Jerusalem, Israel, May 30-June 2, 2010

Title: AN ANALYSIS OF FLORIDA PHYSICAL EDUCATION TEACHER'S KNOWLEDGE OF FLORIDA BICYCLE LAWS

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Abstract:

According to the National Highway Traffic Safety Administration (2009), in 2008, the state of Florida led the United States in the number of bicyclists killed in traffic crashes. The mission of the Florida Traffic and Bicycle Safety Education Program (FTBSEP) is to reduce injuries and fatalities by training children with the knowledge and skills needed to be predictable and competent bicyclists throughout their lives. The FTBSEP provides statewide training workshops that "teach the teachers" about pedestrian and bicycle safety so that they can, in turn, teach their students. Recently, the Florida Department of Education (2008) published the Next Generation Sunshine State Standards that require physical education teachers to teach specific cognitive skills related to pedestrian and bicycle safety to students in kindergarten through fifth grade levels. Several of these safety-related skills, such as helmet use and signaling when bicycling, are also requirements under Florida law. Using specifically designed curriculums for elementary, middle, and high schools, the FTBSEP has developed and provides educational training programs to address several important pedestrian and bicycle safety topics including relevant aspects of the Florida Uniform Traffic Control Law and specific state of Florida bicycle regulations. Educational programs for training physical education teachers on bicycle safety topics are frequently offered in various sites and occasions throughout the state. The purpose of this study was to assess Florida physical education teacher's knowledge of Florida bicycle laws and the impact of knowledge level on the teacher's instructional coverage of the related safety issues. Through a comprehensive review of the literature, test of content validity by a panel of experts, and a pilot test, a survey form was developed with 17 items that measured knowledge of Florida bicycle laws. Each item was phrased into a true or false statement, with an optional answer of unsure. Additionally, socio-demographic variables were included in the survey form for sample description purposes. After obtaining Institutional Review Board approval, research participants (N = 90) were recruited from a state physical education teacher conference who voluntarily completed the survey. Regression analyses revealed that attending formal bicycle safety education training and having taught bicycle safety in the school were positively (p < .05) related to the level of knowledge of Florida bicycle laws. This suggests that the educational programs for training physical education teachers on bicycle safety topics were overall functional and effective, and using the learned knowledge in instructional activities also reinforced the cognitive concepts of Florida bicycle laws. How often they rode a bicycle was not significantly (p > .05) related to the level of knowledge of Florida bicycle laws, indicating that bicycle riding alone was inadequate in learning Florida bicycle laws. Furthermore, descriptive statistics and ANOVA revealed that the level of knowledge of Florida bicycle laws was positively (p < .05) related to age, indicating that older teachers were more knowledgeable of Florida bicycle laws. Descriptive statistics and ANOVA also revealed that the level of knowledge of Florida bicycle laws was not significantly (p > .05) related to gender, indicating that physical education teachers of both genders had similar levels of knowledge of Florida bicycle laws and a non-differential educational program would be effective for both genders of physical education teachers. In general, these findings have further emphasized the importance of bicycle safety training in educating physical education teachers on bicycle laws.