<ArtType>**OPEN PEER COMMENTARY**

<AT>**Where is Community Involvement in Open Science? A Commentary on "(Why) Are Open Research Practices the Future for the Study of Language Learning?"**

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As an interdisciplinary research team spanning linguistics, engineering, speech–language pathology, and education focusing on communication disorders, we found Marsden and Morgan-Short's state-of-the-art article extremely relevant. We endorse the importance of open science to language research and appreciate its potential for advancing equity. Yet we argue that the current debate on open science is incomplete—lacking sufficient community and stakeholder involvement, particularly for individuals who have language disorders and who are racially and ethnically minoritized.

Marsden and Morgan-Short have claimed that open science methods will support inclusivity and diversity of researchers, participants, and research questions. We agree but argue that the open science debate as it is neglects a population deeply impacted by open science practices: individuals with language disorders, and specifically, communication disorders. For example, nearly one third of autistic individuals over the age of five years are minimally speaking, with no spoken language or a small number of single words and fixed phrases (Tager-Flusberg & Kasari, 2013). Yet research with these individuals has declined over the past few decades (Stedman et al., 2019), exacerbating the knowledge gap about language acquisition in this population and in the full population. Open science in language research must center inclusivity to share resources and expand access to marginalized individuals with communication disorders (e.g., autistic individuals who are minimally verbal or have language impairment), with

the broader aim of advancing the advocacy base for their needs and ensuring that our understanding of language development is broadly representative.

Marsden and Morgan-Short have also suggested that data sharing may not be possible or ethical for research with vulnerable participants such as those with language disorders and/or comorbid intellectual disability. However, we argue that, while the inclusion of these populations in open science requires careful consideration, it should not be interpreted as a reason for exclusion. Rather, mindful study design—purposefully designed with the possibility of data sharing and open research—and dynamic informed consent can help overcome these challenges. For example, during consent, researchers should be transparent in explaining the implications of open science, including the specifics of the current research project, and also provide participants with the choice to opt-in to the sharing of their data as well as opportunities to ask questions, demonstrate understanding of their rights and terms pertaining to open science, and access materials in formats responsive to their needs (e.g., visual supports). These suggestions align with best practices from self-advocates with intellectual disability and community stakeholders (Bigby et al., 2014; Nicholson et al., 2013). With such a process in place, in our experience, many families are enthusiastic about being involved in science and may be willing to share their data because they have witnessed the value of alerting other researchers to their unique experiences and needs. In addition, encrypted databases that require training in the responsible conduct of research for access to them provide researchers with a method of ethically sharing identifiable data, such as audio and video, while maintaining privacy.

More broadly, the study of language disorders and language in different neurotypes is fundamental to capturing the richness of language learning and use. These studies inform what types of language supports may be beneficial to these individuals and can motivate new

techniques to support language learning such as augmentative technology and communication devices. Open research increases access to underserved populations and facilitates cross-disciplinary innovation. As such, it is critical that these populations be included in the future of open language research.

Marsden and Morgan-Short argued that open science is the pathway to equity. We argue that open science practices do not lead to equity for racially and ethnically minoritized communities without proactive planning, citing examples from linguistics and autism research. Rickford (1997) noted language research has a long, sinister history of taking from African American English speaking communities to advance science and theory. These unequal partnerships have extended to other minoritized communities (e.g., Indigenous). Per Rickford (1997), predominantly white researchers failed to prioritize training individuals from the communities that they studied to become language researchers themselves; this ethical failure hindered science and policy development for meeting community needs in the workplace, school, and court system. Nearly 30 years later, Charity Hudley et al. (2020) discussed many of these same issues, underlining how inadequate community involvement in language research has generated linguistic ideologies, research methods, and educational models that do not reflect or serve the needs of racially and ethnically minoritized communities. It is the responsibility of researchers to mitigate these harms, with an emphasis on creating ethical research–community partnerships (Charity Hudley et al., 2020).

In addition to race and ethnicity, language research must also center race and dis/ability in open science. Like race, dis/ability is a social construct and a natural part of the human experience for which language research must account in developing scientific theories and findings. Language in autism research has systematically excluded autistic racially and ethnically

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minoritized persons from the evidence base informing diagnostic criteria, assessments, and practices (Girolamo et al., in press). Further, examination of dimensions along which disparities exist in autism research has been rare (Anderson et al., 2018). Altogether, community involvement in open science must include intersectional identities.

Overall, we concur that open science is beneficial for language research, but we call for critical implementation of open science. Conducting language research is a dynamic act, and researchers must consider whose voices are absent from scientific movements like open science. Is equity via open science possible in a research ecosystem where scientists, and not communities, are at the core? Do open science practices in language research reflect interdisciplinary influences and the voices of participant communities? An absence of discussion of these issues in Marsden and Morgan-Short indicates that these complexities have yet to be integrated into mainstream language research. Researchers must treat community involvement in open science as mandatory. Finally, we end by reiterating our agreement with the value of open science in language research. We appreciate the opportunity to consider these complex issues that the authors have raised with our colleagues.

<div align="right">Final revised version accepted 19 March 2023</div>

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