XIV Congreso Internacional de Investigación y Práctica Profesional en Psicología. XXIX Jornadas de Investigación. XVIII Encuentro de Investigadores en Psicología del MERCOSUR. IV Encuentro de Investigación de Terapia Ocupacional. IV Encuentro de Musicoterapia. Facultad de Psicología - Universidad de Buenos Aires, Buenos Aires, 2022.

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Cita:

Bertoli, Juan Ignacio, Quian, Maria Del Rosario, Andreau, Jorge Mario, Ferrelli, Ignacio y Monsalvo, Sabrina Ailen (2022). *Asimetría cerebral y memoria. Estudiando la activación hemisférica a través de la música. XIV Congreso Internacional de Investigación y Práctica Profesional en Psicología. XXIX Jornadas de Investigación. XVIII Encuentro de Investigadores en Psicología del MERCOSUR. IV Encuentro de Investigación de Terapia Ocupacional. IV Encuentro de Musicoterapia. Facultad de Psicología - Universidad de Buenos Aires, Buenos Aires.*

Dirección estable: https://www.aacademica.org/000-084/322

ARK: https://n2t.net/ark:/13683/eoq6/HEP

ASIMETRÍA CEREBRAL Y MEMORIA. ESTUDIANDO LA ACTIVACIÓN HEMISFÉRICA A TRAVÉS DE LA MÚSICA

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RESUMEN

El modelo de asimetría hemisférica para la codificación/recuperación (HERA), (Cabeza et al., 2003; Habib et al., 2003; Nyberg et al., 1996; Tulving et al., 1994) propone una lateralización basada en el proceso de memoria. Según este modelo en la codificación hay una actividad preferencial de la corteza pre-frontal en el hemisferio izquierdo, mientras que durante la recuperación hay una actividad preferencial de la corteza pre-frontal en el hemisferio derecho. Se ha demostrado que escuchar música genera una mayor activación del hemisferio derecho (Alluri et al., 2013; Bever & Chiarello, 2009; Ono et al., 2011; Santosa et al., 2014). Por tanto, un método indirecto para evaluar la lateralización consiste en generar una competencia por los recursos en el hemisferio implicado en el proceso de memoria (Friedman & Polson, 1981; Funahashi, 2017). El objetivo de este estudio es validar un nuevo procedimiento para estudiar indirectamente la activación hemisférica. Nuestra hipótesis es que: Escuchar música durante la recuperación de estímulos verbales conduciría a una disminución del rendimiento en comparación con escuchar música solo en la codificación, ya que en el primer caso el hemisferio derecho estaría comprometido en ambas tareas.

Palabras clave
Memoria - Recuperación - Asimetría cerebral - Música

ABSTRACT

EVALUATING THE HEMISPHERIC ASYMMETRY MODEL OF ENCODING AND RETRIEVAL THROUGH MUSIC

The hemispheric asymmetry model for encoding/retrieval (HERA), (Cabeza et al., 2003; Habib et al., 2003; Nyberg et al., 1996; Tulving et al., 1994) proposes a lateralization during memory process. With a preferential activity of the prefrontal cortex (PFC) in the left hemisphere during encoding and preferential activity of the PFC in the right hemisphere during retrieval. It has been shown that listening to music generates a greater activation of the right hemisphere (Alluri et al., 2013; Bever & Chiarello, 2009; Ono et al., 2011; Santosa et al., 2014). Therefore, an indirect method to evaluate lateralization consists of generating a competition for the resources on the hemisphere involved in the memory process (Friedman & Polson, 1981; Funahashi, 2017). The aim of this study is to validate a new procedure to indirectly study hemispheric activation. We hypothesize that: Listening to music during retrieval of verbal stimuli would lead to a decrease in performance compared to listening to music only at encoding, since in the first case the right hemisphere would be engaged in both tasks.

Keywords
Memory - Retrieval - Brain asymmetry - Music

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