

# Teachers' Support, Students' Self-Efficacy and Achievement Behaviors in Swimming

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## INTRODUCTION

Every teacher would like to create a supportive class climate and foster students' engagement in physical education classes. Teachers' competence support may enhance students' self-efficacy and achievement behaviors in physical education (Zhang, Solomon and Gu, 2011). Student learning in terms of the interrelationship between behavior, personal factors and environmental factors was described by social cognitive theory (Bandura, 2001). Self-efficacy is defined in *Bandura's Social Cognitive Theory* as a situation specific self-confidence that indicates the strength and level at which one believes one can successfully perform a skill or task. Physical self-efficacy is a task and context specific self-confidence in one's ability to perform a physical task (Bandura, 1977).



## PURPOSE

The purpose of this study was to examine how swimming teachers' support for autonomy affects middle school students' self-efficacy, persistence/effort and intention for future participation in swimming.

## METHODS

### *Participants:*

Participants were 82 middle school students (48 boys, 34 girls; M age= 12.7 years) enrolled in an urban public school in New York City. They also represented some diversity in regard to race: Hispanic (n = 53), African American (n=23), Asian (n = 4) and White (n = 2). The vast majority of them are from low socio-economic backgrounds and receive free lunch. Of the total number, 60 students attended both a daily swimming class and an after-school swimming program, 9 students attended only a daily swimming class, while 13 students attended only the after-school swimming program.

### *Method:*

Students' perceived teachers' support for autonomy, self-efficacy, persistence/effort and intention for future participation in swimming were assessed by previously validated surveys.

A shortened version of the **teacher support** subscale of a revised Classroom Environment Scale (Trickett & Moos, 1973) was utilized to index perceived teacher support. This six-item instrument asked students to rate on a 5-point scale (from 1 = *never* to 5 = *always*) how often presented statements were true of the teachers at their schools (e.g., “teachers take a personal interest in students,” “teachers go out of their way to help students,” and “teachers spend time just talking with students).”

## SELF-EFFICACY AND PERCEIVED COMPETENCE

Harter's Perceived Competence Scale for Children (PCSC) (Harter, 1982) was used to measure students' self efficacy and perceived competence. The PCSC utilizes subscales much like other scales of the time , e.g. the Physical Self-Efficacy Scale (Ryckman et al. 1982). Harter's PCSC assess children's sense of competence across cognitive, social, and physical domains, with a fourth subscale for general self-worth (Ostrow, 1990).. This scale was designed for grades 3-8. The physical subscale in Harter's PCSC was the Perceived Physical Competence Subscale for Children (PPCSC). The PPCSC contained seven items and utilized a format unique to Harter's scale, the 'structured alternative format' . The structured alternate format was a result of Harter's recognition of a problem with typical response formats (true/false, like me / not like me). She contended that the two choice format draws socially desirable responses from children. Harter's format allowed children the freedom to choose either side of the scale, as they did not have to admit incompetence or inability on either side, just some degree of difficulty. According to Harter, individuals are motivated to be competent in achievement areas such as sports, and in order to satisfy the urge toward competence, they attempt mastery.



## RESULTS

Correlation and hierarchical multiple regression analysis were used to reveal positive relationships among the variables. According to past research and expectations, self-efficacy constructs were entered in the first block and swimming teachers' support constructs were entered in the second block. Two hierarchical regression analyses revealed that self-efficacy ( $\beta = .22, .27$ , all  $p < .01$ ) and autonomy support ( $\beta = .28, .30$ ; all  $p < .05$ ) were positive predictors of persistence/effort ( $R^2 = 18.2\%$ ) and intention for future participation in swimming ( $R^2 = 14.8\%$ ). Regression analysis also indicated that autonomy support was a positive predictor of self-efficacy ( $R^2 = 17.5\%$ ;  $\beta = .26, p < .01$ ).

## CONCLUSIONS

Teachers' autonomy support enhanced students' self-efficacy and achievement outcomes in swimming. Enhancing students' self-efficacy should foster students' engagement in regular swimming classes and after-school swimming programs. Students like to play a role within their own teaching learning process. Creating peer teaching and leadership opportunities for students in swimming classes can promote students' motivation and success in a variety of water skills. Middle schools classes come really alive when students teach their peers. Swimming teachers should consider what are the most effective strategies to create active and enjoying environments that allow students to learn independently through exploration or from more experienced peers

## Selected References

Bandura, A. (1977). Self-efficacy: Toward a unifying theory of behavioral change. *Psychological Review*, 84 , 191-215.

Zhang et al. (2011). Teachers' Support, Students' Self-Efficacy, and Achievement Outcomes in Physical Education. Supplement to RQES, Vol. 82. No 1, A-58.