



# Efficacy of Using a 6-minute Video to Provide Concussion Education: The Short and Long Term Effects

NU Sports Medicine  
+  
Student Affairs Assessment  
**DISCUSSION**

## OVERVIEW

### Background

In the past decade, concussions have become more prevalent in both the athletic and general student population. When not treated properly, concussions can effect cognitive and emotional behavior, however, little is know about the recreationally active student population and the best medium for providing education. Education about concussions could lead to earlier interventions and better long-term outcomes.

### Learning Outcomes

Students who complete the Concussion Education Module will [or will be able to]...

- Correctly identify sign and symptoms of a concussion
- Identify the complications of returning to physical activity while still experiencing concussion symptoms
- Know where and how to seek help if they sustain a concussion
- Demonstrate where and how to seek help if they sustain a concussion

### Division of Student Affairs Learning Outcomes

- Personal Development
- Cognitive & Practical Skills

- Overall baseline & posttest knowledge of concussion was high, however, *students struggled to recognize 3 symptoms of a concussion (insomnia, amnesia, & nausea)* and identified other symptoms that were not actual concussion symptoms.
- The slight increase in Total Knowledge Score that was seen on the posttest returned to pretest levels at 6-months post-intervention.
- Subjects were able to identify the complications of returning to activity while still experiencing concussion symptoms.
- Scores related to complications of returning too quickly remained high at the 6-month test
- The majority of students "agreed" or "strongly agreed" that after watching the video they knew where to seek help if they sustained a concussion.
- Over half of the students reporting a concussion in the 6 months after watching the video sought medical attention at the Health Service

Methods: Pretest → Video → Posttest  
→→→6-Month Posttest

## RESULTS

### Demographics

	n=946
<b>Sex</b>	
Male	553 (58.5%)
Female	393 (41.5%)
<b>Year in School</b>	
Freshman	246 (26.0%)
Sophomore	257 (27.2%)
Junior	201 (21.2%)
Senior	186 (19.7%)
5 <sup>th</sup> Year +	56 (5.9%)
<b>Type of Sport</b>	
Contact	423 (44.7%)
Non-Contact	517 (54.7%)
Sport Missing	6 (0.6%)

### Immediate Concussion Knowledge 6-Months

	n=946 Pretest	n=946 Posttest
<b>Total Knowledge</b> <i>(possible range 0-33)</i>		
Mean (SD)	27.5 (3.36)	27.4 (3.66)
Range	17-33	17-33
<b>Actual Signs &amp; Symptoms</b> <i>(possible range 0-8)</i>		
Mean	6.81 (1.20)	7.06 (1.13)*
Range	0-8	0-8

\*p<.000  
**Total Knowledge**  
17% of subjects answered the same number of questions correctly on the posttest as on the pretest and **40%** answered more questions correctly.

**Actual Signs & Symptoms**  
48% of subjects answered the same number of questions correctly on the posttest as on the pretest and **33%** answered more questions correctly.

	n=240 Pretest	n=240 Posttest	n=240 6-Month
<b>Total Knowledge</b> <i>(possible range 0-33)</i>			
Mean (SD)	27.5 (3.36)	27.4 (3.66)	27.8 (3.24)
Range	17-33	17-33	18-33
	n=255	n=255	n=255
<b>Actual Signs &amp; Symptoms</b> <i>(possible range 0-8)</i>			
Mean	6.93	7.21***	6.439***
Range	4-8	1-8	0-8

\*\*\*p<.001  
**Differences between Groups**

- **Females** are **55% more likely** than males to show gains in concussion knowledge between the pretest and the post-test
- Student with *prior concussion education* in high school is associated with students being **48% less likely** to have gains in concussion knowledge
- There were **no differences** between students who play *contact* sports versus students who play *non-contact* sports.

### Reporting Behaviors:

- Of the 255 subjects who completed the 6-month posttest, **13 (5%)** had sustained a concussion.
- Of these **13, 8 (61.5%)** sought medical attention at the Health Service.
- **3** of the 255 subjects reported **4** occasions of participating in an athletic practice or competition with signs and/or symptoms of a concussion