

### Research Poster 1382050

#### Concussion-Like Symptoms Reported in Female Collegiate Non-Concussed Non-Athletes Analyzed by Major



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**Research Objectives:** To investigate the influence of choice of college major on reporting of concussion-like symptoms for the non-concussed. Because concussion symptoms are non-specific, the general public may report experiencing them even without the presence of brain injury.

**Design:** Cross sectional online survey research design consisting of the self-rated symptom scale from the Sports Concussion Assessment Tool (SCAT) 5th edition.

**Setting:** The setting was a liberal arts women's college in Notre Dame, Indiana.

**Participants:** The selection process was broad and consisted of surveying female non-athletes with ages ranging from 18 years to 25 years. Sixty-six subjects provided information about their declared academic majors.

**Interventions:** No interventions.

**Main Outcome Measures:** The number of symptoms, type of symptom, and severity of concussive symptom as measured by the Sport Concussion Assessment Tool 5th edition (SCAT-5) and if the type of college major contributes to concussion like symptoms.

**Results:** Non-concussed collegiate students did not report concussion like symptoms at a clinically significant level of severity. No relationship was demonstrated between choice of major when analyzed across major, academic group, or academic unit. In response to increased symptoms after physical and cognitive exertion, participants reported increased symptoms at a rate of more than 3x greater for cognitive versus physical exertion.

**Conclusions:** Because concussion symptoms are non-specific, the general public or non-concussed population may also report experiencing them. Results did not reveal a significant relationship between choice of major and self-reporting of concussion like symptoms. This may support use of a symptom scale for identification of concussion symptoms but more research is recommended. In response to increased symptoms after physical and cognitive exertion, participants reported increased symptoms at a rate of more than 3x greater for cognitive versus physical exertion. The SCAT-5 does not clarify which symptoms increase with exertion and to what level of severity. This would also be an area for additional study.

**Author(s) Disclosures:** Nothing to disclose.

**Keywords:** Concussion, Concussive Symptoms, Physical Exertion, Cognitive Exertion, Sport Concussion Assessment Tool

### Research Poster 1382052

#### The Perspectives of Therapists on Falls and Fall Prevention Training in Spinal Cord Injury Rehabilitation



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**Research Objectives:** The study aimed to explore the perspectives of physical and occupational therapists who work with patients with spinal cord injury (SCI) on: 1) how they assess fall risk in patients with SCI, 2) what fall prevention education, interventions and/or strategies they provide to patients with SCI, and 3) opportunities to improving fall risk assessment, management and the delivery of fall prevention education, strategies and interventions in SCI rehabilitation.

**Design:** A qualitative descriptive study.

**Setting:** Five SCI tertiary rehabilitation centres.

**Participants:** Twenty-one participants, consisting of 13 physical therapists and 8 occupational therapists, from five provinces across Canada who work with patients with SCI.

**Interventions:** N/A.

**Main Outcome Measures:** Therapists completed an individual interview or focus group in which open-ended questions queried the clinicians' perceptions of fall assessment, prevention and management in SCI rehabilitation. Interviews were audio recorded, transcribed, and analyzed using thematic analysis.

**Results:** Analysis of interviews revealed four themes: 1) policy impacts practice (i.e. positively and negatively), 2) assessing and managing fall risk in SCI rehabilitation (i.e. fall risk assessments, unrealistic expectations of falls in rehabilitation, and fall management), 3) "Helicopter therapy" and responsibility for fall prevention (i.e. clinician's responsibility, patient's responsibility, challenges with education, and resources desired), 4) building insight and fall education (i.e. for patients and for therapists).

**Conclusions:** Clinicians perceived the current fall prevention policies as challenging, unrealistic, and limiting the progression of patients in rehabilitation. Additional resources and educational tools should be developed to build insight into fall prevention and management for both patients with SCI and clinicians.

**Author(s) Disclosures:** None.

**Keywords:** Spinal Cord Injury, Falls, Fall Prevention

### Research Poster 1382053

#### Pragmatic Evaluation in a Rehabilitation Setting



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**Research Objectives:** To investigate pragmatic deficits in a 61-year-old patient with a widespread lesion in the left temporal lobe (ventral stream).

**Design:** We video-recorded a conversation among the patient, the investigator, and a familiar person (Key conversational partner KCP): i.e. the patient's wife, in order to simulate a naturalistic conversation. The topics of the discussion included general every-day questions, and we tried to elicit an emotional narration from the patient. The conversation was transcribed with the CHAT conventions, and uploaded in the international database, AphasiaBank (MacWhinney, 2000). Furthermore, we applied the Pragmatic Evaluation Protocol – Revised (PREP-R), in order to explore the pragmatic competence of the patient.

**Setting:** At the neurology clinic of Papageorgiou hospital in Thessaloniki, Greece.

**Participants:** A 61-year-old patient with a widespread lesion in the left temporal lobe (ventral stream), after an ischemic stroke. Biographical history included his work as an employee at a private company and had a basic educational background.

**Interventions:** Not applicable.

**Main Outcome Measures:** Right hemisphere operations, such as gazes, managing of pauses and interactions were intact, whilst left hemisphere functions, such as word retrieval, comprehension, and morphological aspects of language were impaired, which was in line with our hypothesis. **Results:** Deficits in both the Grammatically-Based Pragmatic Ability (62.5%) and the Specific Pragmatic Ability (42.85%) were seen. Importantly, while the patient encountered significant difficulties in the Enunciative (46.66%) and the Textual Pragmatics (28.57), Interactional Pragmatics remained relatively intact (71.42%).

**Conclusions:** General Pragmatic ability was reduced mainly by Enunciative and Textual Pragmatics. Pragmatic evaluation can be important for the evaluation and the design of rehabilitation programs. These findings point to the clinical relevance of a KCP in the pragmatic evaluation of conversational sample from an individual with CVA and the use of CHAT conventions.