

# UNIVERSITI PUTRA MALAYSIA

## DOES DIFFERENT WORKLOAD AFFECT HORSES' BEHAVIOUR?

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## **DOES DIFFERENT WORKLOAD AFFECT HORSES'**

## **BEHAVIOUR?**



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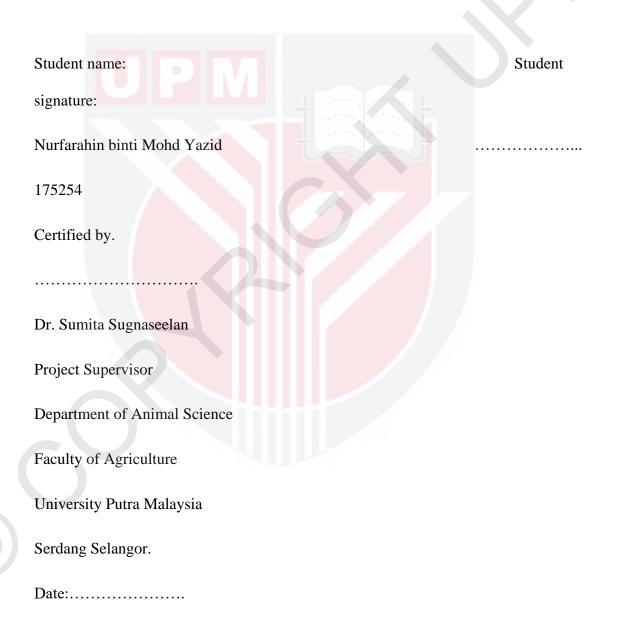
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#### CERTIFICATION

This project entitled "**DOES WORKLOAD AFFECT HORSES' BEHAVIOUR?**" is prepared by **NURFARAHIN BINTI MOHD YAZID** and submitted to Faculty of Agriculture in fulfilment of the requirements of the course SHW 4999 (Final Year Project) for the award of the degree Bachelor of Agriculture (Animal Science).



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## LIST OF ABBREVIATIONS

MAIN: Maintenance

S.I.: Social Interaction

LOCO: Locomotion

AB: Abnormal behaviour

STA: Stance

MISC: Miscellaneous

## **DOES WORKLOAD AFFECT HORSES' BEHAVIOUR?**

#### By

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#### ABSTRACT

Horses are social animals and often need optimum environment to maintain its performance. This experiment consists of 18 thoroughbred horses consisting of 3 females and 15 geldings. These horses were then put into 3 groups based on their workload which are endurance group, riding school group and ex-race horses. These for each group, the horses are observed for two weeks or 14 days consecutively and the behaviours performed were marked on the datasheet and data was collected. For every 10 minutes, the behaviour performed by each horses was observed carefully. The experiment requires a ten hour observation from 8 AM to 6 PM.

KEYWORDS: behaviour, horse, workload, endurance, riding school

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#### **1. INTRODUCTION**

Horses contributed to the economic development in addition to the accomplishment of large scale human conquest and the cultural revolutions these brought worldwide (Mills and McDonnel, 2005). Evidence from excavations of ancient burial sites worldwide proved that horses were used for transportation. This is due to the findings of well-preserved equipment such as brindles, saddles and harnesses together with the remains of horses as reported by Rudenko (1970) in his published work entitled The Frozen Thombs of Siberia (in Mills and McDonnel, 2005). The Botai culture is said to have the earliest association with horses (Levine, 1999). The use of horses expanded throughout Eurasia where they were generally used for transportation, warfare, and later agricultural work apart from the early days, horses are now domesticated for the use of recreational and sporting purposes (Mills, 2002). Since the horse is a social animal and prefers to be in strings, separating horses from their natural environment and housing them in individual stables may affect their behaviour. When kept in small enclosed confinement, horses tend to express abnormal behaviours which may affect their health. Therefore, in order to minimize the expression of detrimental abnormal behaviours, the general stable management may be crucial in ensuring good welfare of the horses when they are stabled.

#### **1.1 Research Problem**

When animals fail to cope with significant deviations in their environment, they will experience stress and, as a result, will be exposed to the development of abnormal behaviour, including stereotypies (Visser and Van Wijk-Jansen, 2012). The workload of horses is determined by the stable management system, and may relate to the behaviours displayed by the horses. Therefore, the different classes can affect the behaviour of horses which may lead to the performance of each horses.

#### **1.2 Research Hypothesis**

Different classes of workloads mean different amount of time spent by each horses in their respective confinement. The amount of time spent by each horses in their individual stables leads to the different classes of behaviour expressed by each individual horses. Therefore, information regarding the relationship between the different behavioural classes performed and the different work classes of horses will be included in this study.

#### **1.3 General Objective**

Proper amount of time spent in confinement of individual horses will affect the frequency of abnormal behaviours expressed by horses. Therefore, this experient was conducted to ensure good performance level of horses as well as good management practice.

#### **1.4 Specific Objectives**

Performance of horses can be affected by the amount of abnormal behaviours expressed by the horses. In other words, optimum stable management can be achieved as the amount of time spent by horses in confinement are improved. Thus, the specific objectives of this experiment includes:

- To attain proper handling of horses associated with the amount of time spent by horses confined.
- To investigate the relation of performance and the behaviours expressed by horses.

#### **1.5 Significance of Study**

Stereotypy is the result of horses being unable to express a number of highly motivated activities in their respective stables. These include the prevention of locomotor activity and exercise, restrictions on diet selection and foraging, and simulations on both the social environment and predator evading activities (Mills, 2002). Stabled horses with limited opportunity to perform sufficient kinetic activity may respond by performing undesirable locomotor abnormal behaviours in the stable such as weaving or box-walking (Waran *et al.*, 2002). Thus, horses need to be frequently allowed to spend ample time out of their stable to avoid the expression of abnormal behaviours or stereotypy.

This is to improve the welfare of the stabled horses in the facility which can also improve the horses' performance. In addition to that, this study will provide helpful information to ease the management and therefore training of these stabled horses.

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