

**The effect of the use of self-regulated learning  
strategies on college students' performance and  
satisfaction in physical education**

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## Abstract

The purpose of this study was to investigate whether using self-regulated learning strategies could promote college students' learning and satisfaction in Physical Education.

A quasi-experimental design, experimental group (N =49) and control group (N=51), was used to examine the effectiveness of a teaching intervention in achieving the goals of learning and satisfaction. Students undertaking the self-regulated learning intervention were compared with a group participating in standard curriculum instructional conditions. Three questionnaires were administered to identify 1) students' entry characteristics, 2) their perceptions of their learning experiences, and 3) satisfaction. Students completed a students' characteristics questionnaire in week 2. During the module, students responded to a learning experience questionnaire. At the conclusion of the module, students completed a tennis skills test and responded to a satisfaction questionnaire.

The conceptual framework for this study included the independent variables of teaching strategy, mediating variables (students' characteristics), and dependent variables (satisfaction and performance). The experimental study was conducted within this framework by use of an ANCOVA design.

The main results were:

1. The experimental group scored significantly higher on measures reflecting self-regulated learning processes in their learning experience than the control group ( $p=0.000$ ).
2. There was no difference between the groups on scores for global satisfaction ( $p=0.059$ ).
3. There was no difference between the groups on satisfaction through valuing ( $p=0.401$ ).
4. The experimental group demonstrated significantly higher students' satisfaction through enjoyment than the control group ( $p=0.013$ ).
5. The experimental group had significantly higher performance in the tennis skills test than the control group ( $p=0.000$ ).

Several effects of self-regulated learning were indicated in this study. Analysis of the monitoring sheets provided evidence that students gained more interest and confidence in their involvement in the tennis class by the use of self-regulated learning strategies. However, it was expected that the self-regulated learning group would experience the greater satisfaction. As this did not occur, more research is needed to further examine the relationship of learning experiences to satisfaction and particularly the dimension of valuing.

The importance of utilizing a conceptual framework that accounted for differences in student entry characteristics in a teaching intervention of this nature was demonstrated by the ANCOVA analysis. The individual factors of managing environmental change, problem solving, ability attributions, and task orientation were all shown to have some significant effects on student outcomes over and above those attributed to the learning experience.

Finally, some interesting findings concerning the composition of the scales used in the study were reported. They were interpreted as providing evidence for the importance of verifying the cultural appropriateness of even well-known theoretical concepts that may have been developed in different contexts to those in which they are being used. The study concludes with some specific recommendations for future research.