Can Equine-Assisted Activities Contribute to the Welfare of Horses?

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Equine-assisted intervention (EAI) is known to improve humans' psychological and physical functions. Equine-assisted activity (EAA) is one service of EAI that involves interaction between humans and horses for motivational, educational, and recreational purposes. However, the influence on horses has not been fully investigated. If it is shown that the stress induced by EAA is reduced, it can be regarded as beneficial activities for horses. Therefore, this study aimed to examine the psychological effects of EAA on horses by measuring physiological indicators (heart rate and salivary cortisol concentration) and behavioral indicators (duration of behaviors reflecting mental states). The results showed that the horses exhibited a significant decrease in average heart rate, a decreasing trend in salivary cortisol concentration, a significant decrease in stress-related behaviors, and significant increase in relax-related behaviors after EAA. These findings suggest that EAA reduces the horses' stress levels and may contribute to the improvement of the horses' welfare when conducted under appropriate management. One possible explanation is that horses show affiliative behaviors when they interact with humans same as when they interact with conspecifics. For instance, a horse voluntarily lowered her head to accommodate a child who could not reach her face to stroke, and many horses showed more attentiveness toward the disabled children than the others. These suggest that horses may recognize the disability of human individuals and can change their behavior to an affiliative one.

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