

CHAPTER TWO

REVIEW OF LITERATURE

So far, no previous research has been conducted on the attitude of people toward horseback riding. This section presents the relevant studies which are likely to affect people's perceptions toward horseback riding. And because of the higher popularity of horseback riding overseas, the information contained in this chapter were mainly based on reliable international data from online sources. Thus, this section presents

- 1) Definition of Attitude
- 2) Negative Effects from Horseback Riding
- 3) Positive Effects from Horseback Riding
- 4) Attitudes toward Animals among Norwegian Adolescents

2.1 DEFINITION OF ATTITUDE

According to Wikipedia, attitude is a concept in psychology. Attitudes can be positive, negative, or neutral. People can also feel both positive and negative at the same time.

Additionally, judgments can cause attitudes. Attitudes develop on the ABC model (affect, behavioral change, and cognition). The individual's preference to do something comes from the physiological response which is affected by the affective response. The behavioral intention is a verbal indication of the intention of an individual. The cognitive response is a cognitive evaluation of the entity to form an attitude. Most attitudes in individuals are a result of social learning from the environment.

2.2 NEGATIVE EFFECTS FROM HORSEBACK RIDING

2.2.1 Horseback-Riding-Associated Traumatic Brain Injuries

The report of Oklahoma State Department of Health (OSDH) (1996) showed that traumatic brain injury (TBI) was one third of all the injury deaths in The United State while a great many survivors lost bodily functions or needed intensive

medical-care. Importantly, during 1992-1994, one hundred and nine TBIs, including three deaths, related to horseback riding. Most of the cases happened because the riders' heads hit on the ground and some of them were kicked or rolled on by a horse after falling from it. The majority incurred severe brain injury, loss of consciousness, loss of memory, and some persistent effects on brain nerves respectively. These happened to both female riders, 55 cases, and male riders, 54 cases, ages between 3-71 years.

Furthermore, besides 109 TBIs, 23 TBIs who did not associate with horseback riding were also harmed by a direct kick to the head by a horse and one person died. Thirteen of these TBIs were children aged not over 10 years. Even though bicycle riding caused more than twice the number of TBIs from horseback riding (234 versus 109), the severity rate from horseback riding seemed much greater than for bicycle riding.

2.2.2 Horseback Riding Riskier than Motorbikes

According to a research team From the University of Calgary (2007), Canada, Suggested that horseback riders were more likely to suffer serious injury and hospitalized 3.5 times more often than motorcycle riders. The most experienced riders on well-trained horses were the main serious cases with a lot of chest injuries, for example, rib or collarbone fractures, revealed by Jill Ball an occupational therapist in the trauma program at Calgary's Foothill Hospital. They also found that, during 1995-2005, one hundred and fifty one horseback riders were severely trauma brain injured while surgery was required in almost half of those.

2.2.3 Horseback Riding More Dangerous than Bungy

A study by Massey University Centre for Tourism Research post-doctoral researcher Dr. Tim Bentley (1998) made a notice that dangerous activities like bungy jumping had a lower rate of injury accidents than horseback riding. The survey showed that less regulated activities, such as cycling or horseback riding were placed on the higher ranks of incident than bungy jumping which was a well regulated activity. Cycling tours were the most dangerous activities with an average of 7401

injuries per million participant hours (IMPHs) while horseback riding was at the fifth, 718 IMPHs, which was higher than bungee jumping with an average of 117 IMPHs, the tenth.

2.2.4 Horseback Riding Injuries among Children and Young Adults

The study of Grant L. Christey, David E Nelson, Frederick P Rivara, Suzanne M Smith, and Corrine Condie (1994) suggested that the horseback riding injuries tended to be severe, according to the percentage of all injuries and the number of visits to physicians between two years, 1989-1990. The data were collected by randomizing from the mailing list of a national mail-order company that sold horseback-riding equipment. The overall injury rate of children and young adults was 0.6 per 1000 riding hours. They found, from the previous research, that the most common mechanism of injury was falling from horseback and the riskiest part of the body was the upper part. The research team also found that the incidents occurred while jumping. The results suggested that being female was another independent risk factor for riding injuries.

2.3 POSITIVE EFFECTS FROM HORSEBACK RIDING

2.3.1 Horseback Riding in Children with Cerebral Palsy: Effect on Gross Motor Function

According to the study of John A Sterba, Brian T Rogers, Amy P France from Center for Sports Therapy Research, East Aurora, and Debarah A Vokes from Robert Warner Rehabilitation Center, Children's Hospital of Buffalo (2001), horseback riding therapy (HBRT) was likely to affect an improvement in the gross motor function of children with cerebral palsy (CP). Seventeen children with CP disability participated in horseback riding therapy. Even though the efficiency of the disabled significantly increased after the second session and returned to pre-riding level in the post-riding period, this study supported horseback riding to be sports therapy for children with cerebral palsy. However, the research team suggested further research with a larger number of participants.

2.3.2 Therapy in the Lives of Children with Disabilities

This undergraduate research from The Master's college by Stacy Truelove (2006) who is a staff member at Carousel Research, aimed to determine whatever there were any positive effects from either occupational therapy or therapeutic riding on disabled children's lives. In California on April 7-8, 2006, the survey was conducted by giving 32 questionnaires with ten questions to parents of students who participated in the Carousel Ranch program in Action. The questions asked parents about any positive differences in their children with occupational therapy and therapeutic riding. The results suggested that therapeutic riding has helped to increase the upper body strength of the children. Children who continuously participated in both occupational therapy and therapeutic riding have a greater improvement and gain more benefits in their lives than those not involved in these therapies.

2.4 ATTITUDES TOWARD ANIMALS AMONG NORWEGIAN ADOLESCENTS

Tore Bjerke, Toril S. Odegardstuen, and Bjorn P. Kaltenborn from Eastern Norway Research Institute, Lillehammer, Norway, (1998) conducted research to gain more information about the development of attitudes toward animals throughout adolescence. This research included a sample of 562 Norwegian children and adolescents, aged between 9 and 15. The instrument in this study was a questionnaire based on Kellert's (1996) attitude typology toward animals, which, in this study, was delineated into seven categories as follows:

- *humanistic*: interest and strong affection for individual animals, principally pets.
- *moralistic*: concern for the right and wrong treatment of animals, with strong opposition to exploitation and cruelty toward animals.
- *utilitarian*: concern for the practical and material value of animals or their habitats.
- *negativistic*: avoidance of animals due to indifference, dislike or fear.
- *dominionistic*: interest in the mastery and control of animals, typically in sporting situations.

- **naturalistic**: interest and affection for wildlife and the outdoors.
- **ecologicistic**: concern for the environment as a system, for interrelationships between wildlife and natural habitats.

According to this study, the results showed that

Humanistic. Almost 100% of the Norwegian adolescents answered that they liked pets very much and disagreed with the statement “I do not understand and how local people can live with animals.” This showed the humanistic attitude among the Norwegian adolescents.

Moralistic. Most respondents disagreed on cruelty against animals, and against zoos. Half of them thought that hunting animals for fun was wrong.

Ecologicistic. A large majority of respondents wanted to learn more about animals (89%), while disagreed with the item “I do not want to learn more about life processes in the lakes.” (61%).

Naturalistic. Although 66% of the students would like to stay at a camp site where they can see many wild animals, they preferred pets to wild animals.

Negativistic. Sixty-eight percent of the respondents agreed that they did not like snakes or stinging insects, 40% were afraid of spiders, and 35% thought that dangerous animals should not exist.

Dominionistic. Eighty-five per cent agreed that horses or dogs should be punished if they don't obey, and 45% thought that wild animals hunters were clever and brave.

Utilitarian. Few respondents agreed with hunting animals in order to make clothes was all right, while most disagreed.