

**STUDENTS' PERCEPTION OF THE LEARNING ENVIRONMENT AND  
SATISFACTION WITH TEACHING AND LEARNING USING A SELF-  
DIRECTED LEARNING APPROACH AMONG UNDERGRADUATE  
PHYSIOTHERAPY STUDENTS AT UNIVERSITY OF GHANA**

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## **ABSTRACT**

### **Background**

Education of health professionals has been a topic of investigation since the beginning of the twentieth century following the Flexner report in 1910. Self-directed learning (SDL) has been one of the predominant issues in the study and practice of healthcare education and is claimed to increase student's confidence in, and capacity for independent learning in dynamic and challenging educational environments.

### **Aim**

The aim of this study was to determine students' perception of the learning environment and satisfaction with the content and lecturing of two modules presented with an SDL approach in a teacher-centered learning environment.

### **Methods**

Ethics approval was obtained for this intervention study conducted over two academic years and consisted of 119 clinical year physiotherapy students who consented to participate and were conveniently recruited. Two instruments Dundee ready education environment measure (DREEM) and Course evaluation questionnaire (CEQ) were used to obtain information about the learning environment and quality/satisfaction of delivery after implementation of the two modules. Both instruments were on five-point Likert type scales.

Stata version 14 programme was used for analysis. The Hotelling's  $T^2$  test was used to compare post-implementation outcomes obtained for the learning environment (DREEM) and quality/satisfaction (CEQ) of modules presented.

### **Results**

All the students of this study rated the learning environment 'more positive than negative'. The third-year groups of study years one and two differed statistically significantly ( $p < 0.001$ ) with respect to all five domains of the DREEM. However the fourth-year groups of study year one and two did not differ ( $p = 0.19$ ) much with respect to students' perceptions on all five domains of DREEM.

All students rated the quality/satisfaction of modules presented as 'good' or 'very good'. Third-year participants of study year two in general scored the quality of, or satisfaction with, the teaching strategy implemented in this study statistically significantly higher

( $p=0.003$ ) than the third-year students of study year one. The mean score of the two fourth-year groups did not differ ( $p=0.35$ ) much with respect to all domains on the CEQ

### **Discussion and conclusion**

Students' general satisfaction with the learning environment and positive perception of the instructional approach may be that students had found the instructional approach stimulating or beneficial. It could have been that the questions in the DREEM are formulated in a way that may have inclined some students to complete the questionnaire with the entire curriculum in mind.

Students' scores on the CEQ are complementary to the results on the DREEM. Probably that explains why the difference between the two third year groups' opinions on the quality of the teaching or satisfaction with the module, differed significantly.

The outcome of the assessment of a teaching environment can be used to enhance the status of the learning environment by changing the environmental aspects that limit / hinder students' SDL.

**Key words** *Learning environment, Physiotherapy students, modules, quality/satisfaction*