The Effect of Rider Ability and Movement on the Stress/Discomfort Indicating Behaviors of Hippotherapy Equines

Mullis, Hannah (School: East Gaston High School)

A majority of hippotherapy patients struggle with balance, coordination, and self-regulation, causing participating horses to present stress/discomfort indicating behaviors (SDIB) during therapy sessions. Hippotherapy uses horses and their movements in therapeutic settings; benefits include fine-motor development and increased mobility. This study aimed to (1) identify which therapeutic activities result in a higher number of SDIB, and (2) find differences in the presentation of SDIB in horses when a therapy patient rides versus an experienced rider. A Therapy Patient and an Experienced Rider rode the same 7 horses (5-28 years old) and completed the same activities on each horse, all while being videoed. The first activity was mounting the horse, the second activity was crossing an elevated platform, and the third involved the rider placing plastic rings on a pole to the side of the horse. After all rides were completed, an ethogram was used in order to track occurrences of 5 predetermined SDIB (tail flicking, head tossing, stomping, biting threats, and ear-pinning) during each ride. Statistical analysis provided evidence that more SDIB were presented during the mount and ring activity than the elevated platform activity, as the former require more lateral (side-to-side) rider movement. Additionally, horses presented significantly fewer SDIB with an Experienced rider than with a Therapy patient. With results indicating that therapeutic activities and rider ability have a relationship to equine SDIB, therapists can develop goals that help improve core strength while strategically placing lateral movements throughout sessions, minimizing equine stress/discomfort.

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