

## **CONNECTING ASPECTS OF THE SPECTRUM AND OF SELF-EFFICACY**

Three studies examined aspects of the Spectrum of Teaching Styles and the theory of Self-Efficacy. The first to do so were Salter and Graham (1985), who found, with a group of elementary school children, no significant difference in skill improvement or in Self-Efficacy while using two of Mosston's teaching styles (Command and Guided Discovery), while not instructing a third unit at all.

Harrison and associates (1995) measured the effects of the Practice and Command Styles on the rate of change in Volleyball performance and Self-Efficacy. The 58 participants in the study were divided into groups according to their level of play. Significant differences were found only in the low-skilled players - the Command Style producing better results on the set, the Practice Style on the spike. Self-Efficacy increased for all students, with no significant differences between the styles.

In 1999, Harrison (with a different group of associates) published another study in which she compared the effects of two instructional models on skill development, knowledge, Self-Efficacy and team cohesion in Volleyball. Both models used elements of Mosston's and Ashworth's Inclusion Style and therefore no relationship between the Spectrum of Teaching Styles and Self-Efficacy could be established.

Metzler (2000) pointed to a further connection between Mosston's Spectrum and Bandura's theory of self-efficacy. In the section dealing with so-called "peer-teaching" (pp.290-8), which according to Metzler is based on the social theories of Bandura and Piaget (p.291), Mosston and Ashworth's reciprocal style is mentioned as "the most notable version of peer teaching" (p.294), thus establishing a link between Bandura and Mosston.

Whereas in the past open or hidden criticism were occasionally heard pertaining to Mosston's Spectrum of Teaching Styles and to Bandura's Self-Efficacy, the trend seems to have changed within the last decade of the 20<sup>th</sup> century. Recently it has been suggested that both theories were but parts of larger entities. Whereas in the past Self-Efficacy and self-confidence were considered parallel expressions, Weinberg and Gould (1995) came up with a model that considered Self-Efficacy an integral part of self-confidence. A similar development has been recorded in the case of the Spectrum of Teaching Styles. In 1983 Metzler criticized it, yet in his book, published in 2000, he considered it a part of Joyce's and Weil's model of teaching, which he accepted as a basis for his own theory.

Goudas and associates (1995) recommended that Sports Psychology would pay more attention to Physical Education research. This emphasis should be given to regular classes, rather than voluntary sports classes, in order to represent the general learner's population.

### **Theoretical Background of the Spectrum and Self-Efficacy in Israel**

In the review of available local literature in Israel no study whatsoever pertaining directly to the Spectrum of Teaching Styles could be recognized. On the other hand studies that dealt with the relation of Self-Efficacy with sport and physical education could be identified. Those studies emphasized the importance of physical activities in the senior year of high school, which was the students' age in the present research.

Researchers and physical educators in Israel and abroad have reported an existing decline in participation in physical education classes in the last years of high school, especially among female students. (Baranowski, et al., 1992; Raviv & Geron, 1997).

In Israel physical activity in the senior year of high school gains in significance due to the forthcoming service in the Armed Forces of both boys

and girls. It is generally assumed that physical ability is a major factor in adjusting, physically and mentally, to army life. (Ben-Sira, et al., 1994).

Even though no clear-cut evidence about the relationship between physical activities in the last years of high school and in adult life has been established, many have emphasized the importance of those activities for the purpose of habit forming.

Research that has been performed in Israel in recent years has recognized the following reasons for the decline in active participation of high school students:

Raviv and Geron (1997) have found that interpretation of Self-Efficacy has had an influence on the frequency of participation in physical activities. In other words, a low level of Self-Efficacy was found to be one of the reasons for dropping out from activities.

Rubin and Raviv (1999), in their study about motivational factors pertaining to physical activities of high school students, claimed that physical educators have failed to follow the educational principle that puts the student's needs in the center of learning. The authors emphasized especially the role of Self-Efficacy for that purpose.

Ben-Sira and associates (1994), who examined the frequency of physical activities and their quality in the senior year of high school, have recommended the use of a variety of teaching methods including an understating of the advantages and disadvantages, their principles and the possibility of their use on an independent basis. Raviv and Geron (1997), in the summary of their study, have recommended the use of alternative methods that would suite the goals of the variety of students, in order to prevent the drop-out from physical activities. Both studies, although not referring directly to the Spectrum, pointed out to some of its main principles.