

Beyond the Chronological Age: Subjective Age, L2 Motivation, and Perceived Working Memory Among People Aged Over 60 years old

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Abstract

While Second Language Acquisition (SLA) research increasingly focuses on non-WEIRD (Western, Educated, Industrialized, Rich, and Democratic) populations, studies of older learners are often based on chronological age alone. This study challenges that convention by investigating age identity (one's subjective sense of age) as a more accurate indicator of L2 motivation and cognitive perception. Using a mixed-methods design, researchers surveyed 120 L2 learners (aged 60+) from China and the United States. The study measured the relationship between age identity, the L2 Motivational Self System (Ideal, Ought-to, and Anti-ought-to selves), and perceived working memory. Quantitative regression analysis was complemented by semi-structured interviews to capture cultural variations in the aging process. Key findings indicate that age identity outperformed chronological age in predicting both L2 motivation and perceived working memory. Qualitative data further revealed that cultural factors significantly influence how elderly learners manage cognitive challenges and maintain motivation. By advocating for a shift from chronological to subjective age, this paper contributes to the goals of equity, diversity, and inclusion (EDI) in SLA. It emphasizes the need for nuanced, less standardized approaches to adult education that recognize the psychological diversity of the third age stage learner.

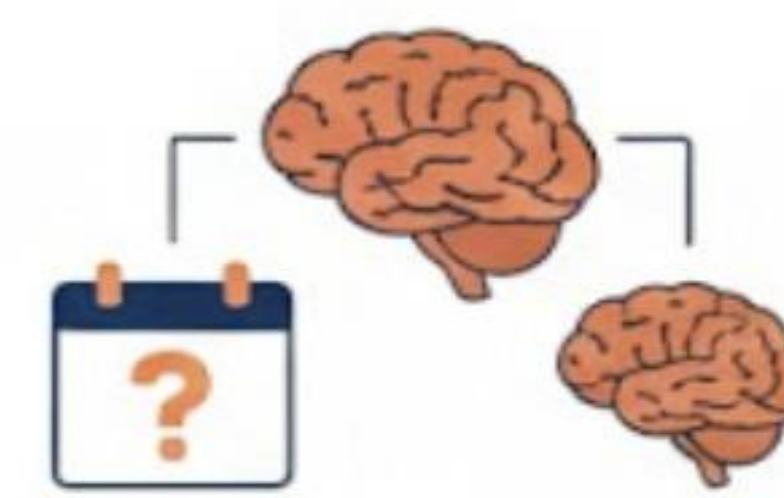
Introduction

- Second language (referred to as L2) learning is a heavily studied field, as well as L2 motivation, which is known as a learners' desire to start and sustain the long often tedious learning processing (Dörnyei & Ryan, 2015) and is regarded as a complex individual difference factor that would affect language learners' L2 learning.
- In multiple studies conducted on older adults, it was found that the elderly' episodic memory, or long-term memory of personal experiences, could get through aging-related decline, but can be easily compensated by their learning strategies and experiences (de Masson D' Autume et al., 2019).
- On the other hand, their working memory was found to potentially have a more significant association with their age(e.g., Wingfield et al., 2007). These studies focused on one's chronological age in relation to their L2 motivations. However, the connection between age identity, defined as a subjective concept representing the inner experience of one's age and aging process, and L2 motivation, has not been thoroughly investigated.
- This study aims to answer the question of whether perceived age (age identity) is positively correlated to L2 motivation and working memory, as well as the cultural factors that shape one's age identity, specifically in older adults.

Methods

- A mixed-method design was implemented to explore the research question.
- Flyers with a QR code containing the initial Qualtrics survey and information to consent were handed out to recruit those aged over 60 who are actively learning a second language.
- The initial questionnaire gathered background information on the participant, L1 and L2 learning experiences, as well as a working memory test. If selected for the secondary stage of the study, the participant will then engage in an open-ended interview focusing on their L2 motivation and their relations to the participants age identity.
- Utilizing the information collected via interview as well as the participant background data and working memory results, the team can determine if L2 motivation is related to older adults' age perception, as well as the cultural factors that may correlate with the responses of certain demographics.

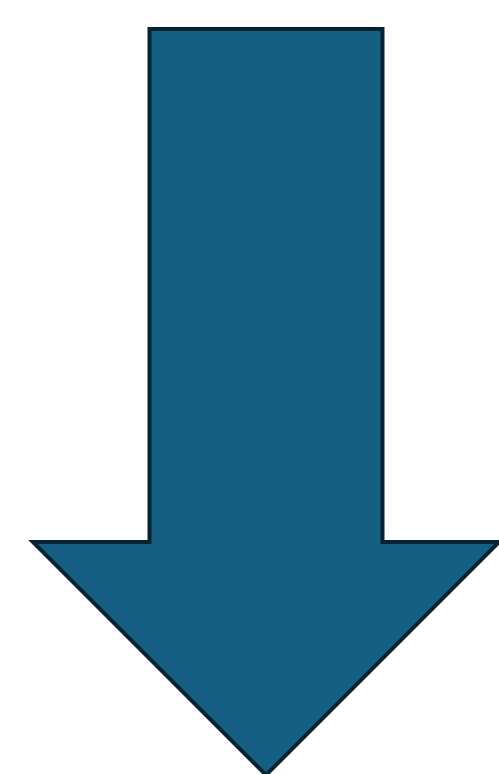
The Research Question



How will age identity and L2 motivation affect 3rd age language learners? (Adults 60+)



Questionnaire



Semi-structured interviews

Our Approach



Quantitative



Qualitative

120 participants: Surveys + interviews + working memory measures

Big Picture



1. L2 motivation is more than simply chronological age
2. Cultural factors should be used to improve third age learning outcomes



Expected Results

The project is awaiting IRB approval in order to begin data collection. After collection, the quantitative data will be analyzed using regression analysis, which we expect to show that age identity will outperform chronological age in predicting both the participants' L2 motivation and perceived working memory. We expect the thematic analysis of the interviews to support such a finding and hopefully allow for a holistic determination of the role that cultural factors play on the elderly's motivation and approaches learning-related challenges.

Conclusion

These findings emphasize the need for continued research within this topic. In the future it would be best to see advocacy on behalf of non-WEIRD populations behalf regarding second language learning. Future studies could be conducted on a larger scale in different age groups.

References

- Dörnyei, Z., & Ryan, S. (2015). *The psychology of the language learner revisited*. Routledge.
- de Masson d'Autume, C., Ruder, S., Kong, L., & Yogatama, D.(2019). *Episodic memory in lifelong language learning*. Proceedings of the Neural Information Processing Systems (NeurIPS).
- Wingfield, A., & Tun, P. A. (2007). Cognitive supports and cognitive constraints on comprehension of spoken language. *Journal of the American Academy of Audiology*, 18(7), 548–558.