

**Poster Session 05: Neuroimaging |
Neurophysiology | Neurostimulation |
Technology | Cross Cultural |
Multiculturalism | Career
Development**

4:15 - 5:25pm
Thursday, 2nd February, 2023
Town & Country Foyer

**1 Older Adults as Informed Consumers:
Guidance in Discussing the Utility of
Dietary Supplements for Cognitive
Function**

Timea Tozser, Tyler Ramsey, Kassie Prevost,
Erin Yancey, Omar Assaly, Julie Lynn Williams
Wright State University School of Professional
Psychology, Dayton, OH, USA

Objective: Nationally and internationally, life expectancies continue to increase, and so are age-related cognitive impairment (Stough et al., 2015). As a result, the rise of consumer dietary supplement products has increased significantly in the last 20 years as older adults are inundated with media related to improving cognitive function. However, research on these nootropics and natural supplements reveals mixed efficacy (Brownie, 2009; Stough et al., 2015). Serendipitously, the COVID-19 pandemic has unveiled the necessity for increased healthy equity and screening internationally across health service disciplines (Jensen et al., 2021; Wells & Dumbrell, 2006). This poster encompasses two primary aims: (1) to highlight common international dietary supplements marketed to an older adult population. Next, (2) develop best evidenced-based practices to approach effective use of nutritional information while maintaining a neuropsychologist's scope of care.

Participants and Methods: A literature review was conducted of peer review articles from 2006 to 2022 from the following databases PubMed and Google Scholar. Recommendations were constructed based on identifying and analyzing the emerging themes across identified articles. Keywords include neuropsychology, nootropics,

natural supplement use, aging, Vitamin E, Vitamin D, Phosphatidylserine, feedback, cognition, older adults, and international. **Results:** Although supplement use and regulations may differ by country, current research suggests increased supplement use and inquiries to neuropsychologists (Armstrong & Postal, 2013; Aysin et al., 2021). Literature highlighting the benefit of taking a natural dietary supplement for older adults across the spectrum of cognitive decline has been variable (Brownie, 2009; Haider et al., 2020). Commonly explored vitamins such as Vitamin E, Vitamin D, Vitamin B 12, and Phosphatidylserine have proven to be beneficial in improvements in cognitive domains such as attention and memory for those experiencing mild cognitive impairment (Kang et al., 2022; La Fata et al., 2014; Richter et al., 2013; Van Der Shaft et al., 2013). Therefore, one alternative for defining the utility of supplement usage may be from preventive lens for those with mild or emerging cognitive concerns (Health Quality Ontario., 2013; Joshi & Practicó, 2012). Alternatively, older populations are at risk for malnutrition, which can negatively impact cognition (Well & Dumbrell, 2006).

Conclusions: While recognizing their clinical scope, informed neuropsychologists must be up to date on emerging literature on the efficacy of these supplements. Neuropsychologists should consider following these general guidelines when discussing recommendations for older adult clients with varying degrees of cognitive impairment. For example, neuropsychologists should approach alternative treatments as an exploration of the possible risks, costs, and benefits with evidence-based research while balancing the client's need for hope (Armstrong & Postal, 2013). Neuropsychologists should also have increased awareness of malnutrition screening amongst this population (Gestuvo & Hung, 2012; Wells & Dumbrell, 2006). Other practices should include ongoing consultation and referral to a nutritionist or following up with their primary care physicians to assist further. With these guidelines, Neuropsychologists can be better equipped to provide ethical recommendations to facilitate clients to become informed consumers.

Categories: Career
Development/Education/Training

Keyword 1: aging disorders

Keyword 2: neuropsychological assessment

Keyword 3: aging (normal)

Correspondence: Timea Tozser, MA Wright State University School of Professional Psychology tozser.2@wright.edu

2 Preliminary International Clinical Neuropsychology Competency Guidelines

Tyler Ramsey, Susan George
Wright State University, Dayton, OH, USA

Objective: The prevalence of significant brain disorders and their economic burden are projected to continually increase as populations age longer. This review aims to analyze the barriers to international collaboration and propose preliminary international competency guidelines for the advancement of the neuropsychology field. Moreover, these guidelines can aid the field in advocating for international development and collaboration. Specifically, these guidelines may lead to clarity of services, culturally informed norms, cross-cultural research opportunities, and improving accessibility globally (Chan et al., 2016; Hessen et al. 2017).

Participants and Methods: Literature between 2002 and 2022 was obtained by searching the Google Scholar and PubMed databases. Keywords such as guidelines, international, and neuropsychology were used. Articles were selected on the criterion of relevance to the objective, international perspectives, and current national guidelines. The remaining articles were reviewed, and themes were clustered to identify overlapping international competencies within the literature. The findings were utilized to create preliminary competency guidelines and discuss their future implications.

Results: Covid-19 unveiled the feasibility of health service fields collaborating internationally to solve global problems (Bump et al. 2021). The pandemic is a call to action for the neuropsychology field to improve global health equity and collaboration to address international challenges (Obschonka et al., 2021). However, one barrier is the lack of globally accepted definitions of neuropsychology and what a neuropsychologist does (Grote et al., 2016). Yet, a way to address this is for international organizations to propose international competency guidelines. This may allow countries with less developed neuropsychology

fields to advocate for legislation and services (Chan et al., 2016; Hessen et al., 2017). In addition, countries reported the need for competencies to advocate for advancing current practices (Chan et al., 2016; Hokkanen et al., 2020; Janzen & Guger, 2016). Notably, by developing guidelines, public understanding and competent practices of neuropsychology can be strengthened (Grote et al., 2016; Hessen et al., 2017). Temple and colleagues (2006) discovered the two largest barriers for physicians referring to neuropsychologists were a lack of familiarity with the field and geographical limitations. Therefore, international competency guidelines present a serendipitous opportunity to benefit clients, physicians, and neuropsychologists.

Therefore, the current study presents 10 international neuropsychology practice competencies and their elements. Foundational competencies include: (1)Scientific knowledge, methods, and evidence-based practice; (2)Individual and community diversity; (3)Ethics, legal standards, and policy; (4)Interdisciplinary systems; (5)Reflective practice; (6)Therapeutic relationships. Functional competencies include: (7)Assessment; (8)Intervention; (9)Consultation; (10)Advocacy.

Conclusions: Although training and regulations may differ internationally, emerging literature supports the establishment of global competencies. Despite data on competencies in many countries being unavailable, the need for services in many locations suggests that using the available data to implement guidelines may allow for the growth of consistently competent neuropsychologists to serve the many underserved populations around the world (Hessen et al., 2017). Fortunately, Covid-19 exposed the need for increased health equity and mental health services globally (Jensen et al., 2021). Ultimately, the international competencies presented should be investigated further to improve international neuropsychology research, practice, advocacy, and legislation to abate global disparities.

Categories: Career Development/Education/Training

Keyword 1: cross-cultural issues

Keyword 2: diversity

Correspondence: Tyler Ramsey Wright State University ramsey.104@wright.edu