Enhancing stock and flow relationship understanding through experiential learning

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ABSTRACT

The stock-flow failure, cognitive bias that distorts the judgment of the relationship between a stock and its related flows, has implications for many decision-making processes in organizations management. Therefore, it is a relevant issue in new manager's education. Although many studies have replicated the stock-flow failure, few have provided insight into effective interventions to improve the performance of subjects and none of them presented a model derived from a theory of learning to improve the poor performance understanding. This study aimed to test whether the experiential learning improves students' performance in the accumulation problem. Based on the theory of experiential learning and the detailed analysis of the problem, it was developed an intervention, in the form of a problem-based learning PBL, that promoted the operative exercise of some necessary coordination for the solution of the stock-flow problem, improving the performance of students undergoing this intervention. This improvement was not observed in students undergoing a placebo intervention.

Keywords: Systems thinking. Stock-flow failure. Management education. Experiential learning