



Self-reported Effects of Cannabis and Cannabinoids on

Neuropathic Pain and Pain Medication use in people with Spinal Cord Injury

Kristiina Kinnunen, Linda Robayo Riofrio, Nicholas Cherup, Scott Frank, Eva Widerström-Noga

Introduction:

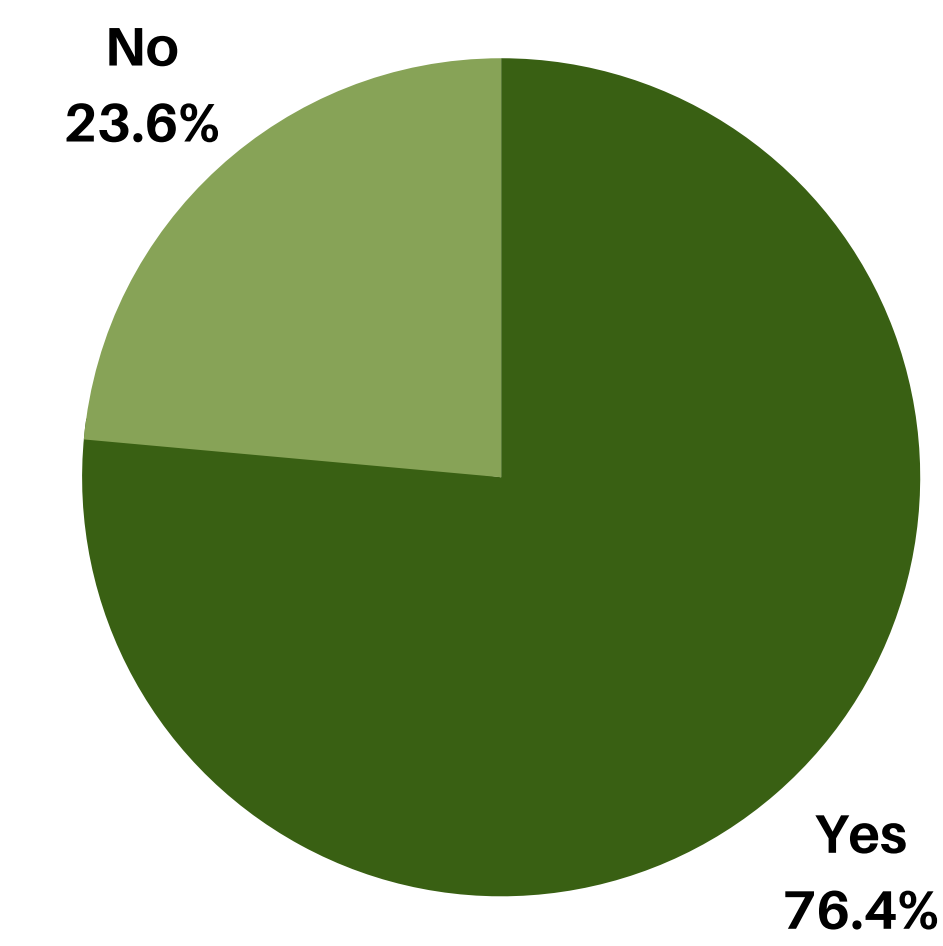
As many as 80% of individuals with Spinal Cord Injury report suffering from chronic pain, with 60% experiencing neuropathic pain. Given these data, finding possible ways to reduce or manage neuropathic pain symptoms in SCI is critical to enhancing the quality of life of these individuals.

The objective was to evaluate the self-reported effects of Cannabis and Cannabinoids on neuropathic pain in individuals with spinal cord injury (SCI). Additionally, the study aimed to assess whether cannabis and cannabinoids are used as substitutions for pain medication.

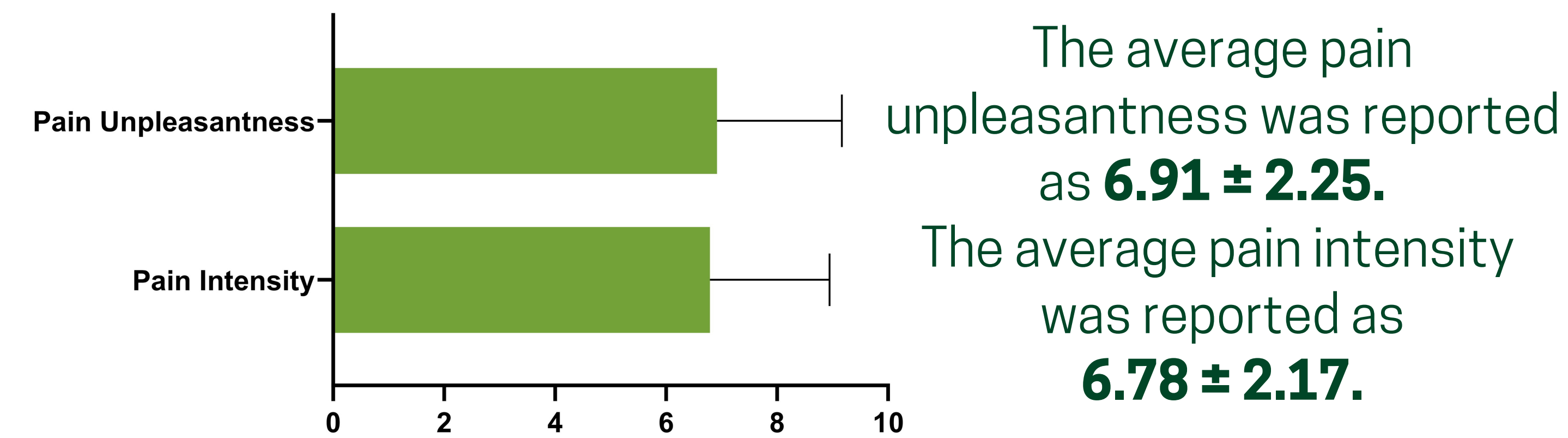
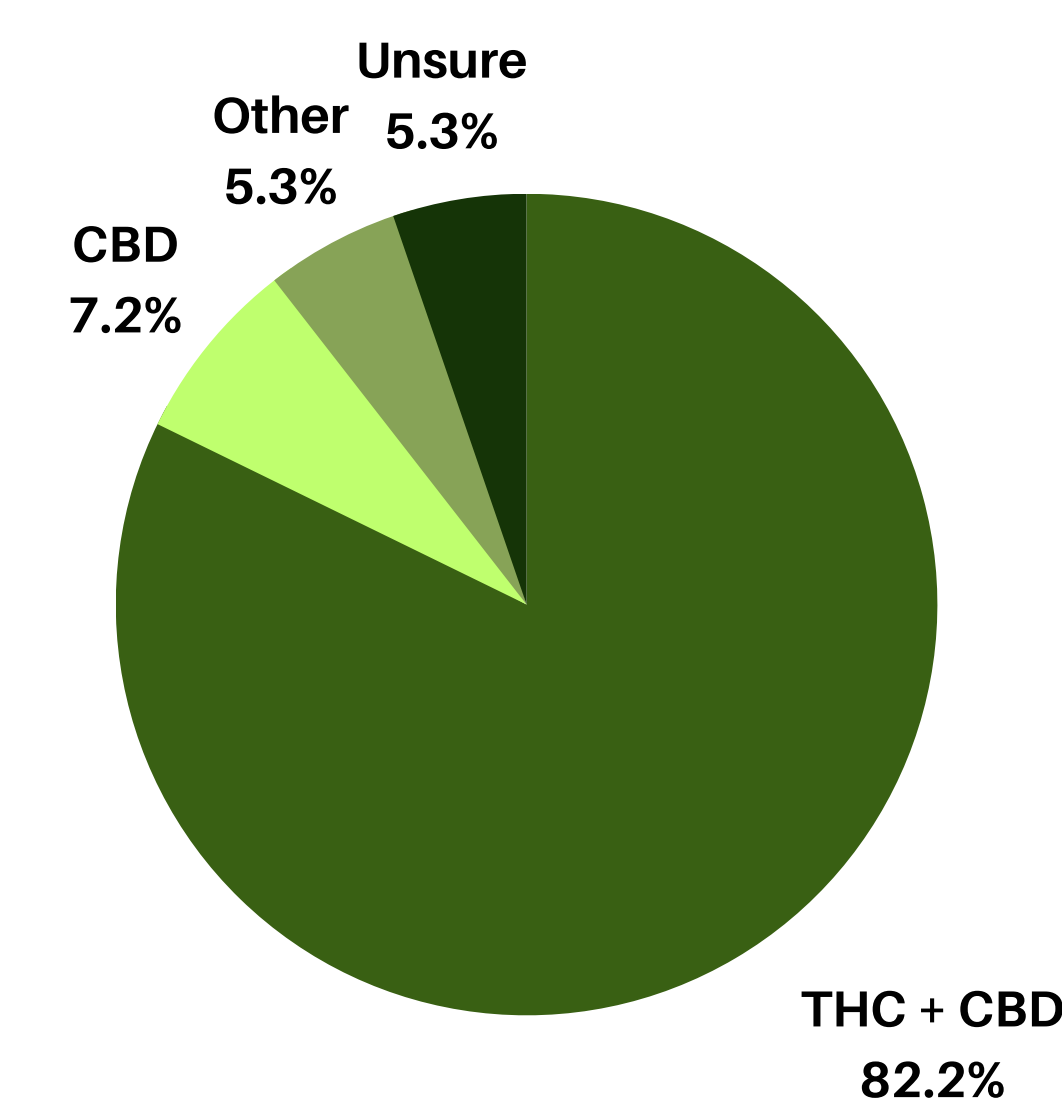
Methods:

315 participants responded to a 45-item survey consisting of questions regarding Demographic information, Pain intensity, Pain Medication use, Cannabis/Cannabinoid use, perceived effects of Cannabis/Cannabinoids on Neuropathic pain, and pain medication use

Current use of Cannabis/Cannabinoids

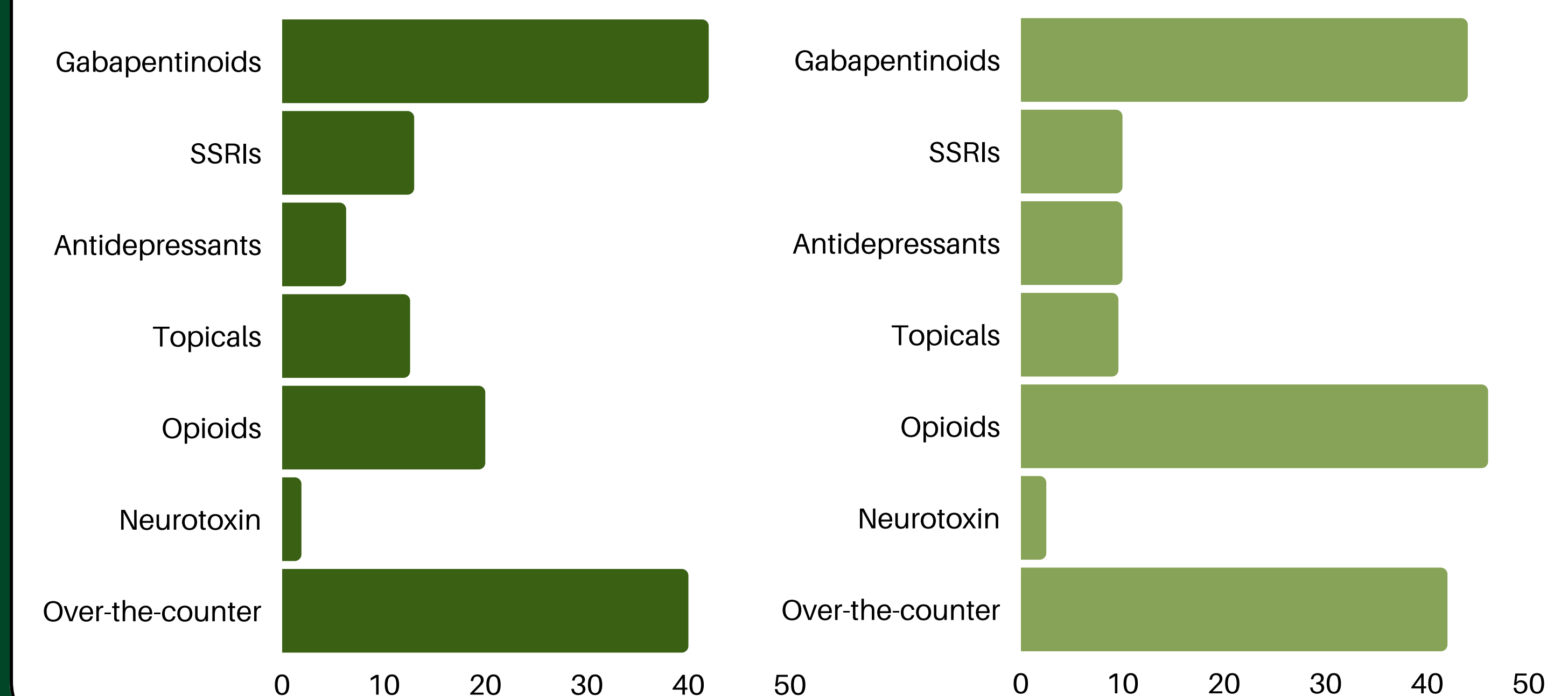


Cannabinoids used



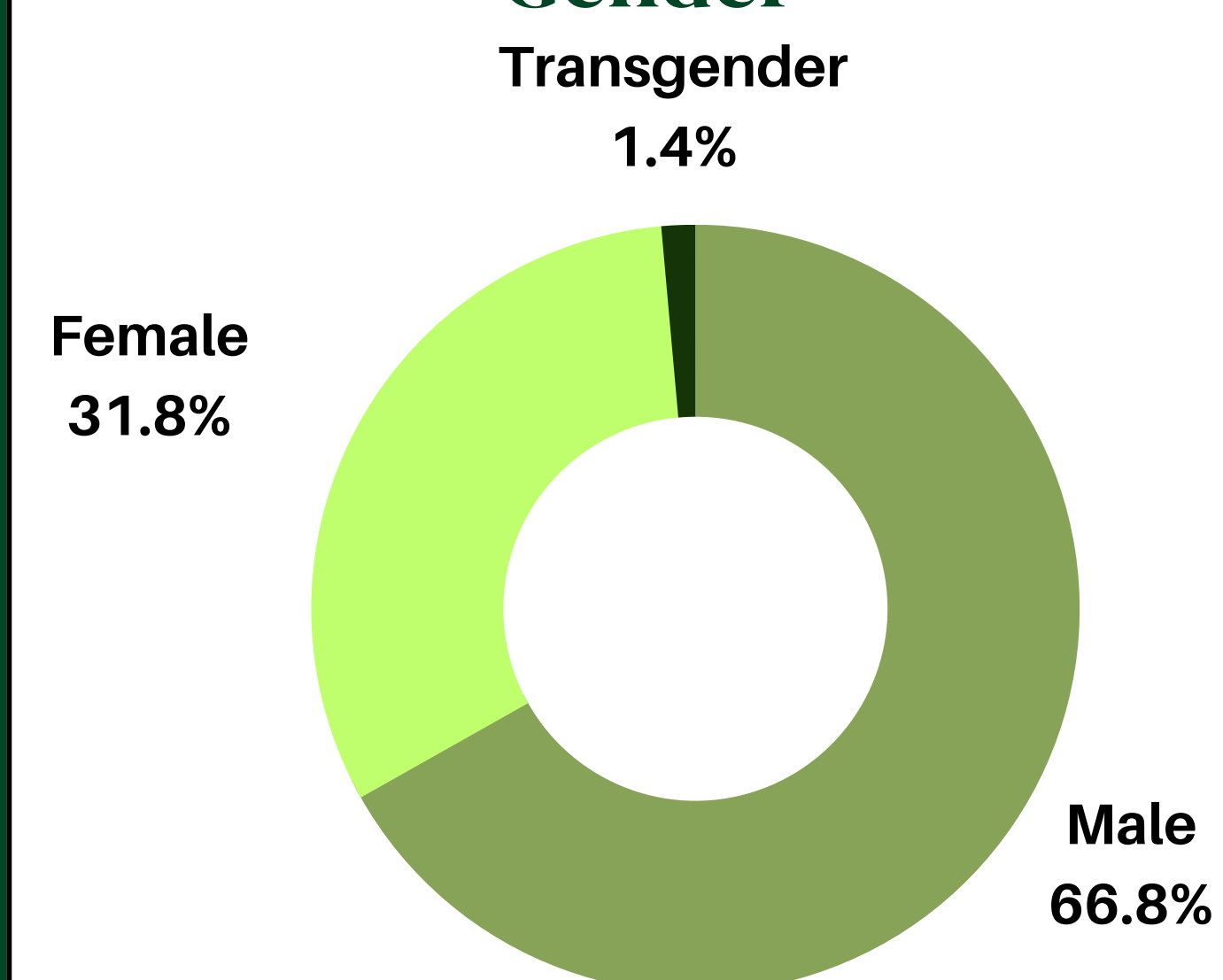
- **Gabapentinoids** (42%), **over-the-counter pain medications** (40%), and **opioids** (20%) were reported as the most used medications.
- 84% of participants have substituted cannabis for pain medication
- the most substituted medications were **opioids** (46%), **gabapentinoids** (44%), and **over-the-counter pain medications** (42%).
- Other positive effects experienced from cannabis and cannabinoids were reported as decreases in **stress, anxiety, depression, spasticity, insomnia, and nausea**, as well as increases in **appetite, focus and concentration, and relaxation**.

Current medications used, % Pain medications substituted, %

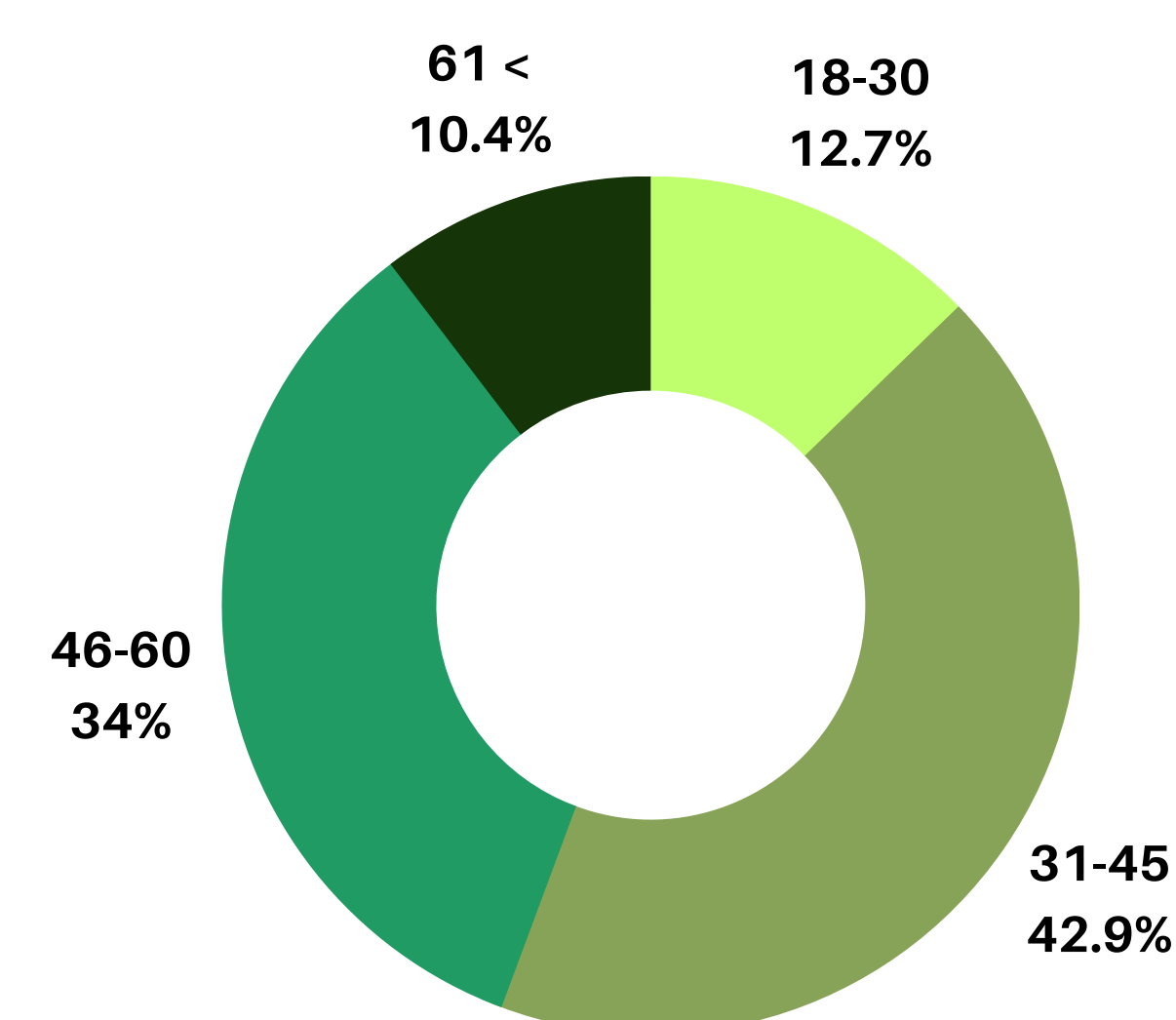


Results:

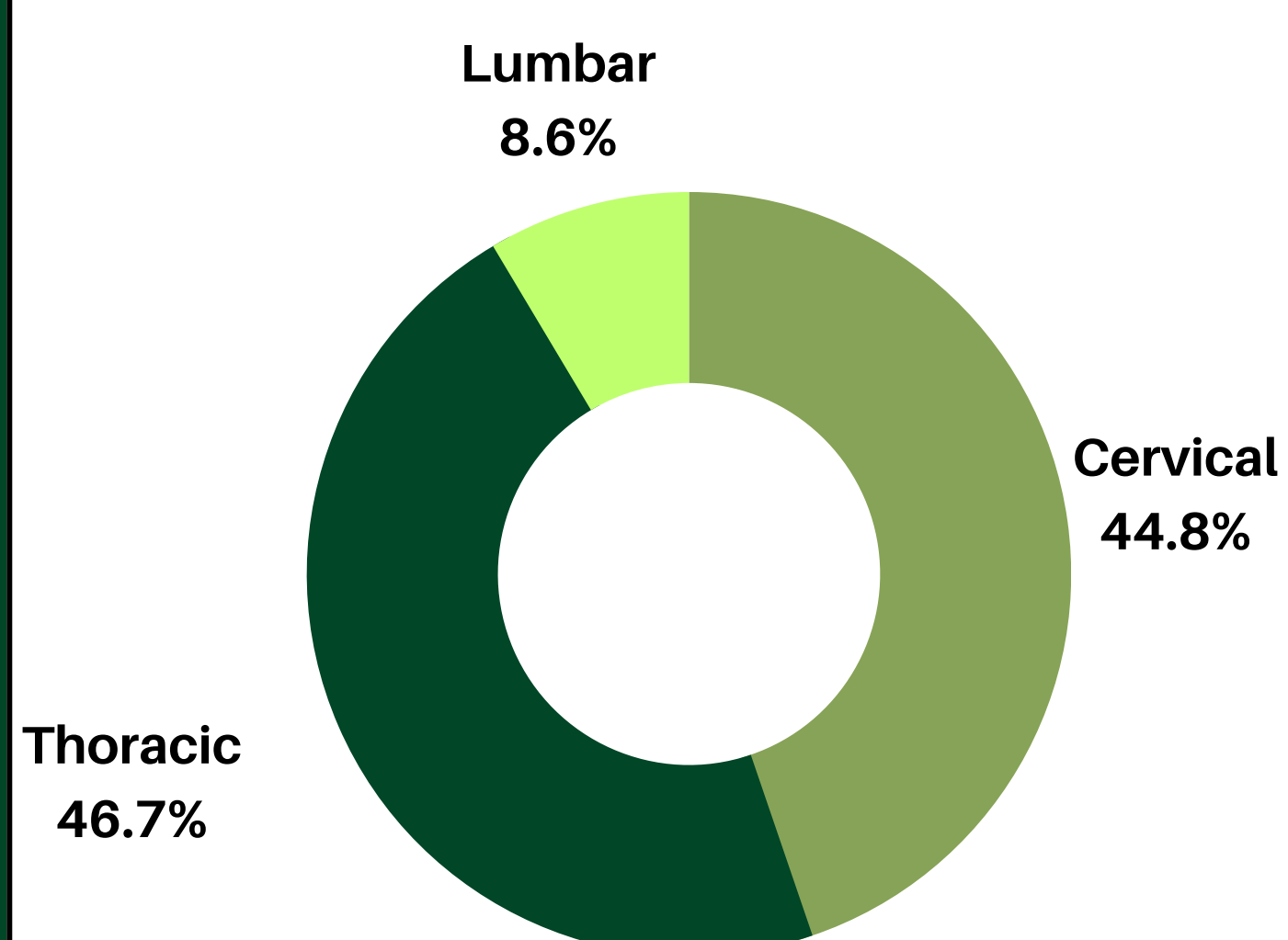
Gender



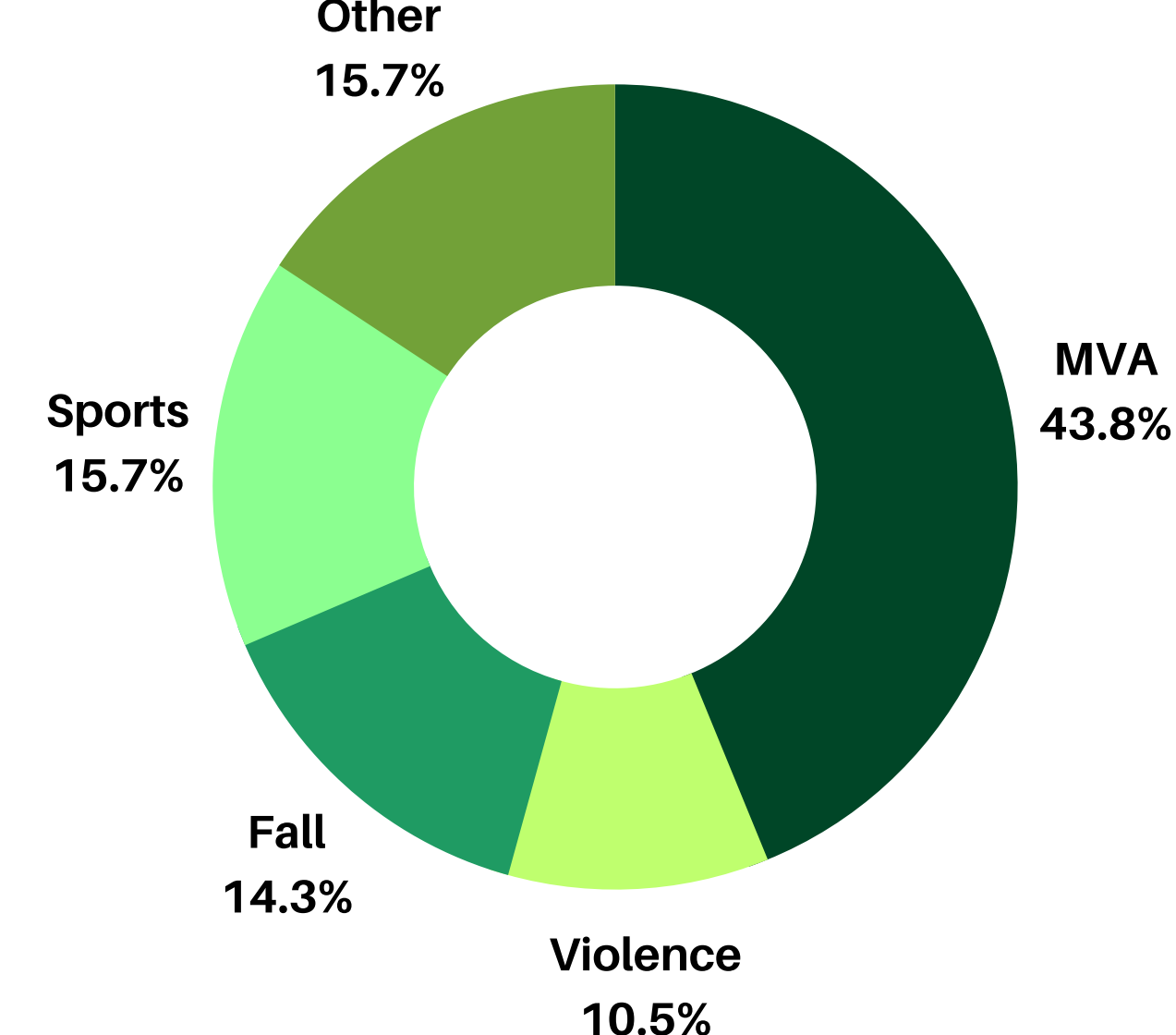
Age



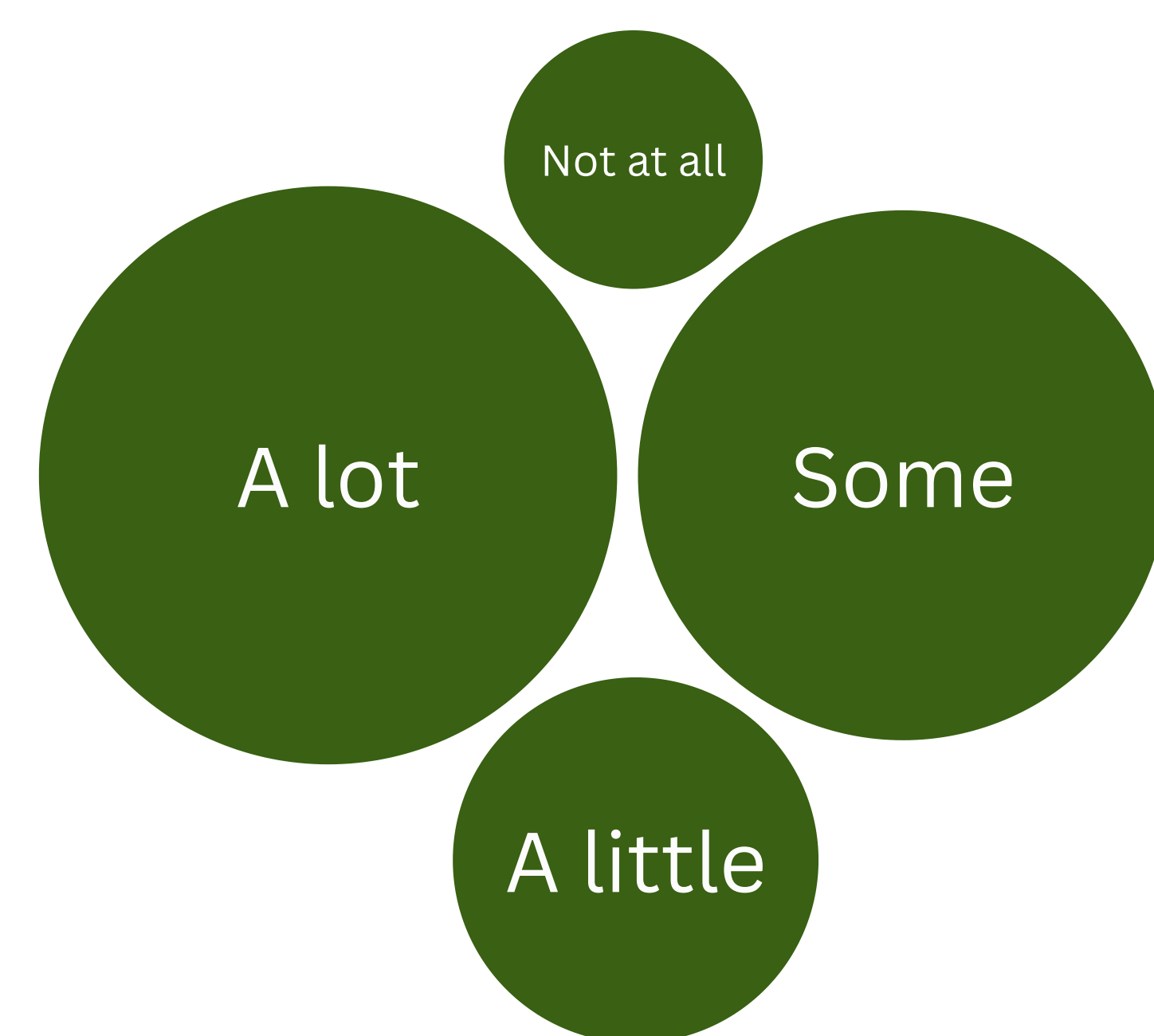
Level of Injury



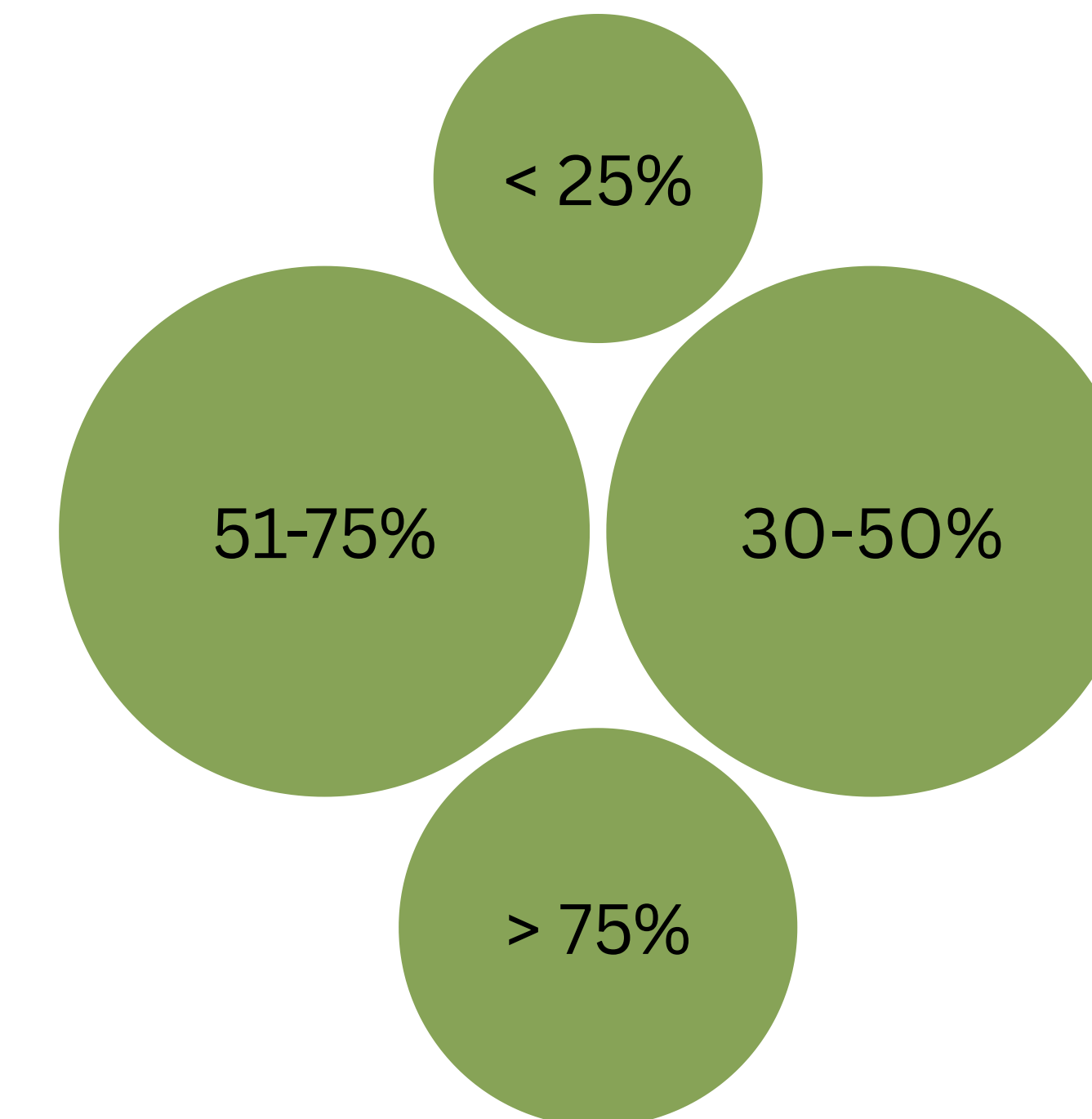
Cause of Injury



How much Cannabis/Cannabinoids help you to deal with your pain?



How much Cannabis/Cannabinoids decrease your neuropathic pain intensity?



The size of the circle is proportionate to the number of responses

- 92% reported cannabis helping them to deal with their pain
- 49% of the participants reported cannabis reducing their pain intensity by more than 50%

Conclusion:

These results suggest that cannabis and cannabinoids are perceived as effective in reducing neuropathic pain, and are being used as a substitution for pain medications in people with SCI.

Acknowledgements:

This research was supported by the Henry G. Steinbrenner Scholars Program and the Miami Project to Cure Paralysis at the University of Miami.