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Occupational Impacts of Seizures

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Occupational Impact of Seizures

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BACKGROUND

Seizures are caused by sudden and uncontrollable abnormal electrical disturbances in the brain. The location of the seizure determines the type, whether it be general, focal, or unknown. Depending on the onset and location of the seizure, the effects can be either motor or nonmotor.

Individuals with drug-resistant epilepsy are at a heightened risk for various negative outcomes, including “premature death, injuries, psychosocial dysfunction, and a decreased quality of life”. This condition also impacts the “emotional well-being, daily function, and productivity of the patients and their caregivers” (Jafarpour et al., 2019, p. 9; Löscher et al., 2020, p. 607).

Research indicates that individuals with drug-resistant epilepsy are more likely to have mental health diagnoses such as depression, anxiety, social anxiety, and low self-esteem. Additionally, they may experience poor sleep quality and face multiple external barriers in education, such as bullying, isolation, negative school staff interactions, and decreased implementation of seizure management plans. The condition also significantly affects the family unit and caregivers.

PURPOSE

The purpose is to gain an understanding of the occupational impact that seizures have on the pediatric population, specifically adolescents through a research study.

CASE DESCRIPTION / METHODS

Research Question: What are the occupational impacts of seizure disorders on an adolescent?

Semi-Structured Interviews: n= 2

Caregivers were asked about their child's occupational participation in relation to their seizure and the impact on their family unit

Adolescent Survey: n = 2

Adolescents were asked via Likert scales, how their seizures influence different occupational domains

Adult Survey: n = 16

Adults were asked about via Likert scales and open response, how their seizures influence different occupational domains

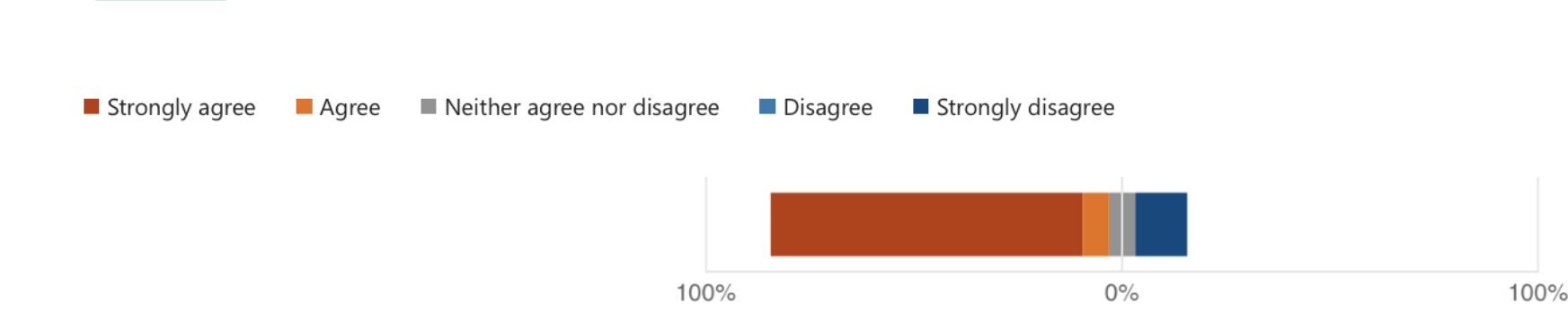
RESULTS

Quantitative Results: Occupations Impacted

- Rest / Sleep
- Social Participation
- Extracurricular (play or leisure)
- Work
- Education
- Health Management

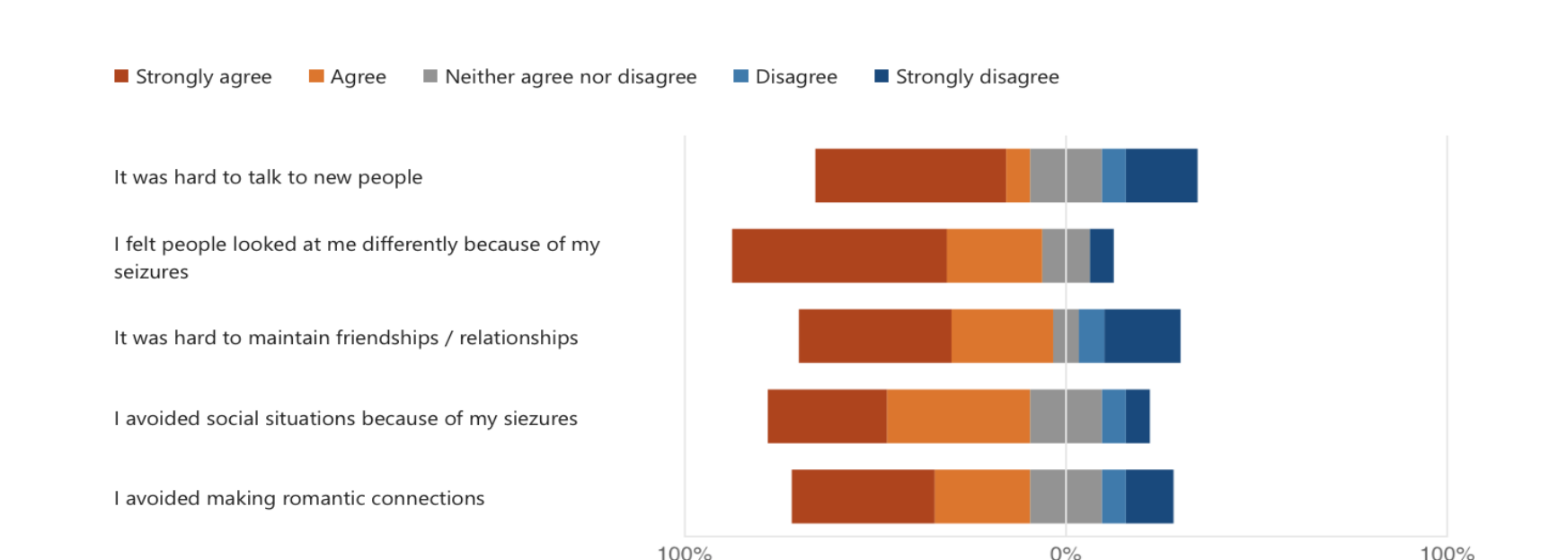
14. My seizures impacted my sleep.

[More Details](#)



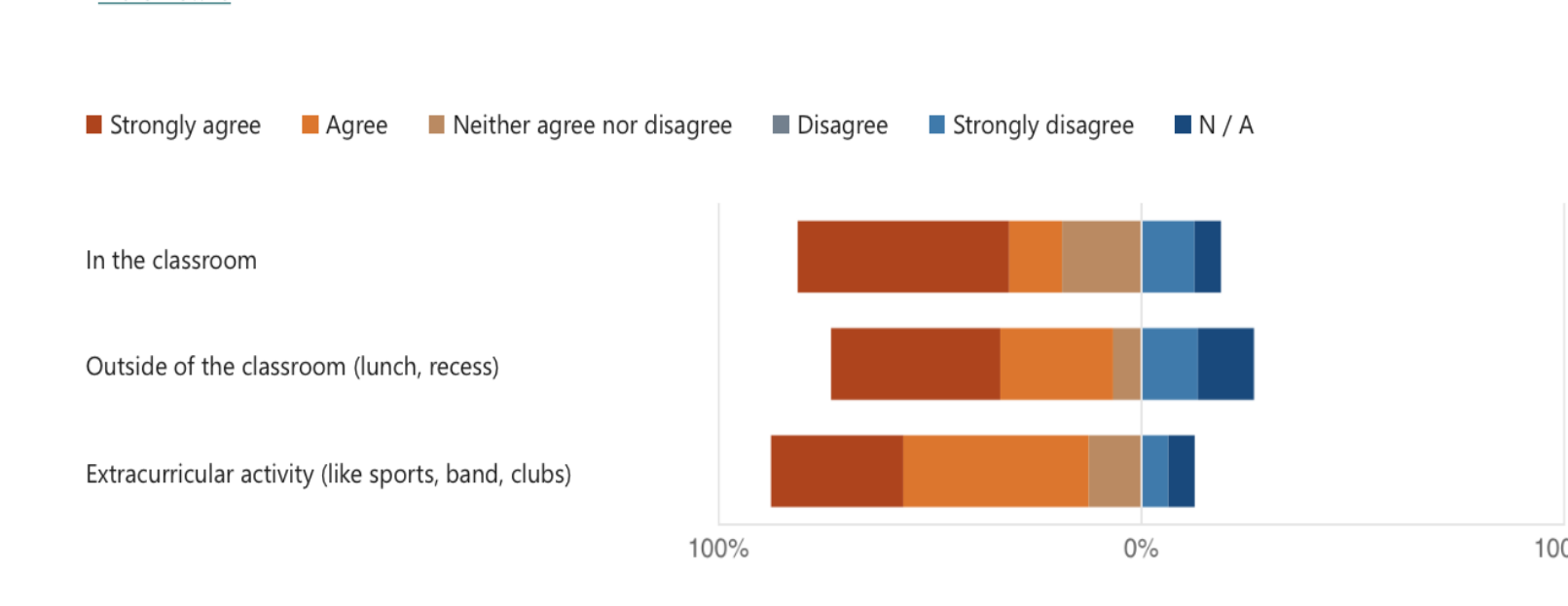
18. My seizures impacted my social participation?

[More Details](#)



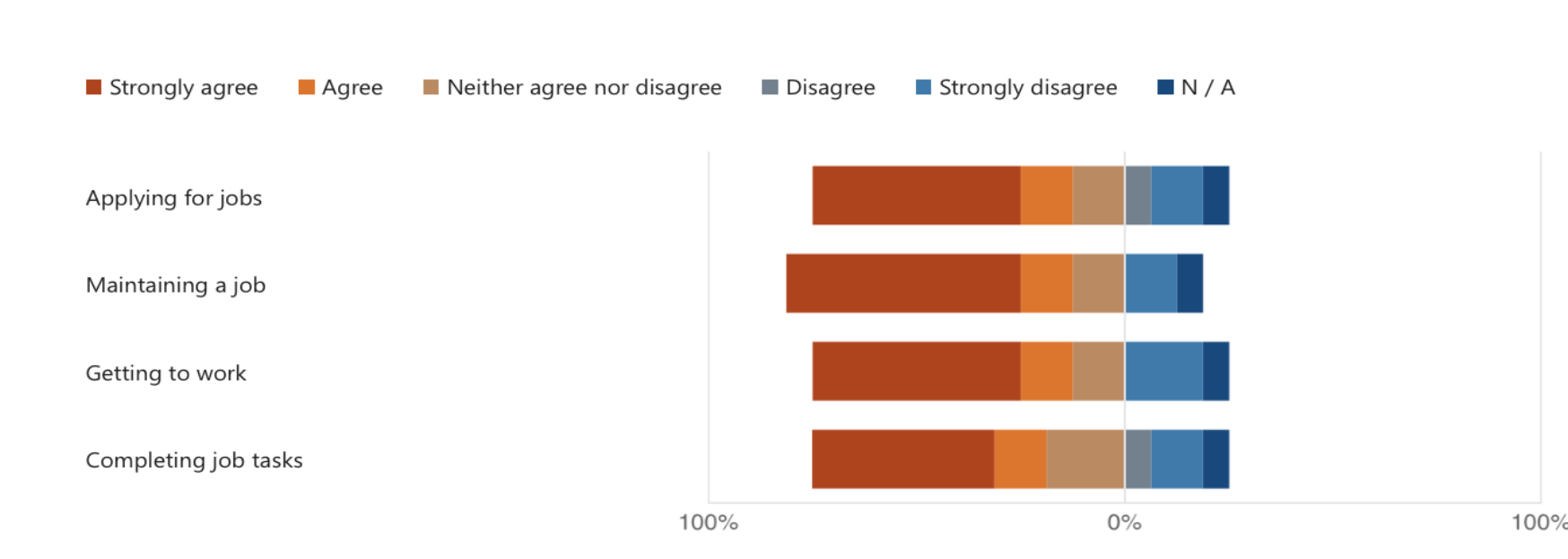
15. My seizures impacted my school experience.

[More Details](#)



16. My seizures impacted my ability to work.

[More Details](#)



Qualitative Results - Themes

Theme	Subthemes
Healthcare System Working Against Them	<ul style="list-style-type: none"> • Financial Burden • Access to Medications • Reduced Support Systems (i.e. foundations) • Time consumption: hospital stays and treatment- leads to disruptions within caregivers' occupations (work, leisure, social)
Avoidance of Occupations	<p>Occupations were avoided due to caregivers' perception of their child's seizures making these activities more difficult:</p> <ul style="list-style-type: none"> - Travel - Social Participation - Sleep
Hypervigilance Due to Potential Harm	<p>Occupations that should be independent, but parents watched over to ensure no harm comes :</p> <ul style="list-style-type: none"> - Leisure / Play - Sleep / Rest - Privacy
Disconnect in Perception: Caregiver to Adolescent	<p>Caregivers reported higher levels of impact compared to their child with:</p> <ul style="list-style-type: none"> - Social Participation (social isolation) - Leisure / Play - Potential Harm
Impacts on Executive Function	<ul style="list-style-type: none"> - Emotional Regulation - Planning - Mental Health - Initiating Tasks

DISCUSSION

Occupations that were shown to be most disrupted were social participation, rest/sleep, education, work, and health management. While there were other disruptions in different domains, these were the most prominent across the surveys and interviews.

There were environmental factors, which contributed to occupational participation. These included: supports and relationships (family unit, friends, and community members), attitudes, services, systems, and policies. There are also client factors, such as mental functions, that showed to have impacted occupational participation.

CONCLUSIONS

Occupational therapy can help help address areas that are disrupted for those with seizures. This include within specific occupations or with client factors, like cognition.

Occupational therapy can address these through intervention including:

- Occupations and Activities
- Interventions to Support Occupations
- Education and Training
- Advocacy

Institutional Review Board (IRB)

This study involves human subjects; it has been reviewed and approved by the IRB.

REFERENCES



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