Parámetros de diseño para retroalimentar el aprendizaje motor en un ambiente virtual de enseñanza-aprendizaje

Design Parameters for Feedback in Motor Learning in a Virtual Teaching-learning Environment

Parâmetros de elaboração para *feedback* de aprendizado motor em um ambiente virtual de ensino-aprendizagem

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Resumen

Este estudio secuencial pretende estructurar parámetros de diseño para la retroalimentación en el proceso de aprendizaje motor en un entorno virtual de enseñanza-aprendizaje. En la primera fase cuantitativa, se hizo un análisis bibliométrico del aprendizaje motor, la retroalimentación y las metodologías para el diseño de ambientes virtuales utilizando el programa vosViewer para crear mapas de coocurrencia. En una línea de tiempo, gracias a estos resultados, se identificó la trayectoria de otras investigaciones relacionadas con nuestro estudio. A partir de los resultados, en la segunda fase cualitativa se clasificaron los diseños de retroalimentación. En la tercera fase, se establecieron los parámetros de diseño necesarios para dar retroalimentación el aprendizaje motor. Y en una cuarta fase, se propuso un entorno virtual de enseñanza-aprendizaje para retroalimentar el proceso de aprendizaje motor.

Palabras Clave: aprendizaje motor; parámetros de diseño; realidad virtual; retroalimentación.

Abstract

The objective of this sequential study is to structure design parameters for feedback in the motor learning process in a virtual teaching-learning environment. A first quantitative phase involved a bibliometric analysis of motor learning, feedback, and the methodologies for the design of virtual environments using the VOSviewer program to create co-occurrence maps. In a timeline, based on these results, we identified the course of other research related to our study. The second qualitative phase, based on the results, classified the feedback designs. In the third phase, the design parameters needed to provide feedback for motor learning were established. In a fourth phase, a virtual teaching-learning environment was proposed to provide feedback on the motor learning process.

Keywords: Motor learning; design parameters; virtual reality; *feedback*.

Resumo

Este estudo sequencial visa estruturar parâmetros de desenho para feedback no processo de aprendizado motor em um ambiente virtual de ensino-aprendizagem. Na primeira fase quantitativa, foi realizada uma análise bibliométrica do aprendizado motor, feedback e metodologias para o desenho de ambientes virtuais, utilizando o software vosViewer para criar mapas de co-ocorrência. Em uma linha do tempo, conseguimos identificar, graças a esses resultados, a rota de outras pesquisas relacionadas ao nosso estudo. Com base nos resultados, a segunda fase qualitativa classificou os desenhos de feedback. Na terceira fase, foram estabelecidos os parâmetros de desenho necessários para oferecer feedback sobre o aprendizado motor. Além disso, em uma quarta fase, foi proposto um ambiente virtual de ensino-aprendizagem para oferecer feedback sobre o processo de aprendizado motor.

Palavras chave: aprendizado motor; parâmetros de desenho; realidade virtual; *feedback*.

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