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# Three-item loneliness scale: Exploring the psychometric properties in the Indian context

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#### ABSTRACT

The present study investigated the psychometric properties of the three-item loneliness scale (TILS) in the Indian context using two studies. Based on a sample of 570 respondents, the first study recommended the scale's factorial validity. Based on a sample of 534 respondents, the second study confirmed reliability, composite and criterion validity following rigorous statistical processes. The results suggest adequate reliability and validity of the TILS in the Indian context.

### 1. Background

Loneliness leads to poor mental health (Suri and Garg, 2020), general anxiety (Beutel et al., 2017), depression (Yanguas et al., 2018), insomnia (Pengpid and Peltzer, 2021), psychiatric and personality disorders (Mushtaq et al., 2014), psychosis (Chau et al., 2019), paranoia (Lamster et al., 2017), dementia, Alzheimer's disease (Lee et al., 2019), and impaired cognitive functions (Pengpid and Peltzer, 2021), physical health problems (Igarashi, 2019), low energy and fatigue (Suri and Garg, 2020), obesity and diabetes (Mushtaq et al., 2014), hypertension, cardiovascular diseases (Lee et al., 2019), biological dysfunctions and physiological distress (Tiwari, 2013), poor quality of life (Musich et al., 2015), and emotional and psychological turmoil (Garg, 2020). Given its deleterious and far-reaching implications, exploring the different facets of loneliness has become imperative. It has also become crucial as loneliness has emerged as one of the fastest-growing psychosocial health concerns (Hossain et al., 2020; Saito et al., 2019) in contemporary societies like India, which is witnessing a major transition from collectivism to individualism (Hossain et al., 2020).

This undesirable transition leads to deterioration in interdependence (Clark et al., 2018), close stable relationships (Böger and Huxhold, 2018), and overall social capital (Firoz et al., 2021). There are more than 1.23 million men and 3.68 million women living alone in India (Jeyalakshmi et al., 2011). This trend has been on the rise with changes in the socio-cultural values of joint and extended families over time (Grover et al., 2019). Moreover, despite many people living in the same house, quality interactions that could otherwise offer assurance against loneliness have also been reduced (Hossain et al., 2020). Furthermore, socioeconomic factors like low education, high poverty, accelerating dependency ratios, income inequality, rapid industrialization, unplanned urbanization, and poor transportation have increased the probability of loneliness among Indians (Tiwari, 2013). Similar sentiments voicing the ever-increasing 'loneliness crisis' have been echoed by media reports (Newmyer et al., 2021). The exponential rise in both reported and unreported cases of loneliness necessitates its exploration among Indians.

The first and foremost step in exploring a social phenomenon is the availability of a scale that allows its correct measurement, which further leads to studies on its causes, effects, and remedies. Also, given the cultural differences, it is imperative to analyze the reliability and validity of an existing scale in every culture settings. Thus, the present study investigated the psychometric properties of the three-item loneliness scale (TILS) in the Indian context. Although a few other scales, like the UCLA (University of California, Los Angeles) Loneliness scale (Russell et al., 1978), are available, modern researchers advocate smaller scales. Since response rates in social science research have been declining (Bryman, 2012), shorter scales serve as quick measures by overcoming the limitation of length that otherwise make their use difficult in larger-scale studies (Hughes et al., 2004). Thus, a three-item loneliness scale is considered in the present study. Two studies were conducted sequentially to access the reliability and validity of TILS among Indians. The first study confirmed the three-item structure of

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