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Jack Watson

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# Psychometric Assessment of the Spanish SCORE-15 for Families of Individuals with Parkinson's Disease in Mexico

Jack Watson<sup>1,2</sup>, Grace McKee<sup>3,1</sup>, Paul B. Perrin<sup>1</sup>, Sarah K. Lageman<sup>1</sup>, Teresita Villaseñor<sup>4</sup>

<sup>1</sup>Virginia Commonwealth University

<sup>2</sup>Hunter Holmes McGuire VA Medical Center

<sup>3</sup>Advanced Fellowship Program in Mental Illness Research and Treatment, Mid-Atlantic Mental Illness Research Education and Clinical Center (MIRECC), Central Virginia VA Health Care System

<sup>4</sup>University of Guadalajara

## BACKGROUND

- Parkinson's disease (PD) is the second most common neurodegenerative disorder and can lead to a number of mental health problems for both patients and caregivers<sup>1,2</sup>.
- Research has suggested that worse caregiver mental health predicts greater patient mortality for individuals with neurodegenerative diseases, and caregiver mental health is best when family needs are met<sup>3,4,5</sup>.
- As healthcare trends toward an outpatient, home setting, it is important to study the factors and effects of PD within the family setting.
- This study evaluated the proposed three-factor structure (found in English-speaking people) of the Spanish Systemic Clinical Outcome and Routine Evaluation (SCORE-15, a measure of family dynamics) in a sample of PD caregivers from Mexico.



Within the Mexico sample, results showed a **single-factor** structure of family dynamics rather than a three-factor structure, indicating the need for **improved cross-cultural sensitivity** in measures of family functioning within the context of PD.

## Identified Structure for the SCORE-15 in Mexico

### General Pathology/Unhappiness

- 1) Things always go wrong for my family
- 2) We find it hard to deal with everyday problems
- 3) People often don't tell each other the truth in my family
- 4) It feels miserable in our family

## METHODS

- PD caregivers ( $n = 148$ ) were recruited from an urban academic medical center in Mexico.
- Confirmatory and exploratory factor analysis (CFA/EFA) of the SCORE-15 were conducted.

## Results

1. Initial CFA suggested that the three-factor solution was a poor fit.
2. EFA found evidence for a one-factor structure representing (1) general pathology/unhappiness. Three other putative factors contained too few items and were subsequently dropped. In addition, 6 items did not load on any factor or were split across factors and were also removed.
3. This factor structure bore little resemblance to the original three-factor structure (strengths and adaptability, overwhelmed with difficulties, and disrupted communication).

## DISCUSSION

- The SCORE-15 was originally validated in an English-speaking population.
- Results suggest that the SCORE-15 does not measure the same three-factor structure in Spanish as the English-speaking population for which it was developed.
- This could be due to the wording of the measure, translation, or the cross-culture applicability of the family dynamic constructs.
- Future research would benefit from investigating this discrepancy in order to improve cross-cultural sensitivity in measures of family dynamics in the context of PD

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