

# The Impact of Bitted and Bitless Bridles on the Therapeutic Riding Horse



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## Introduction

The wearing of bitted bridles for therapeutic horses is still commonplace in many riding centres. Despite the widespread use of bits, research shows how they can be a potential source of significant discomfort and pain (McLean et al., 2005), dental damage (Cook, 2011), injury (Jahiel, 2001) and numerous behavioural difficulties (Cook et al., 2003). Little research has been carried out on the effect of bitted and bitless bridles on the therapeutic riding horse.

This study aimed to explore whether horses wearing bitted bridles during riding lessons will show an increase in negative behaviours and whether horses wearing bitless bridles during riding lessons will show a reduction in negative behaviours and an increase in positive behaviours.

## Materials and Methods

- Quantitative study
- 16 horses age 8-22
- 1 control group (8 horses)
- 1 study group (8 horses)
- 64 therapeutic riding sessions carried out (32 control; 32 study)
- Each therapeutic riding session was videoed
- Video analysis of sessions
- Developed a behaviour profiling ethogram - amalgamating Cooks(2013) research and preliminary pilot studies carried out at Festina Lente (Carey, 2014 [unpublished study])
- Ridden in Micklem multipurpose bridles, bitted and bitless
- Snaffle bits



## Literature cited

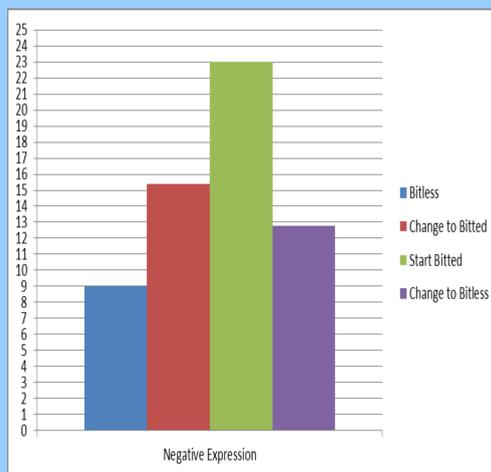
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- McLean, A, McGreevy, P, (2005), Behavioural problems with the ridden horse *The Domestic Horse: The Origins, Development, and Management of its behaviour*, Cambridge University Press.

## Further information

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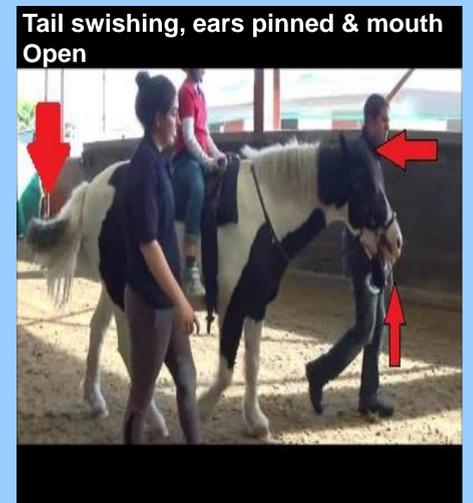
## Results

### Negative Expression

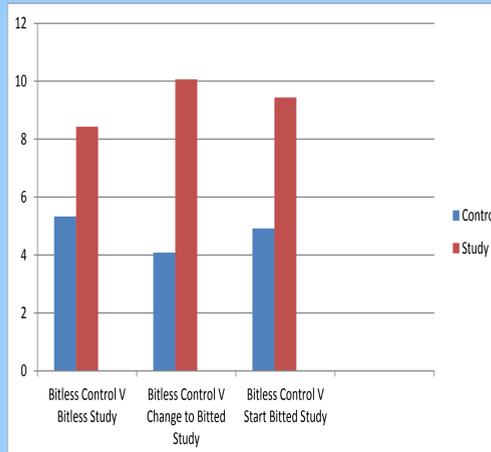


### Negative Expression

Negative expression was highest in the bitted riding session compared to the other sessions, including when they changed to bitted bridles after starting with a bitless bridles. The horses have the lowest negative expression when using bitless bridles.

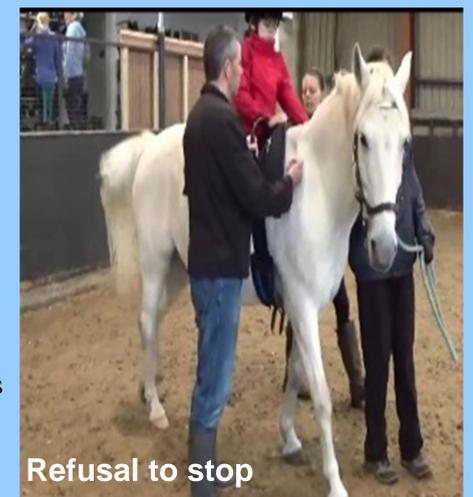


### Aversive Behaviour

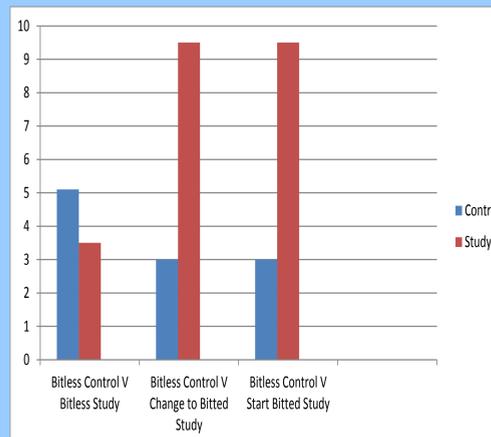


### Aversive Behaviors Study Horses vs. Control Horses

A statistically significant difference in aversive behavior was seen in comparisons between bitless control horses vs. change to bitted study horses as well as the bitless control horses vs. started bitted study horses.



### Oral Distress

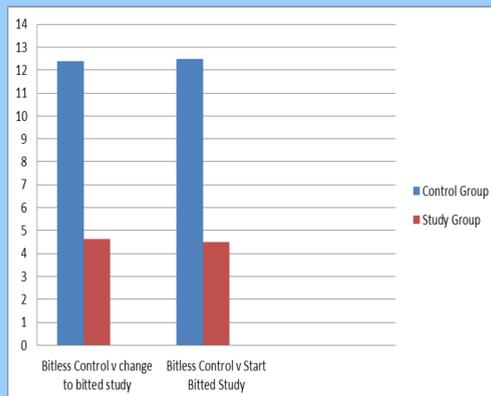


### Oral Distress Study Horses vs. Control Horses

Oral distress included behaviours such as chomping, chewing or crossing the jaw. Statistically significant differences were evident in bitless control horses vs. change to bitted study horses as well as the bitless control horses vs. started bitted study horses.

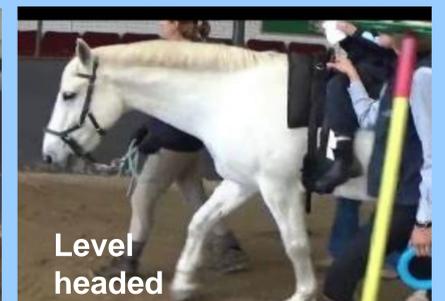


### Positive Behaviours



### Positive Behaviour Study Horses vs. Control Horses

Relaxed positive behaviours included behaviours such as licking and chewing, eyes half closed, blowing out, lowering head – long and low and level headed. The result of the Mann Whitney u analysis shows that there was a statistically significant difference in positive behaviour between the control horses with bitless bridles and the study horses in bitted bridles.



## Conclusions

The wearing of bitted bridles and changing from bitless to bitted bridles causes a significant increase in negative expressions, aversive and oral distress behaviours. This correlates with previous research which shows horses wearing bitted bridles display higher rates of negative behaviours than those wearing bitless bridles (Cook, 2003, 2007a). Subsequently the wearing of a bitless bridle showed the horses in the study displaying higher rates of positive behaviours.

## Recommendations for further research

Following on from this study it is suggested that bitted bridles are unnecessary in therapeutic riding sessions. Many of the negative behaviours witnessed during the study not only compromise the welfare of the horse but may also compromise the therapeutic riding session itself, though further research in this area is necessary.

The welfare of the therapeutic riding horse is of paramount importance at Festina Lente and for this reason we endeavour to ensure all the horses in our care have access to all of the five freedoms, in this case as it applies to freedom from pain. As the bit can be a source of pain and injury for the horse it is our recommendation that it is an unnecessary piece of equipment that violates the freedom of the horse.