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# Reliability and Validity of Type 1 Diabetes Self-Efficacy Ratings among Adolescents from Puerto Rico

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Valeria S. González-González<sup>1</sup>, Camille P. Cruz-Martínez & Eduardo Cumba-Avilés  
Institute for Psychological Research, University of Puerto Rico-Río Piedras Campus

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## Abstract

**Problem Statement/Objectives:** Diabetes self-efficacy (DSE) is the confidence in one's ability to appropriately conduct self-care behaviors. Adolescents with Type 1 Diabetes (T1D) are particularly in need for developing self-efficacy given their difficult treatment regimen and the usual demands of adolescence. Although a diabetes self-efficacy scale has been previously used with Puerto Rican youth, there are no published studies available examining its psychometric properties, which is our current goal. We expected a reliability coefficient  $\geq .80$  for the scale, and significant correlations with other measures, supporting its validity. **Methods:** Participants were 51 T1D youth (aged 12-17 years), enrolled in a depression treatment study (IRB#1112-005). Adolescents and one parent each completed several measures. We used Cronbach's alpha to estimate the internal consistency of the measure, and Pearson's correlation to assess its concurrent and construct validity. **Results:** The internal consistency of the Self-Efficacy for Diabetes Scale was .91 for its standard 35-item version, and .89 for its 25-item version (Diabetes Self-Efficacy Scale). Supporting its concurrent validity, DSE scores correlated ( $p \leq .05$ ) with youth self-efficacy for depression. Evidencing its construct validity, these scores converged with youth self-reports of satisfaction with life and perceived diabetes-specific family support, and parent-reports of adolescents' adherence to T1D self-care. DSE scores diverged from youth self-reports of negative mood and self-esteem, anxiety, helplessness, cognitive alterations, death thoughts, and quality of life problems. **Conclusions:** Our findings document the reliability and validity of this measure when used with youth with T1D from Puerto Rico. **Acknowledgements:** This study was funded by NIDDK (R03DK092547).

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<sup>1</sup> Toda comunicación relacionada a este resumen debe dirigirse a los autores al siguiente correo electrónico: [valeriagonzalez.vsg@gmail.com](mailto:valeriagonzalez.vsg@gmail.com).