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Convergent and Discriminant Validity of the Direction and Orientation Strategy Questionnaire

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Abstract

The “Direction and Orientation Strategy Questionnaire” (DOSQ) is a novel assessment based on giving directions around your hometown and how one remains oriented in real-world environments. The DOSQ produces three sub-scale scores: use of allocentric strategies, use of egocentric strategies, and sense-of-direction. Through an online survey, over one hundred Texas A&M undergraduates completed demographic questions, DOSQ, Santa Barbara Sense-of-Direction scale (Hegarty et al., 2002), Wayfinding Strategy Scale (Lawton, 1994), Questionnaire on Survey Representation (Pazzaglia & De Beni, 2006), Spatial Anxiety Scale (Lawton, 1994), and familiarity measures using the Texas A&M campus. Using factor analysis, we found that the DOSQ sub-scores were highly related to other measures of strategy use and sense-of-direction, establishing its convergent validity. DOSQ sub-scales were not related to the spatial anxiety or familiarity measures, establishing its discriminant validity. The DOSQ provides a method for briefly assessing spatial thinking strategies that support navigation through real-world environments.