical education  
\*  $p < .01$ . \*\*  $p < .001$ .

- Teacher attitudes toward teaching in fitness were significantly predicted attitude toward PA ( $\beta = .34, p < .001$ ) and accounted for 21% of the variance
- Teacher attitudes toward teaching in social were significantly predicted attitude toward PA ( $\beta = .38, p < .001$ ) and accounted for 18% of the variance
- Teacher attitudes toward teaching in motor skill were significantly predicted behavior ( $\beta = .21, p < .01$ ) and attitude ( $\beta = .34, p < .001$ ) toward PA and accounted for 28% of the variance.
- Teacher attitudes toward teaching in self-concept were significantly predicted attitude toward PA a ( $\beta = .40, p < .001$ ) and accounted for 17% of the variance.

**Table 1. Descriptive Statistics and Correlations among Variables**

Variable	1	2	3	4	5	6	7	8
<b>Teaching Attitudes toward PA</b>								
1. Fitness	-							
2. Social Skill	.761**	-						
3. Motor Skill	.759**	.702**	-					
4. Self-concept	.755**	.823**	.679**	-				
<b>Individual Attitudes toward PA</b>								
5. PA Behavior	.240**	.153*	.314**	.175**	-			
6. PE Behavior	.190**	.158*	.241**	.136*	.442**	-		
7. PA Competence	.195**	.166*	.198**	.146*	.243**	.209**	-	
8. PA Attitudes	.392**	.394**	.409**	.396**	.288**	.327**	.268**	-
Mean	40.23	39.06	37.91	38.68	15.32	12.30	64.92	30.65
Standard deviation	3.53	4.26	4.43	3.61	2.57	2.50	20.40	2.88

Abbreviations: TE, teaching; PA, physical activity; PE, physical education. \*  $p < .05$ . \*\*  $p < .01$ .

- Teaching attitudes (i.e., fitness, social skill, and self-concept) associated with the promotion of PA was positively correlated with individual characteristics toward PA.

## CONCLUSION & IMPLICATION

Preservice elementary school teachers having more positive attitudes and behaviors toward PA are significantly more positive about teaching attitudes including fitness, social skill, motor skill, and self-concept.

Ongoing implementation of school-based physical activity interventions may provide the positive effects on behavior and on physical health status measure in school-aged children (Dobbins et al., 2013).

Preservice elementary school teachers should have curriculum that includes development of PA behavior and attitude related to teachers' attitudes toward promoting PA.

Although their perceive competence about promoting physical activities is significantly related to their attitude, there are other factors involved.

## CONTACT INFORMATION

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