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Latent Trait-State-Occasions models to analyze state and trait components of Loneliness in European adults and their associations with social contact

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Poster

Latent Trait-State-Occasions models to analyze state and trait components of Loneliness in European adults and their associations with social contact

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Abstract

Introduction: Loneliness may be considered a risk factor for overall health, especially in the old age, and it is defined as a subjective distressing experience that results from perceived isolation or inadequate meaningful connections (Prohaska et al., 2020). Loneliness is associated with a greater risk of health problems, similar in terms of mortality to that caused by smoking up to 15 cigarettes a day (Holt-Lunstad et al., 2017). Loneliness is monitored in virtually all international and national surveys of adults and older adults, such as ELSA, SHARE, HRS, MIDUS, JAGES, or CLSA, and this opens the possibility to analyze its variability and change through the aging process. Specifically, it could be of great interest to address how much of loneliness in the old age reflects stable trait variance as well as more labile (state) variance (Fleeson & Noftle, 2009). The aims of this work are: a) to estimate the amount of trait vs. occasion (state) variability in loneliness; and b) to accommodate covariates related to social contact to stablish their effects on both trait and occasion latent variables.
Method: The data belong to waves 6, 7 and 8 of the SHARE longitudinal study on European older adults. For the purposes of this study, only participants at least 60 years old at wave 6 were selected. Their mean age at the first wave was 71.72 years (SD= 8.27), and 55% were women. The variables of interest are the short version (three indicators) of loneliness UCLA-R Loneliness Scale and two indicators of social contact for receiving or giving help. The models estimated were Trait-State-Occasion (TSO) models that partitions variance of loneliness into trait, occasion-specific and autoregressive.
Results: The estimated TSO model had an extremely good fit to the data (chi-square= 83.019, df= 21, p< .001; RMSEA= .008, 90% CI [.006, .009]; CFI= .999; SRMR= .012). Trait variance was slightly lower than 60%, while occasion-specific variance was around 40%. Autoregressive effects explained a relatively low percentage of the variance in each wave of loneliness (2.3 to 2.6%). The TSO model with covariates also fitted the data extremely well. The associations of the covariates were significantly associated with the loneliness trait. However, the associations with the occasion factors were much lower, and in general non-significant.
Conclusions: Longitudinal data on loneliness in the old age showed that an important part of its variance is trait-like or stable, which should be accounted for when longitudinal explanatory models are performed. Results also showed that covariates may have a greater association with stable variance than with occasion specific variance.

Keywords

Latent Trait-State-Occasions models; loneliness; aging.

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