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Invited Commentary

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Reply to 'Tailoring Cognitive Interventions to Individuals' Cognitive Profiles: Commentary on "Prevalence of Cognitive Impairments and Strengths in the Early Course of Psychosis and Depression" by Stainton *et al.*'

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It is widely recognised that cognitive impairments are a core feature of psychosis-spectrum (Catalan et al., 2021; Fioravanti, Bianchi, & Cinti, 2012) and major depressive (Goodall et al., 2018) disorders, with significant implications for both everyday (Meier et al., 2014) and long-term (Cowman et al., 2021; Santesteban-Echarri et al., 2017) functional outcomes. In clinical practice, however, the primary focus of early intervention services is often the stabilisation of mental health symptoms. Though current clinical guidelines for the treatment of both psychosis (e.g. Early Psychosis Guidelines Working Group, 2016) and depression (e.g. Malhi et al., 2021) recommend that cognition is assessed, and interventions offered when impairments are impacting upon recovery, cognition is often not addressed in treatment. In Douglas et al.'s commentary on our original paper (Stainton et al., 2023, this issue), they discuss the clinical implications of our findings for cognitive intervention. The authors advocate for the importance of early intervention for cognition in psychosis and depression. Such early intervention may help to prevent further cognitive or functional decline which may occur in the years following the first episode of psychosis, or with repeated depressive episodes. Our recent work also shows that such early intervention for cognition is also aligned with the preferences of young people. Cognition is a high treatment priority for young people with mental illness, alongside the treatment of mental health symptoms (Bryce et al., 2023).

In our 'Your Mind, Your Choice' survey (Bryce et al., 2023), we asked young people who had recently received mental health treatment to rate the importance of 20 different recovery domains. Respondents were 243 young people (mean age = 20.07, s.D. = 3.25, range = 15-25, 74% female) with self-reported mental illnesses including depression, anxiety disorders, personality disorders and psychosis. Cognition was rated as the sixth most important recovery domain (following mental health, emotions, stress management, family problems and sleep). This finding is pertinent given that, as mentioned, mental health and stress symptoms are already addressed in early intervention services. Therefore, greater focus on cognition as a priority to enable recovery is required as part of standard care. Indeed, 70% of survey respondents reported experiencing cognitive difficulties, but only 31% indicated receiving treatment for the same, highlighting that less than half of those who felt that they were struggling with their cognition had received a targeted, evidence-based treatment to assist them with these important skills (Bryce et al., 2023). Douglas et al. highlight the importance of incorporating a strengths-based approach into cognitive intervention. This also aligns with the findings of the Your Mind, Your Choice survey, in which cognitive strengths were rated in the top five of 14 evidence-based cognitive interventions (alongside compensatory training, sleep interventions, psychoeducation and exercise). We have found through a theoretical review (Allott et al., 2020) and a series of qualitative studies with young people, experts in the field and clinicians (Bryce et al., 2022a, 2022b; Steele et al., 2021), that explicitly focusing on strengths alongside difficulties is likely to support treatment engagement, motivation and enhanced functioning. This premise remains theoretical and requires further empirical evidence.

Our findings also underscore that cognitive impairments are prevalent in the early course of mental illness, but not ubiquitous (Bryce et al., 2023; Stainton et al., 2023). One method to enhance early identification and intervention for cognitive functioning that is advocated for by Douglas et al. is the use of routine *cognitive screening*. At present, interventions for cognitive impairments often result from a full neuropsychological assessment by a qualified clinical neuropsychologist. Such assessments account for the individual's current presentation, full developmental history and cognitive test performance, providing a detailed overview of the individual's cognitive profile, as well as any potential neurodevelopmental disorders (Lezak, 2004). Though such assessments represent the current gold standard, they are often subject to lengthy waitlists and, depending on the health service, potentially expensive private fees.



These factors could make addressing cognition less accessible to many young people requiring treatment. Cognitive screening, the use of a brief tool to triage cognitive needs, offers a promising adjunct to the current system. While cognitive screening is used routinely in other contexts, such as detecting mild cognitive impairment and dementia (Roebuck-Spencer et al., 2017), no valid screening tools exist for younger individuals in the early course of mental illness (Bryce, Bowden, Wood, & Allott, 2021). This is despite cognitive screening being recognised by experts as critical for psychiatric care (McIntyre et al., 2019). We are working to close this gap in clinical practice by conducting a hybrid effectiveness-implementation study to validate a brief cognitive screening tool for young people with first-episode psychosis ('CogScreen'; ACTRN12623000236695). At the end of the study, we hope to deliver a validated cognitive screening tool for this population, as well as a suite of resources and training to ensure that early intervention services can incorporate screening into routine clinical care. We expect these findings will have broad implications for youth mental health in general.

In summary, we agree with Douglas et al. who argued for a focus on early intervention for cognition, which includes both a deficit- and strengths-based approach. In our recent work, we have seen that cognitive impairments are prevalent in the early course of psychosis and depression, but that there is also a significant subsample of individuals who demonstrate unimpaired, or even above average performance. The profile of impairment, unimpaired performance and strengths may also vary widely according to the individual. Young people want to have their cognitive needs addressed during treatment, alongside their mental health symptoms, and they are open to a range of different intervention types. We also saw that young people were open to a wide range of potential cognitive interventions to both remediate deficits and build upon strengths. Cognitive screening offers a promising avenue to promote such interventions, whereby those people with the greatest need are captured at service entry. Subjective cognitive complaints must also be considered, and these can be quickly assessed via a self-report questionnaire, of which there are many options. Clinicians can then use this information to tailor treatments and inform further referrals. Ultimately, we hope that this leads to timely and individualised focus on the cognitive needs of young people in the early course of mental illness.

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References

- Allott, K., Steele, P., Boyer, F., de Winter, A., Bryce, S., Alvarez-Jimenez, M., & Phillips, L. (2020). Cognitive strengths-based assessment and intervention in first-episode psychosis: A complementary approach to addressing functional recovery? *Clinical Psychology Review*, 79, 101871. https://doi.org/10. 1016/j.cpr.2020.101871
- Bryce, S., Bowden, S. C., Wood, S. J., & Allott, K. (2021). Brief, performancebased cognitive screening in youth aged 12–25: A systematic review. *Journal* of the International Neuropsychological Society, 27(8), 835–854.
- Bryce, S., Boyer, F., Phillips, L. J., Parrish, E. M., Alvarez-Jimenez, M., & Allott, K. (2022a). Cognitive strengths in first-episode psychosis: Perspectives of

cognition experts. Journal of Psychosocial Rehabilitation and Mental Health, 9(2), 177–188.

- Bryce, S., Cheng, N., Dalton, A., Ojinnaka, A., Stainton, A., Zbukvic, I., ... Allott, K. (2023). Cognitive health treatment priorities and preferences among young people with mental illness: The your mind, your choice survey. *Early Intervention in Psychiatry*, 1–8. https://doi.org/10.1111/eip.13436
- Bryce, S., de Winter, A., Phillips, L., Cheng, N., Alvarez-Jimenez, M., & Allott, K. (2022b). Cognitive strengths in first-episode psychosis: Perspectives from young people with lived experience. *Psychosis*, 1–12. https://doi.org/10. 1080/17522439.2022.2044895
- Catalan, A., De Pablo, G. S., Aymerich, C., Damiani, S., Sordi, V., Radua, J., ... Stone, W. S. (2021). Neurocognitive functioning in individuals at clinical high risk for psychosis: A systematic review and meta-analysis. *JAMA Psychiatry*, 78(8), 859–867. https://doi.org/10.1001/jamapsychiatry.2021. 1290
- Cowman, M., Holleran, L., Lonergan, E., O'Connor, K., Birchwood, M., & Donohoe, G. (2021). Cognitive predictors of social and occupational functioning in early psychosis: A systematic review and meta-analysis of cross-sectional and longitudinal data. *Schizophrenia Bulletin*, 47(5), 1243–1253.
- Early Psychosis Guidelines Working Group. (2016). Australian clinical guidelines for early psychosis. Orygen The National Centre of Excellence in Youth Mental Health: Melbourne, Australia.
- Fioravanti, M., Bianchi, V., & Cinti, M. E. (2012). Cognitive deficits in schizophrenia: An updated meta analysis of the scientific evidence. BMC Psychiatry, 12(1), 64.
- Goodall, J., Fisher, C., Hetrick, S., Phillips, L. J., Parrish, E. M., & Allott, K. (2018). Neurocognitive functioning in depressed young people: A systematic review and meta-analysis. *Neuropsychology Review*, 28, 216–231. https://doi.org/10.1007/s11065-018-9373-9
- Lezak, M. D. (2004). Neuropsychological assessment. New York, USA: Oxford University Press.
- Malhi, G. S., Bell, E., Bassett, D., Boyce, P., Bryant, R., Hazell, P., ... Porter, R. (2021). The 2020 Royal Australian and New Zealand College of Psychiatrists clinical practice guidelines for mood disorders. *Australian & New Zealand Journal of Psychiatry*, 55(1), 7–117. https://doi.org/10.1177/0004867420979353
- McIntyre, R. S., Anderson, N., Baune, B. T., Brietzke, E., Burdick, K., Fossati, P., ... Harvey, P. (2019). Expert consensus on screening and assessment of cognition in psychiatry. CNS Spectrums, 24(1), 154–162.
- Meier, M. H., Caspi, A., Reichenberg, A., Keefe, R. S. E., Fisher, H. L., Harrington, H., ... Moffitt, T. E. (2014). Neuropsychological decline in schizophrenia from the premorbid to the postonset period: Evidence from a population-representative longitudinal study. *American Journal of Psychiatry*, 171, 11.
- Roebuck-Spencer, T. M., Glen, T., Puente, A. E., Denney, R. L., Ruff, R. M., Hostetter, G., & Bianchini, K. J. (2017). Cognitive screening tests versus comprehensive neuropsychological test batteries: A national academy of neuropsychology education paper. *Archives of Clinical Neuropsychology*, 32(4), 491–498.
- Santesteban-Echarri, O., Paino, M., Rice, S., González-Blanch, C., McGorry, P., Gleeson, J., & Alvarez-Jimenez, M. (2017). Predictors of functional recovery in first-episode psychosis: A systematic review and meta-analysis of longitudinal studies. *Clinical Psychology Review*, 58, 59–75.
- Stainton, A., Chisholm, K., Griffiths, S. L., Kambeitz-Ilankovic, L., Wenzel, J., Bonivento, C., ... & PRONIA Consortium (2023). Prevalence of cognitive impairments and strengths in the early course of psychosis and depression. *Psychological Medicine*, 1–13. https://doi.org/10.1017/ S0033291723001770
- Steele, P., Cheng, N., Phillips, L. J., Bryce, S., Alvarez-Jimenez, M., & Allott, K. (2021). Cognitive strengths in first episode psychosis: A thematic analysis of clinicians' perspectives. *BMC Psychiatry*, 21(1), 1–9.