

LETTER TO THE EDITOR

The Effectiveness of Equine-related Therapies: A Response to Anestis, Anestis, Zawilinski, Hopkins and Lilienfeld (2014)

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The recent article by Anestis, Anestis, Zawilinski, Hopkins and Lilienfeld (2014) in the Journal of Clinical Psychology has caused a reaction in many who are involved in therapies using equines and in the related research fields. In their review article, Anestis et al. (2014) assess a number of research studies on mental health therapies involving equine partners, describing and evaluating each study and giving their judgment regarding the validity of the studies. In the overall conclusion of the article it is stated that “current evidence does not justify the marketing and utilization” (Anestis et al., 2015, p. 1115) of equine-related therapies.

I was alerted to this article by the December newsletter of Horses in Education and Therapy International (HETI, formerly FRDI), where the article's conclusion was noted with consternation (Kern Godal, 2014). The Horses and Humans Research Foundation (HHRF) newsletter of December 2014 also noted the conclusions of this study, with a call for more research in this field, not less (HHRF, 2014a). I, and many others, would agree that rather than ceasing what Anestis et al. (2014) call “equine-related treatments (ERT)” (p. 1115), there is a need to expand research in this area and for that research to be published.

Reading the article by Anestis et al. (2014) left me with the impression that the authors had taken a particular position - in this case that equine related treatments are ineffective - then examined available studies looking for errors and potential problems with the research. Even if this were not the case, in my opinion Anestis et al (2014) are not being reasonable: they expect perfection, requiring the “gold standard” in a very difficult area for research methodology.

There is a great deal of anecdotal and research evidence in favour of equine-related therapies and reports of beneficial effects are found in media ranging from newspapers and popular magazines (e.g., McVeigh, 2012; Wilkins, 2014) to the peer review journals which published the articles evaluated by Anestis et al. (2014) (e.g., Journal of Autism and Developmental Disorders; Psychiatric Rehabilitation Journal). Scientific research into equine related therapies is still in its infancy however and, yes, there is room for improvement, but that is not to say that such therapy is to be avoided. After all, how will research into effectiveness be run if the therapies are abandoned?

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I am perhaps biased, working in this field myself, but I believe that many of the issues noted by Anestis et al. (2014) are simply inherent to the area of study. Although Anestis and colleagues do acknowledge difficulties of research in equine-related therapies, they still seem to require impossible standards. For example, although it is the ideal, often one cannot have a treatment control group because of difficulties of assembling a matched group of such individuals or ethical issues regarding withholding of treatment¹. My own work is on the effects of Therapeutic Riding (TR) for children (e.g., Carey, Murray & Barnfield, 2013). This type of research uses a form of convenience sampling where we have to study those who are available to us and cannot assign participants to categories at our convenience. In this research, for a control group we would have had to age and condition-match all children who had signed up to participate in TR sessions. At the time there was no waitlist to use as controls, and the children's physical and mental conditions varied. In such a situation, it thus verges on the impossible to create a valid control group. We could ask to hold back half of the children who have registered for TR, but no sensible parent is going to sign consent for such a study. Who would deny their child what is at the very least an enjoyable activity, and potentially much more, for the convenience of an unknown researcher? The most appropriate option, then, is to use each child as their own control. Baseline, pre-riding session behaviours are measured and then compared to post-riding session scores to make within-subjects comparisons. Not perfect methodology, perhaps, but the best that can be done in this situation.

Similarly, whilst having observers/research assistants blind to the study hypothesis might be the gold standard for observational research, in practice this is often impossible to achieve. Unless one has a large grant and numerous assistants available, having a person who does not know the hypothesis under investigation perform observations really is not an option. Research is often performed by those who have devised the study simply because there is no-one else to do so. It could be argued (as do Anestis and colleagues) that the researcher is potentially biased by their understanding of the study's hypothesis and potential outcomes, but it is possible to set up a study utilizing methods known to reduce possible biases in recording of results. Research can be kept as objective as possible by, for example, use of rigorous checklists and behavioural definitions which have been finalized well before any observations are made. Making such

¹ Some research does allow for a treatment control group, when participants are first recruited from a specific population and then assigned treatment or not (e.g., Gabriels, Pan, Dechant, Agnew, Brim, & Mesibov, 2015), but many established therapeutic situations – as with the TR study described here – cannot support this.

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observations pre-and post-treatment with no reference to the original record sheets also reduces potential for bias.

One benefit of ERT which is often overlooked, and in fact listed as a failing by Anestis et al. (2014), is that such activities tend to be viewed positively by participants. People who may not feel motivated to participate in other forms of therapy can be encouraged to participate when horses are involved (e.g., Beetz, Winkler, Julius, Uvnäs-Moberg, & Kotrschal, 2015). As noted by the HHRF recently: "Motivational aspects of equine therapy are an assumed strong impact factor in the therapy session" (2014b, n.p.). Children particularly may not even see activities such as TR as being therapy. A parent interviewed for the qualitative aspect of our TR research stated that the best part of her daughter's TR participation was the child was happy to attend and did not perceive the session as therapy. Another parent pointed up the "normalcy" aspect, noting that: "The riding gives her an activity she can participate in that levels the playing field with other kids." Taking part in activity that other youngsters might also do gives children something to talk about with peers, thus incidentally decreasing social isolation. These motivational aspects of ERT can be viewed as advantages, rather than methodological failings. Another "failing" which could actually be viewed as an advantage is that participants might be interested in the opportunity to interact with the equine partners. This "novelty effect" was listed as another methodological issue by Anestis and colleagues, rather than being seen as a potential benefit. Surely something which encourages participation in therapy should be viewed as a positive influence rather than a negative? How one could eradicate any novelty effects of therapy with equines is also an interesting question - one suggestion from a colleague (given in jest) was: "Well, you could try using cows!" In seriousness, some studies have used comparisons of interactions with equines versus being in a similar atmosphere (e.g., barn work; Gabriels et al, 2015) or comparing use of dogs to horses (e.g., Nurenberg et al., 2015), but to say that in all situations one could eliminate or control for the novelty of ERTs is, again, to require the impossible.

Anestis et al. (2014) do allow that there are "stubborn obstacles" (p. 1129) and difficult methodological issues in equine-related therapy research, but then to assume that all such research is therefore invalid is too absolute. There is much good which comes from equine-related activities in therapeutic settings and to dismiss outright the utility of any such intervention is an extreme position. I have neither the time nor the expertise to run the sort of extensive analysis that Anestis and colleagues have done - perhaps others working in this field could do a similar study to look, as suggested by Kern-Godal (2014), for the good achieved by such work, rather than only the flaws in its execution. More funding will need to be provided to run such trials. It is unfortunate, however, that there is reluctance on the part of funding bodies to give grants for such research. At least here in Canada there seems to be a form of negative, circular reasoning shown in response to grant applications: No funding for

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research until we know this type of therapy is legitimate; until research shows this to be legitimate, no funding.

Until research into equine-related treatments is more fully funded it will be difficult to eliminate sources of bias. Even then, with issues such as some of the examples given above, research studies can never be perfect; we will simply have to do the best we can. I for one strongly support the need for further studies in this field, and will be continuing my own research into the psychological effects of therapeutic riding.

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