

The Mechanism of Action of an Equine Assisted Intervention: A Pilot Study

Background and statement of problem

There is now an accumulation of evidence of the vital contribution that emotion makes to learning. Within this broad advance in understanding is a growing body of research emphasising the embodied nature of this emotion based learning.

Study Aim and Objectives

This paper reports on a study of the mechanism of action of an equine assisted therapy based on natural horsemanship using hetero-phenomenology.

Study Design

It was hypothesised that the established success of this intervention was due to emotion based learning, measurable by somatic psychophysiological changes.

Three research methods were used to collect data, phenomenological data was collected through interviews, psycho physiological data was collected and video data was collected.

Study population

Seven healthy participants undertook the equine intervention.

Data Collection Methods and Measures

The first four participants had emotion-related psychophysiological changes (heart rate, breathing, heart rate variability, facial EMG, skin conductance) measured while they viewed their experience on video in the lab, and the final three experienced a development of the methodology as their responses were captured in real time on video while participating in the intervention. All participants were also interviewed while watching themselves completing the intervention on video to explore their emotional experience.

The sessions were analysed by five independent researchers who matched together the psycho physiological responses with what was happening in the video of the individual engaged in undertaking the intervention and their responses when interviewed while watching themselves on video. This was done in order to identify any emerging patterns of change in the psycho physiological responses in relation to the exact timing of what was happening on the video.

Duration of study

Two stages, over two years.

Outcome/Results

The results supported the hypothesis that the primary learning process in the intervention may be an embodied emotional response as consistent patterns of measurable change in skin conductivity responses were found at particular points in the intervention.

Words – 318

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