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Role of Human Personalities in Horse Handling

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Abstract:

How do people with different personalities interact with horses? This study was designed to determine if introverts have an easier time handling an unfamiliar horse when compared to extroverts. Volunteers with a range of horse experience were asked to complete the Myers Briggs Personality Assessment. Volunteers were assigned a horse to lead over a 12-foot platform in an outdoor arena. All horses were familiar with this obstacle. Every participant was videotaped. The dependent variables included the fluid motion of the horse, horse facial expressions, and horse body language along with horse-human interactions. The hypothesis was that introverts would experience an easier time with fewer stops when compared to extroverts in completing this task with the horse. The results showed that there was no significant difference in how the horses were led when with an extrovert or an introvert. There was a difference in the time taken depending on if the person was handling a reactive horse or a nonreactive horse.

Introduction:

Throughout the years the topic of human personality has fascinated scientists and studies have been conducted to look at how people interact with animals as well as how people with different personalities behave in learning and testing situations. Personality tests can be used to determine the likelihood of whether a person will succeed in a job and what type of job would best suit them. Factors of human personality such as extroversion and introversion can play a role in learning style and how people interact with each other. These factors make some people better at certain jobs or better with animals whether that be in a school or a work setting. An introvert is a person who responds to the energy coming from an object or another person and reflects on. When the origin of energy comes from an outside source this makes introverts become focused and reflective which may make them appear reserved. An extrovert is a person whose energy naturally flows out into the environment; therefore, they are more likely to create immediate actions. Due to this outward flow of energy they are interested in groups or events and will jump into activities and are usually perceived as outgoing. Personality tests that look at a person's typology such as the Myers-Briggs are often used to determine a person's learning style in an attempt to make the classroom setting a more efficient place to learn. Due to the ability to immediately practice ideas presented in animal science classes, extroverts and introverts may differ in their response to the opportunities to learn new ideas and practice the concepts. Extroverts are more likely to perform a task in order to learn the concept while introverts are more likely to ask questions and watch the activity before performing it themselves (McCann, Heird, Roberts, 1989).

When it comes to self-regulation and creating maps and goals for the future there seems to be no difference in visions for extroverts and introverts but there are different places where they excel in the exercise. Self-regulation is when a person sets goals and then attempts “to monitor, regulate and control their cognition, motivation, and behavior guided and constrained by their goals” (Abbasi, 2017). Extroverts and introverts can benefit from goal setting exercise while approaching them in different ways (Abbasi, 2017). Extroverts will place their energy into the actions required to complete their goals. Introverts will evaluate the steps it takes to complete their goals. The difference in energy from introverts and extroverts may impact animal companions, especially those that are sensitive to the behaviors of others. This study will attempt to look at how horses react to extroverts and introverts and if there are differences in the time and reactions from both horses and humans when it comes to completing a simple task. The hypothesis of the study is that introverts will take more time to complete the activity and will have an easier time as seen by fewer stops and periods of struggles when walking the horses.

Method:

2.1 Participants:

Participants were students from the Carroll College campus in Helena, Montana who had no contact with the horses in the study. Students were selected from the Anthrozoology and Psychology programs at the college. None of the participants were required to have equine experience but it was a requirement that all participants go through a safety demonstration. Participants were asked to take the Myers-Briggs test at the Anthrozoology House on the Carroll College Campus.

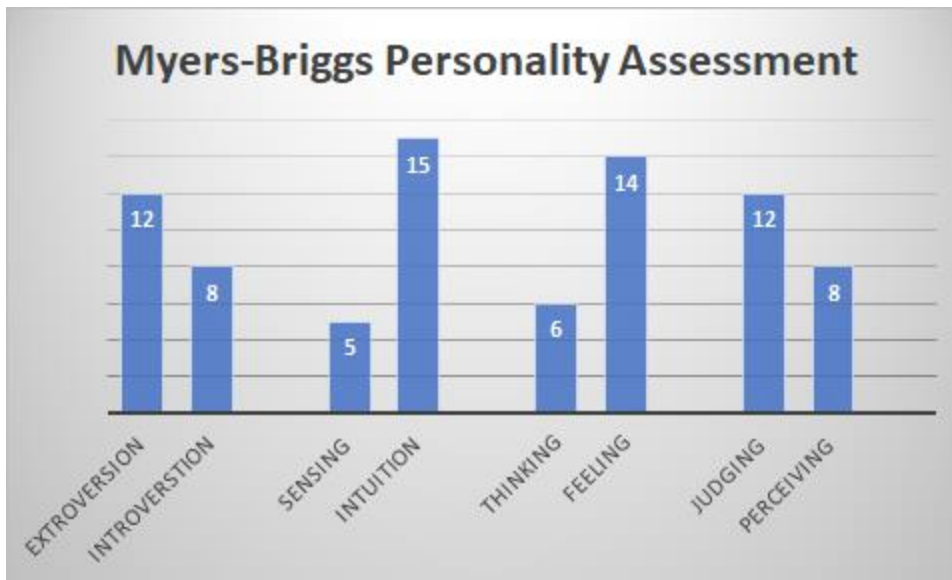
The horses selected to participate in the study were tested with a reactivity test with hula hoops and an exercise ball moving around or towards them. The items were rolled towards, on the side of, and in front of the horse in an indoor arena. The horses were then placed into either a reactive or nonreactive group. Horses were placed into the reactive group if they had exaggerated movements such as jumping away, running, or trotting away from the items. Horses were placed in the nonreactive group if they walked around the items or turned their head to look at the items.

2.2 Procedure:

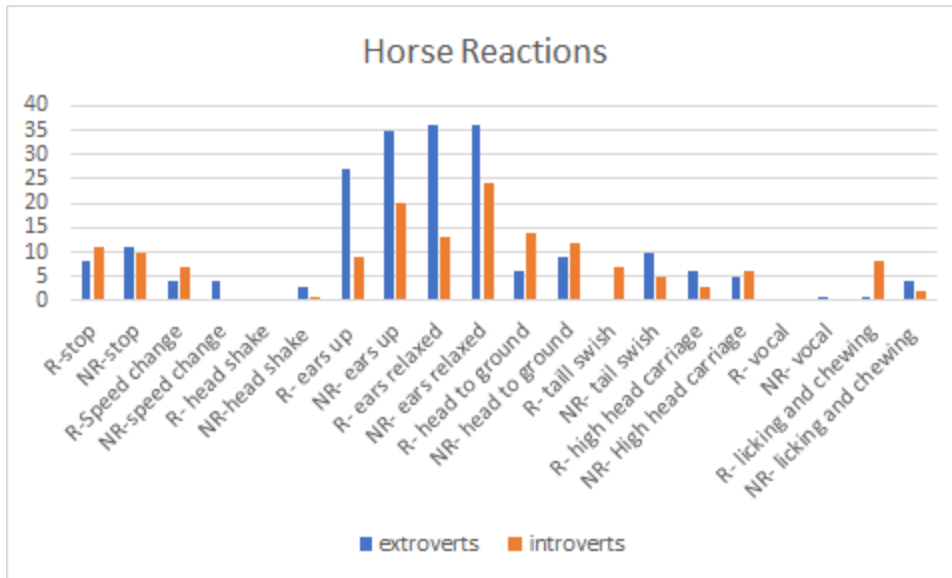
Participants were assigned two (2) horses at random. Participants were given a starting point between a cone and a gate and were told to lead the horse towards the 12-foot elevated surface and to cross over it when they reached the slanted side and then to step off the other end. When they completed that, they were asked to walk back towards the starting point. Each participant was asked to complete the activity twice, once with a reactive horse and again with the nonreactive horse.

A camera was set in place to monitor the reaction of both the horse and human participants. The researcher was looking for ear movement, head movement, body movement, and resistance from the horse. The researcher was looking for speed of walk, reaction to the horse's movement, and length of time for the person to complete the task. The videos were recorded and were coded at a later date by the researcher.

Results:



Of the twenty participants who took the Myers-Briggs Assessment test, there was no significant difference in the number of introverts or extroverts, however, there was a large difference between sensing and intuitive persons. Of the twenty participants in the study 15 tested as intuitive and 5 tested as sensing. People who are identified as intuitive have a tendency to look at the big picture rather than the individual parts of a puzzle and prefer to using thinking and symbols. People who are identified as sensing prefer to look at the facts presented before them and prefer to use their senses. The difference between extroverted participants and introverted participants was demonstrated in the time that it took to complete the task from start to finish. On average, it took introverts 57.75 seconds to complete the task with the nonreactive horse while it took them 67 seconds with the reactive horse. From the introverted participants, there were only two participants who took longer with the nonreactive horse. The opposite was seen in extrovert participants who averaged a shorter task completion time with the reactive horse. The average for the non-reactive horse was 53 seconds while the time for the reactive horse was 50.27 seconds.



Overall, extroverts received more physical feedback from the horse such as ear and tail movement. The most noticeable reaction was the movement of the ears which would alternate from being in a down and relaxed position to an upright position pointed in different directions. The statistics were calculated using a chi test and contingency table. Looking at positive responses from the horse such as relaxed ears, licking and chewing, and whether there was a change in speed, the p-value for introvert and extroverts overall was 0.6776 indicating that introverts with experience do not handle horses better than extroverts with experience. Stopping, tail swishes, and high head carriage from the horse were considered negative responses and resulted in a p-value of 0.1698.

Discussion:

The present study looked at the reaction of horses to introverts and extroverts and how differences in human personality can affect the time it takes to complete a task. The horses in the study received a reactivity measure based on their reactions (i.e.: jumping away, watching the hula hoops roll) to being in an open area with hula hoops and an exercise ball being moved around them. This required them to be isolated from their herd

mates as well as exposed to a new situation. Previous studies have created a combination of reactivity scores and emotionality scores when it comes to novel situations. While there were no significant differences within the emotionality scores, high heart rates within isolation tests and novel stimulus tests were accurate predictors of nervousness and reactions to stimuli outside a research setting (McCall, Hall, McElhenney, Cummins, 2006). Active planning used by extroverts may create more activity for them to participate in while work with the horses and plan out how to complete a task. Working with horses may increase the arousal potential for introverted humans who are inexperienced with horse due to the uncertainty of how to handle a horse and what the horse will do (Abbasi, 2017; Kumari, 2004). Inexperienced introverts may request more time watching others work with horses before deciding to take on the new role of participator when working with horses. Introverted and inexperienced participants took longer to complete the task with the reactive horses. This may show an increase of energy coming from the horse that created uncertainty and surpassed the arousal threshold required for comfort in introverts. Extroverted participants may have taken less time working with the horses due to boredom. The lack of interaction with the horses may have resulted in them finishing the task faster.

The idea of using personality tests for handlers has been studied with canine teams and showed lower levels of performance in the introverted handler. The idea of testing human-equine pairs can be applied to show teams in jumping as well as rodeo and whether there is a difference in personality between the sports. Some limitations of this present study are that the horses used were older school horses who had had the opportunity to cross the elevated surface in previous years. Although the task was new to

the human participants it was not novel to the horses as they had performed the task by being led and ridden. Another limitation of this study was the number of participants who were able to complete the study. While there were forty-three volunteers only twenty of them were able to complete the study due to class schedules and weather conditions.

Future research should include horses who have not had exposure to a stimulus. Also, a more in-depth look at the personality of the horse may reveal traits that fall under certain personality types. Different human personality types may work different with horses during training in the techniques they may use, as well as how long it takes for the horse to complete the task. Since different human personalities have proven to work and respond differently to situations this may be true of horses. Future research should look at how different horse personalities may respond to situations or people. New research could lead to improved matches when it comes to pairing people with horses and having people ask horses to perform new behaviors as well as predicting behaviors when placed in novel situations with people.

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