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Spring 2017

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Misich, Colin and Fraas, Michael, "Post-concussion Services in Speech-language Pathology: Awareness, attitudes, and training in concussion for currently practicing SLPs" (2017). WWU Honors Program Senior Projects. 39.

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# Post-concussion services in speech-language pathology: Awareness, attitudes, and training in concussion for currently practicing SLPs

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### **BACKGROUND**

In recent years, the issue of concussion and its appropriate management has continued to remain a significant public health concern despite increased public outreach and awareness. Likewise, nationwide state legislation regarding "Return to Play" guidelines in youth athletics, as well as new legislation in several states regarding the equally (if not more) important issue of "Return to Learn" guidelines have yet to show significant evidence of their ability to reduce the negative impacts of concussion.

Cognitive rehabilitation following concussion is one of the services outlined by the American Speech-Language-Hearing Association within the scope of practice for speech-language pathologists.<sup>1</sup> Yet in a 2016 survey of SLPs practicing in educational settings in Illinois, 91% reported having no experience in a post-concussion management role.<sup>6</sup>

This survey aims to explore the knowledge level and awareness of currently practicing SLPs on the topic of concussion, as well as what type of formal education they have received on the subject. This data will be compared with responses from a cohort of first year graduate students in speech-language pathology.

## RESEARCH QUESTIONS

- 1. Explore the concussion histories of SLPs and a first year cohort of graduate students.
- 2. Examine the knowledge level of SLPs and a first year cohort of graduate students regarding concussion and the physical, cognitive, and emotional symptoms associated with concussion.
- 3. Examine the level of knowledge that SLPs and grad students possess about current WA state legislation mandating the management of concussion.
- 4. Explore SLP and grad student beliefs about who should take the primary role in managing student concussions.

## **METHODS**

A survey that assessed SLP participants' knowledge about concussion was developed based on previously published surveys.<sup>3, 6</sup> The survey was sent through a listserv email to the SLPs. It was noted that completion of the survey served as consent for participation. Survey links were sent by listserv to 224 SLPs; 85 SLPs responded, achieving a 37.9% response rate. In addition, 21 students in a first year graduate cohort of a speech pathology program also completed the survey, for a total of 106 respondents.

The practicing SLPs work in various settings, including schools, acute hospitals, and in- and outpatient rehab.

Descriptive statistics were used to analyze demographic information from the respondents. Frequency distributions were calculated for the responses to T/F and 5-point Likert-scaled questions regarding concussion knowledge and beliefs regarding management practices.

#### **Respondents' Concussion History**

Included in the survey was the question, "Have you ever sustained a concussion?" Among SLPs, 27.1% answered yes (Range = 1-9), compared to 28.6% of graduate students (Range = 1-2). In addition, 7.2% of SLPs and 23.8% of grad students answered "Not sure".

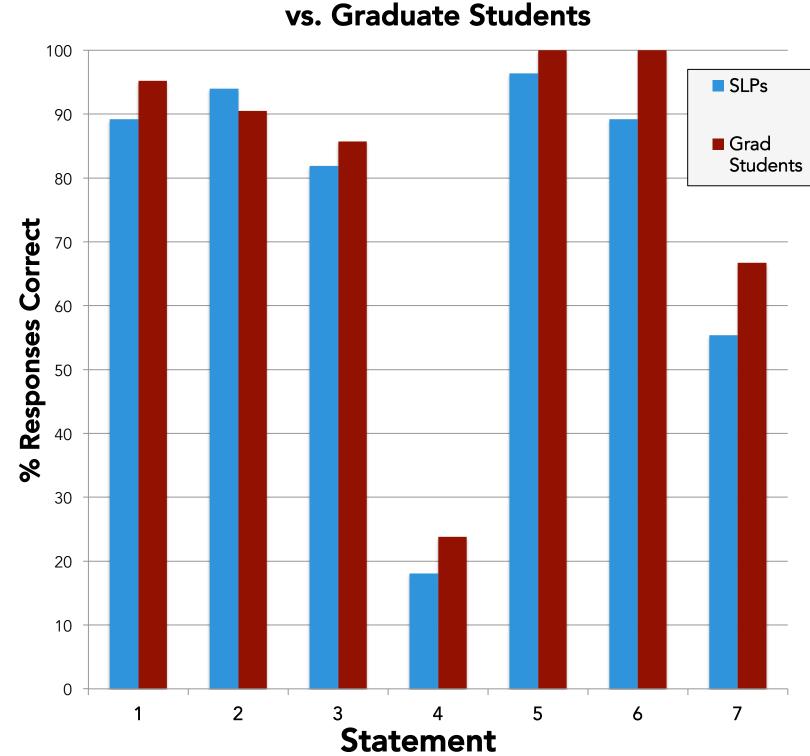
#### **Identifying Symptoms of Concussion**

	% Responses Correct	
Concussion Symptom	SLPs	<b>Grad Students</b>
Headache	98.8%	100%
Neck ache	80.3%	81%
Nausea/vomiting	97.6%	100%
Balance problems	95.1%	95.2%
Noise sensitivity	92.4%	95.2%
Light Sensitivity	93.7%	100%
"Don't feel right"	96.3%	95.2%
Difficulty falling asleep	79.5%	66.7%
Irritable	93.6%	100%
Sadness	84.6%	100%

#### Concussion Knowledge

#	ITEM	T/F
1	A concussion is a traumatic brain injury.	Т
2	Loss of consciousness is a requirement for a diagnosis of concussion.	F
3	Protective devices (e.g. helmets, mouth guards) will prevent a concussion.	F
4	Generally, children show better recovery outcomes compared to adults.	F
5	The risk for sustaining a subsequent concussion increases with each concussion.	T
6	If symptoms quickly "clear", an athlete can return to activity the same day.	F
7	A concussion can typically be diagnosed from a CT/MRI scan.	F

## Responses to Concussion T/F Statements: SLPs



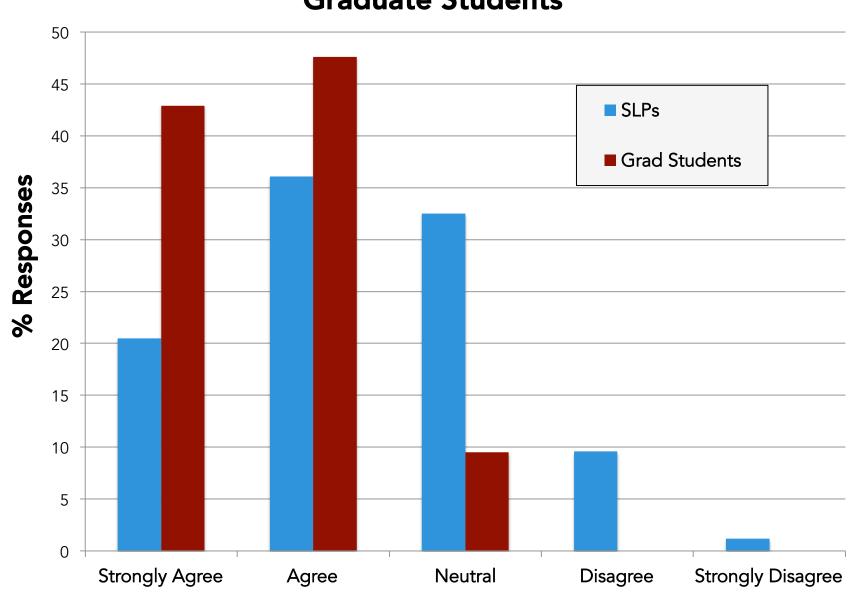
#### **RESULTS**

#### Zackary Lystedt Law (RCW 28.A.600.190)

Respondents were asked the question, "Are you familiar with the Zackery Lystedt Law (RCW 28.A. 600.190)?" Only 15.7% of SLPs indicated that they were, compared to 52.4% of graduate students. In addition, 7.2% of SLPs and 4.8% of graduate students answered "Not sure".

# "SLPs should play a direct role in managing the symptoms of concussion"

# SLP Role in Concussion Management: SLPs vs. Graduate Students



### CONCLUSIONS

- 1. A similar % of respondents from both groups indicating a history of sustaining concussion; however, graduate students were less certain about their reports.
- 2. Both groups were relatively knowledgeable about concussion symptoms; however, 20% of SLPs and nearly 35% of grad students failed to identify "sleeping difficulties" as a symptom.
- 3. Overall, grad students were more accurate in their knowledge of concussions. This may be due to increased academic focus on the issue.
- 4. Surprisingly, SLPs were far less aware of current legislation mandating concussion management compared to grad students.
- 5. Grad students feel more strongly that SLPs should take a primary role in the management of concussed students compared to currently practicing clinicians.
- 6. Graduate training programs should provide future SLPs with knowledge about concussions and proper management techniques.

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