GUEST EDITORIAL

Novel strategies to promote well-being and positive aging

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As the world's population of older adults continues to rapidly rise accompanied by accelerating rates of late-life neuropsychiatric disorders, loss of independence, and function, there is urgent need to develop new strategies that promote well-being and positive aging and prevent cognitive decline. Although age is a primary risk factor for cognitive impairment, other risk factors include risk genes (e.g. APOE-4), late-life depression, education, brain injury, exposure to pesticides or toxins, physical inactivity, and other chronic medical and vascular conditions such as heart disease, stroke, and diabetes (Hugo and Ganguli, 2014). The field is learning more about protective factors of positive aging such as higher educational level, healthy lifestyle (e.g. diet, exercise, sleep, stress reduction), along with positive psychological attributes like optimism and positive emotions (e.g. gratitude, compassion). Positive aging is a multidimensional concept that combines various characteristics of aging well such as optimal, successful, productive, and healthy aging with multiple domains of health, cognition, activity, affect, and physical fitness (Lam et al., 2020). The basic notion is that at any age, including the old and very old, people can enjoy positive well-being and experience "successful aging." An increasing number of studies are exploring the role of modifiable positive psychosocial characteristics (PPCs) and subsequently targeting these PPCs to improve mental health, wellbeing, and cognition in older adults (Lam et al., 2020).

Three articles and accompanying editorials in this issue of the Journal identify potential targets for promotion of psychological well-being in older adults via enhancing resilience, cognitive empathy, and selfcompassion. Szymkowicz et al. (2022) identified cognitive profiles, or phenotypes, as well as sociodemographic and clinical characteristics of 120 non-demented older adults with late-life depression (LLD) and 56 non-depressed older adults ages > 60years in an observational cohort study. Szymkowicz et al. (2022) used a data-driven approach to identify cognitive heterogeneity and phenotypes within LLD. Three cognitive phenotypes emerged in LLD, including "High Normal," "Reduced Normal," and "Low Executive Function" groups, with the "High Normal" group being younger, more educated, predominantly Caucasian, with fewer vascular

risk factors, and higher MMSE. This reinforces the role of cognitive reserve and vascular health in cognitive resilience (Pettigrew and Soldan, 2019; Stern, 2012), but as Dotson (2022) notes, future studies will need to consider other social determinants of health such as racial disparities that will require more racially and ethnically diverse participants.

Another example of positive cognitive and emotional attribute is empathy that is a broad concept that refers to the cognitive and emotional reactions of an individual to the observed experiences of another being and is a prerequisite for compassion toward others. In this journal, Gutiérrez-Cobo et al. (2021) examined the role of cognitive empathy in 902 adults aged 18 to 79 years to analyze the effect of age, gender, and educational level (as a measure of cognitive reserve) on the capacity to show cognitive empathy. Gutiérrez-Cobo et al. (2021) sought to characterize the relationship between age and cognitive empathy and the moderating role of education. Observed sex difference in empathy demonstrated that women scored higher than men on cognitive empathy. Participants with higher education scored higher on cognitive empathy, with age and cognitive empathy fitting the inverted U-shaped curve consistent with previous studies (Labouvie-Vief, 2009; O'Brien et al., 2013). Most importantly, age-related decreases in cognitive empathy are mitigated in individuals with higher educational level, suggesting that education could be an active component of cognitive reserve that buffers the decline in cognitive empathy when cognitive decline begins. This suggests that improving cognitive empathy may be a particularly important target against age-related decline in lower-educated individuals aged 35 years and older who are at risk for cognitive impairment. Jester and Mausbach (2022) note that including more individuals with lower educational attainment may further characterize the moderating effect of cognitive empathy and lead to more tailored cognitive empathy interventions to individuals of all educational and socioeconomic statuses.

Many factors contribute to cognitive abilities that can either delay or accelerate cognitive decline. Positive emotions and attitudes appear to be protective for physical and mental health and may be protective for cognition in late life. For example, self-compassion involves unconditional feelings of care, acceptance, and kindness toward oneself when dealing with difficult experiences. Many correlates of self-compassion represent indicators of well-being, which in turn have been viewed as components of positive aging (Phillips and Ferguson, 2013). Relevant to aging, self-compassion has been associated with an ability to manage adversity and make necessary life changes. In young and multigenerational samples, self-compassion (SC) has been associated with psychological health (Phillips and Ferguson, 2013). A review by Tavares et al. (2020) examined the role of SC in psychological adjustment in older adults and found that SC was associated with diverse mental health indicators and moderated the relationship between physical and mental health. Because of the complex relationship between wellbeing and SC, as well as how this may potentially impact mental well-being and overall mental health, aging, and even cognitive impairment and cognitive reserve, more research is needed to advance our understanding of SC as a potential target for interventions to promote healthy and successful aging. Kupeli (2022) notes that research on how SC impacts well-being in older adults in addition to its potential neuroprotective role in cognitive decline. This is particularly timely given the COVID-19 pandemic-related reports of increased loneliness and isolation in older adults.

This issue of the journal highlights novel factors of positive aging, such as protective cognitive phenotypes, and points to several novel targets for intervention development, including cognitive empathy and self-compassion (Gutiérrez-Cobo *et al.*, 2021; Kupeli, 2022; Szymkowicz *et al.*, 2022). Development of greater cognitive and emotional empathy and self-compassion can lead to greater sense of well-being, pro-social behaviors that can alleviate loneliness, improve the quality of life, and cognition in older adults.

The search for new solutions to promote positive and successful aging moves the field beyond the conventional psychogeriatric approaches to symptom reduction in late-life neuropsychiatric disorders toward developing complementary approaches that promote well-being and cognitive and psychological resilience. Understanding the role of self-compassion, cognitive empathy, and protective cognitive factors can lead to the development of new interventions that can enrich the field of psychogeriatrics and provide hope to the millions of aging adults around the world and their families and reduce the cost of the disease due to global aging.

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