

Evidence Brief: What is the **impact of a cognitive communication disorder on a person's life** beyond participation in work or education activities?

Key findings from research:

- Cognitive-communication disorders occur frequently after TBI, with over 70% of people with ABI experiencing communication disability after their injury (MacDonald, 2017), however the communication service needs of people with brain injury are often overlooked (Macdonald, 2021).
- Cognitive-communication disorders (CCD) can significantly affect various aspects of a person's life, regardless of their current engagement in study or work (Togher et al., 2023). These disorders often impair essential cognitive functions such as memory, attention, executive functioning, and problem-solving, which are crucial for effective communication and completing daily living activities (Rodriguez et al., 2022; Tompkins, 2012).
- Research has shown that individuals with cognitive-communication disorders may struggle with social interactions and self-awareness (Bond and Godfrey, 1997), understanding and producing language, and managing day-to-day tasks, leading to increased social isolation, emotional distress, fatigue, and reduced quality of life (Borthwick, 2012; Kelly et al., 2023; Rodriguez et al., 2022).
- These difficulties can hinder the individual's ability to form and maintain relationships, participate in community activities, and manage personal responsibilities, ultimately affecting overall well-being, self-identity and independence (Elbourn et al., 2019; Hewetson et al., 2018; Kelly et al., 2023).

Risks of not providing intervention

If CCD is left unaddressed, the individual faces numerous risks that can exacerbate tension in relationships, community re-integration and negatively impact their future potential. A reported case in the literature (Howell et al., 2024) of an individual with TBI in which intervention was not provided for CCD demonstrates these risks. This case had ongoing behavioural outbursts due to misinterpreting events, which threatened his accommodation situation. Once speech pathology intervention was introduced, the multidisciplinary team supporting this case perceived the value of this specialised intervention in improving family relationships and community integration (Howell et al., 2024)

CCD is often overlooked, however, stakeholders have found that SLP intervention is effective for treating CCDs after brain injuries. Appropriate intervention and rehabilitation for individuals with CCD will improve everyday functioning, helping to restore and maintain effective communication skills and full participation of life (Hewetson et al., 2017; Tompkins, 2012). Provision of these services can avoid the negative outcomes of social isolation, decreased self-esteem, and increased mental health issues such as anxiety and depression (Borthwick, 2012). By extension, addressing CCD can reduce the burden on caregivers. Additionally, intervention can reduce barriers to an individual's ability to re-enter education or the workforce in the future, promoting opportunities and potential for personal and professional growth. Therefore, timely and adequate collaborative support is crucial to mitigate these risks and promote a better quality of life.

References

- Bond, F., & Godfrey, H. P. (1997). Conversation with traumatically brain-injured individuals: A controlled study of behavioral changes and their impact. *Brain Injury, 11*(5), 319–329. <https://doi.org/10.1080/026990597123476>
- Borthwick, S. (2012). Communication impairment in patients following stroke. *Nursing Standard, 26*(19), 35–41. <https://doi.org/10.7748/ns2012.01.26.19.35.c8879>
- Elbourn, E., Kenny, B., Power, E., & Togher, L. (2019). Psychosocial outcomes of severe traumatic brain injury in relation to discourse recovery: A longitudinal study up to 1 year post-injury. *American Journal of Speech-Language Pathology, 28*(4), 1463–1478. https://doi.org/10.1044/2019_AJSLP-18-0204
- Hewetson, R., Cornwell, P., & Shum, D. (2017). Cognitive-communication disorder following right hemisphere stroke: Exploring rehabilitation access and outcomes. *Topics in Stroke Rehabilitation, 24*(5), 330–336. <https://doi.org/10.1080/10749357.2017.1289622>
- Hewetson, R., Cornwell, P., & Shum, D. (2018). Social participation following right hemisphere stroke: Influence of a cognitive-communication disorder. *Aphasiology, 32*(2), 164–182. <https://doi.org/10.1080/02687038.2017.1315045>
- Howell, S., Hoskin, J., Eaton, D., Holloway, M., & Varley, R. (2024). Stakeholder views on cognitive communication assessment and intervention for a person living independently in the community with severe traumatic brain injury. *International Journal of Language & Communication Disorders, 59*(2), 483–495. <https://doi.org/10.1111/1460-6984.12839>
- Kelly, C., Cornwell, P., Hewetson, R., & Copley, A. (2023). The pervasive and unyielding impacts of cognitive-communication changes following traumatic brain injury. *International Journal of Language & Communication Disorders, 58*(6), 2131–2143. <https://doi.org/10.1111/1460-6984.12923>
- MacDonald, S. (2017). Introducing the model of cognitive-communication competence: A model to guide evidence-based communication interventions after brain injury. *Brain Injury, 31*(13-14), 1760–1780. <https://doi.org/10.1080/02699052.2017.1379613>
- MacDonald, S. (2021). The cognitive-communication checklist for acquired brain injury: A means of identifying, recording, and tracking communication impairments. *American Journal of Speech-Language Pathology, 30*(3), 1074–1089. https://doi.org/10.1044/2021_AJSLP-20-00155
- Rodriguez, E., Belan, A. F. R., & Radanovic, M. (2022). Cognitive-communication disorder following right hemisphere damage: Narrative production. *Cerebral Circulation - Cognition and Behavior, 3*, 100147. <https://doi.org/10.1016/j.cccb.2022.100147>

Togher, L., Douglas, J., Turkstra, L. S., Welch-West, P., Janzen, S., Harnett, A., Kennedy, M., Kua, A., Patsakos, E., Ponsford, J., Teasell, R., Bayley, M. T., & Wiseman-Hakes, C. (2023). INCOG 2.0 guidelines for cognitive rehabilitation following traumatic brain injury, part IV: Cognitive-communication and social cognition disorders. *Journal of Head Trauma Rehabilitation, 38*(1), 65–82.

<https://doi.org/10.1097/htr.0000000000000835>

Tompkins, C. A. (2012). Rehabilitation for cognitive-communication disorders in right hemisphere brain damage. *Archives of Physical Medicine and Rehabilitation, 93*(1), S61–S69. <https://doi.org/10.1016/j.apmr.2011.10.015>