

KICLS 2025
Track on Communication Disorder Science
Workshops

Beyond Behavior: An awareness Workshop on Integrating applied Neuroscience in Speech and Language Disorders

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BCN . US board certification in Neurofeedback technology the first expert in GCC and Middle East in NFB technology.
Medical Privilege from Qatar MOH

Abstract

Speech-language pathology is increasingly looking to the brain to understand and treat communication disorders. This interactive workshop provides a comprehensive introduction to neurofeedback as a powerful adjunct to traditional therapy. We will begin by demystifying the core principles of neurofeedback, linking specific brainwave patterns (e.g., beta, SMR, theta) to the neural underpinnings of disorders such as stuttering, aphasia, and childhood apraxia of speech , Dyslexia, language Delayed , Autism and ADHD .

Participants will learn to interpret quantitative EEG (qEEG) maps relevant to these conditions and explore evidence-based protocols. A significant portion of the workshop will be dedicated to practical application: how to structure a session, integrate neurofeedback with behavioral techniques, and select appropriate candidates. Through case studies and discussion, attendees will gain a foundational understanding of how to harness brain plasticity to potentially accelerate therapeutic outcomes. This workshop is designed for clinicians and practitioners seeking to expand their toolkit with a brain-based approach.

Key Takeaways:

- Explain the basic rationale for using neurofeedback in speech-language therapy.
- Identify key EEG biomarkers associated with common speech and language disorders.
- Evaluate the potential for integrating neurofeedback into a clinical practice.

Tools of the Speech Language Pathology Trade: Face to Face Tools vs. Teletherapy Tools

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Abstract

The first domain focuses on the definition and context of telepractice, which involves the delivery of speech-language pathology services remotely through telecommunication channels, connecting clinicians to clients or other clinicians for assessment, intervention, and consultation. The COVID-19 pandemic significantly impacted in-person speech therapy, prompting the widespread adoption of teletherapy as an alternative. The second domain addresses the implementation of teletherapy, highlighting the timeline beginning with its initiation during the total lockdown in Jordan, followed by its growth and continuation through partial quarantine with a blended service delivery model. This domain also notes the introduction of occupational therapy and Augmentative and Alternative Communication (AAC) services into teletherapy settings. The third domain covers operational essentials necessary for effective teletherapy, including required equipment such as computers or devices, video conferencing tools, reliable internet, headsets, and support personnel. It emphasizes the importance of preparing clients and caregivers to ensure active participation and discusses the use of multiple online platforms like Zoom, Facebook Messenger, Microsoft Teams, and Google Meet.

The fourth domain considers client-related factors and challenges, with ASHA identifying key problem areas including physical and sensory issues, cognitive and behavioral considerations, communication support, and ongoing research. Challenges encountered include unstable internet connections and difficulties in observing nonverbal cues. The fifth domain focuses on clinical activities and the disorders addressed via teletherapy, encompassing treatment for language delays, articulation and voice disorders, aphasia, traumatic brain injuries, stuttering, hearing loss, dysphagia, and motor speech disorders. It also covers the conduct of assessments, treatments, counseling, follow-up, and training on clinical instrumentation, utilizing techniques and tools such as TalkTools, Neuromuscular Electrical Stimulation, and EMST. The sixth domain highlights the educational aspect, noting the running of graduate-level online courses concurrently with teletherapy sessions, allowing student clinicians to actively participate under supervision and share knowledge. Lastly, the seventh domain reflects on outcomes and feedback, mentioning the number of teletherapy sessions conducted, including the reach to international clients, and positive feedback from student clinicians and caregivers emphasizing the accessibility, convenience, and effectiveness of therapy despite occasional technical difficulties.