



Wearing Equestrian Helmets: Surveying the Attitudes of Riders

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INTRODUCTION

- Approximately 30 million people ride horses each year in the United States alone¹.
- Historically, equestrian sport has had the highest rate of sport-related treatment for traumatic brain injury (TBI)².
- Risks of concussion and fatal injury in horseback riding are comparable to football, motorcycle and auto racing³.
- Up to 100% of riders were not wearing helmets when sustaining an equestrian-related injury³
- **Use of ASTM/SEI approved helmets can reduce equestrian-related TBI by as much as 85%⁴.**

PROBLEM

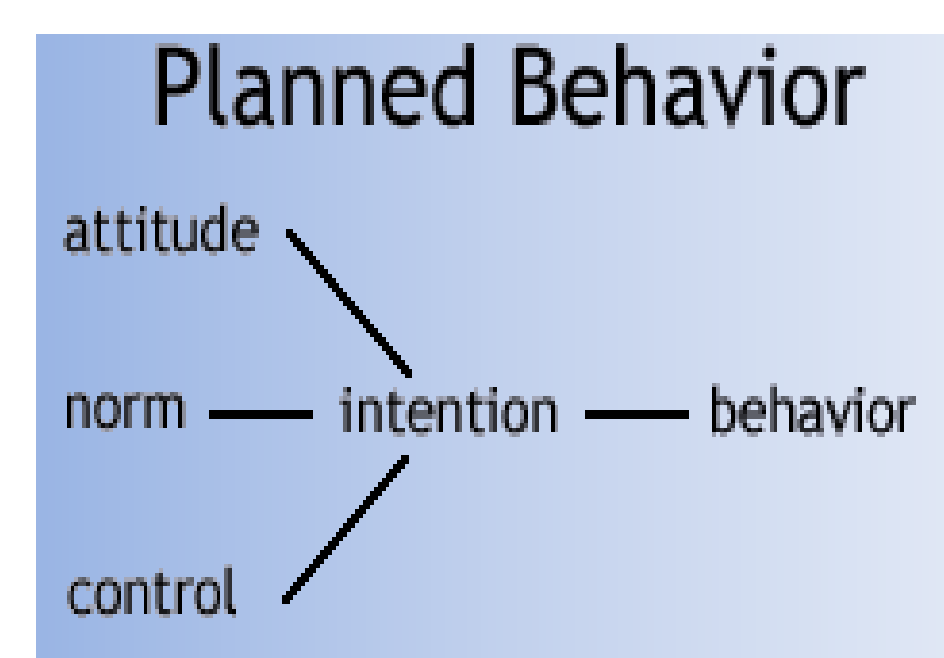
Current literature does not define attitudes or behavior patterns that may impact a rider's decision to forgo use of an approved equestrian helmet.

STUDY PURPOSE

- To determine patterns of helmet use and attitudes toward helmet use among horseback riders in the region.
- Understanding rider's behaviors and/or attitudes may indicate where education and initiatives are needed to increase the use of equestrian helmets, thus providing greater protection against TBI.

RESEARCH DESIGN

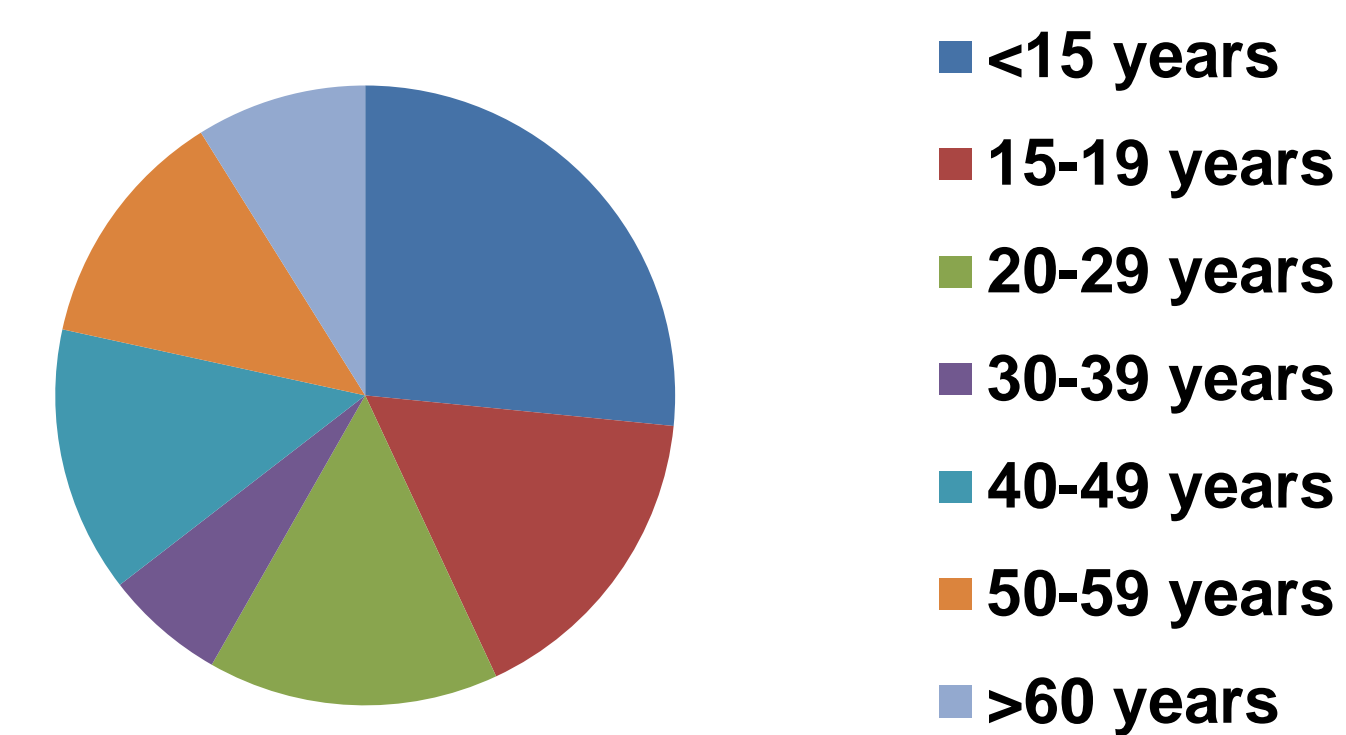
- **Quantitative, anonymous survey:** Designed to parallel and enhance five surveys that previously addressed portions of the research question⁶.
- **Sampling Frame:**
 - Overhead announcements were made during four horse shows of different disciplines communicating survey availability and identifying survey location:
 - Green County, Wisconsin
 - Jo Davies County, Illinois
 - Sangamon County, Illinois
 - Stephenson County, Illinois
 - Surveys were given to a 4-H educator for distribution.
 - Surveys distributed at the College.
 - 81 responses received; 79 (97.5%) were analyzed
- **Theoretical Framework:** Ajzen's Theory of Planned Behavior⁶



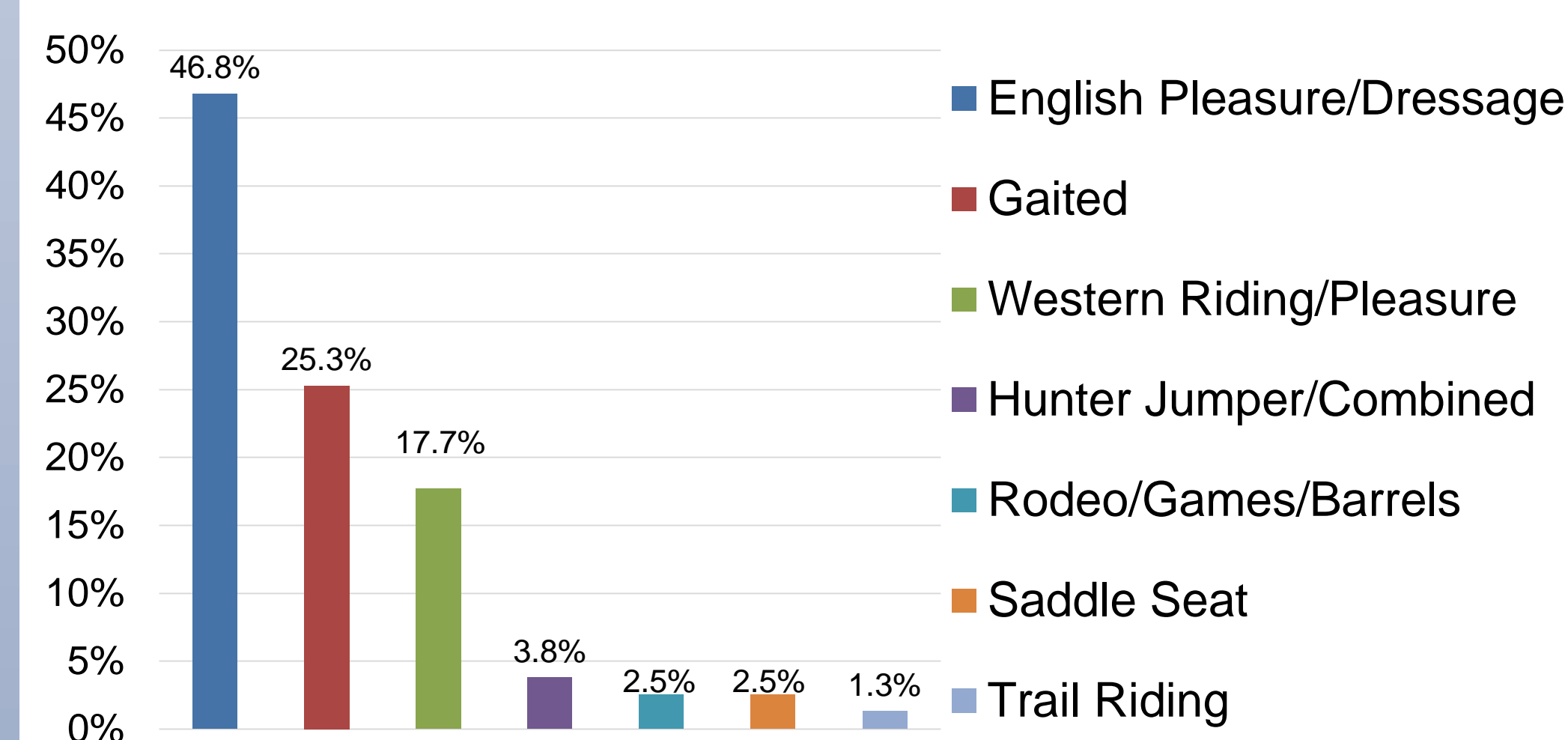
PARTICIPANTS

- **94.9%** Were amateurs
- **97.3%** Were female
- **77.2%** Owned a horse
- **73.4%** Rode at least once per week

Age of Riders:



Riding Disciplines Represented:



I would wear a helmet if...

	Under 20	20 and Older
If they were more comfortable	23.5	33.3
Could get it to fit correctly	23.5	13.3
If it was more attractive	11.8	17.8
If it didn't obstruct vision	20.6	13.3
I never thought about a helmet	2.9	11.1
If it were less expensive	17.6	11.1
If my friends wore them too	2.9	2.2
If my instructor wore at all times	8.8	2.2
If I thought they were more safe	23.5	11.1

RESULTS

Self-Reported Injuries

Bruises/deep muscle bruise	51.9%
Scrapes/abrasions	48.1%
Strain/sprain	30.4%
Cuts	26.6%
Broken bone	25.3%
Head injury/concussion	13.9%
I have never been injured	21.5%

Of the 13.9% of riders who sustained a head injury and/or concussion, only 10% felt this was the worst injury they had experienced.



Figure 8: Daily Mail Reporter. (2008). Retrieved from <http://www.dailymail.co.uk>

- ✓ The majority of riders owned an approved equestrian helmet (72.2%).
- ✓ Less than 50% of riders report wearing an equestrian helmet 100% of the time!
- ✓ Riders under age 20 are more likely to wear a helmet than older riders.
- ✓ 30.4% of riders felt that helmets are not necessary.
- ✓ 32.4% of riders <20 and 17.8% ≥20 years of age felt they were experienced enough to ride without a helmet
- ✓ 5.9% of riders <20 and 8.9% of older riders report they would NEVER wear a helmet

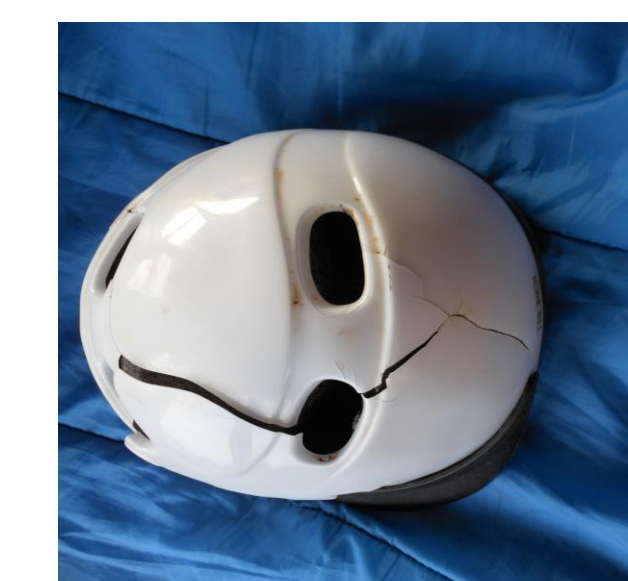


Figure 6: Shattered helmet from rider hitting the ground when horse unexpectedly bolted for the fence. Rider was flown to nearby trauma center. Retrieved from <http://www.riders4helmets.com>

CONCLUSIONS

- Despite an increased focus on TBI secondary to sports-related injury; outside of helmet-mandated events, riders are not wearing protective headgear when they ride.
- **The decision to wear an approved helmet 100% of the time was impacted most by helmet comfort, fit, lack of obstructed vision and whether the rider thought helmets increased safety.**
- Most (75%) younger riders did not consider increased safety a factor in choosing to wear a helmet
- 41.2% of riders <20 years and 77.8% of riders 20 years and older reported that their instructor did not require them to wear a helmet.



NURSING IMPLICATIONS

- The patient history should include assessment for sports-related activities that increase the risk for TBI.
- The goal for young equestrian riders is to use an approved helmet from the time they begin riding.
- Ongoing education regarding approved helmets as a means to prevent equestrian-related TBI is needed for participants, organizations and the private sector.
- Primary care providers are in a position to aid in the prevention of TBI by influencing beliefs, attitudes and patterns of behavior regarding the use of equestrian helmets.

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