Successful Aging with Hearing Loss

How do hearing-related adaptive strategies relate to positive hearing outcomes in older adults?

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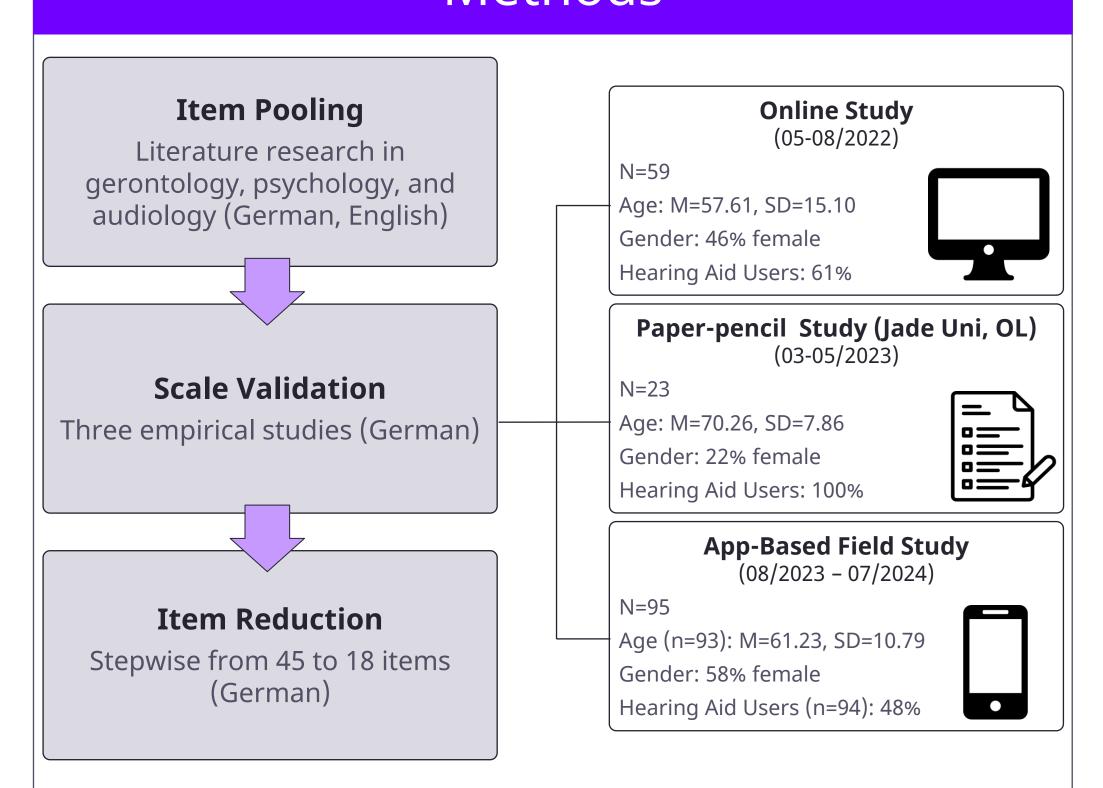
Background

- Successful ageing goes beyond achievement of desirable outcomes (i.e., quality of life, health, well-being)
- It reflects human capacities such as loss adaptation and mastery of changes over life span (i.e., age-related hearing loss, hearing aid uptake)
- Model of Selective Optimization with Compensation (SOC¹) describes such behavioral strategies
- Strategy use was found to be positively related to indicators of successful ageing²

Research Aims

- Development and validation of a SOC-based scale on the use of hearing-related adaptive strategies (AStra)
- Does the engagement of adaptive strategies result in more successful listening experiences?

Methods



- EFA with minimal residual estimation and oblimin rotation for SOC scales with theoretical examination of the result (Content validity)
- Psychometric properties: Reliability, validity of items
- Convergent validity: Relation to Ways of Coping subdimensions³

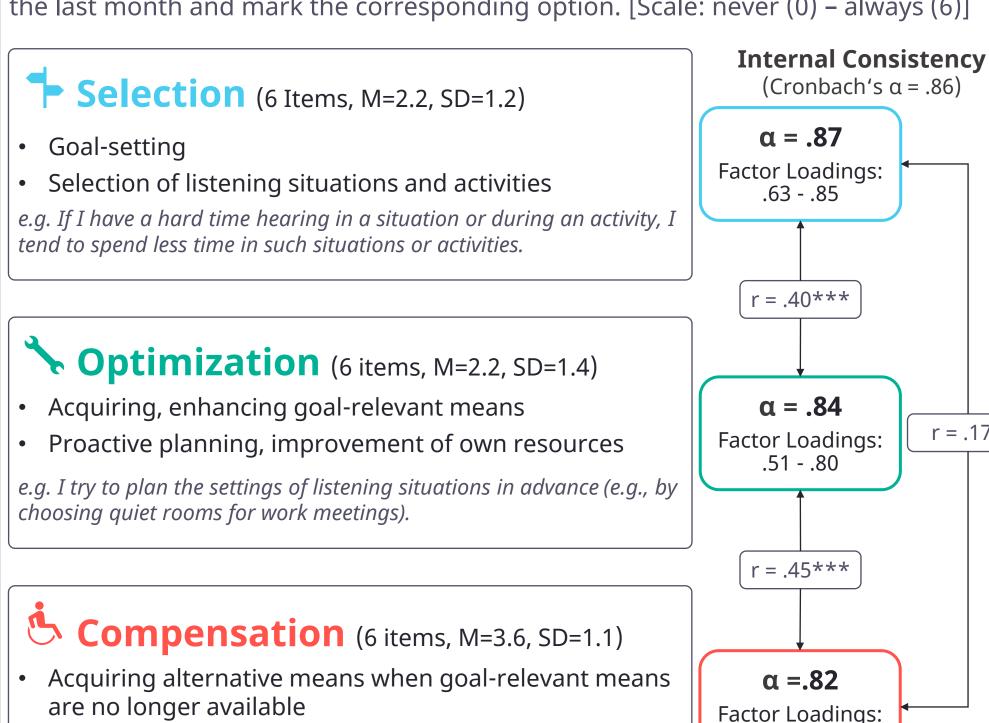
¹Baltes, P.B., & Baltes, M.M. (1990). Psychological perspectives on successful aging: the model of selective optimization with compensation. In Baltes P.B., & Baltes M.M. (eds): *Successful Aging: Perspectives from the Behavioral Sciences* (pp. 1–34). New York: Cambridge University Press.

²Lang, F. R., Rieckmann, N., & Baltes, M. M. (2002). Adapting to aging losses: Do resources facilitate strategies of selection, compensation, and optimization in everyday functioning? *Journal of Gerontology*, *57(6)*, 501–509

Results & Discussion

Hearing-Related Adaptive Strategies Scale (AStra)

Instruction: Please consider how often you have used the following strategies within the last month and mark the corresponding option. [Scale: never (0) – always (6)]



Use of external resources, social support, environment

e.g. If I do not understand, I ask for repetition.

Convergent Validation (n = 80)

AStra		Selection	Optimization	Compensation
Ways of Coping ⁵	Avoidance	.50***	.49***	.20
	Problem Solving	.08	.47***	.31**
	Social Support	02	.52***	.33**

HA satisfaction (Indicator for successful listening experiences; n = 33)

AStra		Selection	Optimization	Compensation	Avg. SOC
Satisfaction with Amplification in Daily Life (SADL)	Positive Effects	.29	.29	.34	.40*
	Negative Features	28	09	.01	19
	Personal Image	22	11	02	17

Outlook

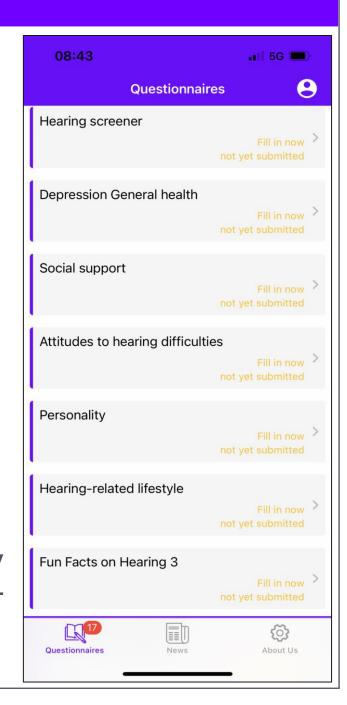
Ongoing research (N=95; ~40% dropout)

6 months longitudinal app-based field study on relation between hearing-related adaptive strategies, positive hearing outcomes and quality of life for HA-users and non-users

Clinical implication

Strategies as valuable component for intervention to improve Quality of Life of people with HL?

3-year project at the Landshut University of Applied Sciences: User-centered development of digital health program & intervention study on acceptance and effects on quality of life for older adults with hearing loss



.46 - .80

³Folkman, S. & Lazarus, R. S. (1985). If it changes it must be a process: Study of emotion and coping during three stages of a college examination. *Journal of Personality and Social Psychology, 48,* 150-170.





