The Dyadic Adjustment Scale: Utility for Rural Marital Assessment

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Learning Objectives
- To learn why health care providers should assess marital/couple functioning
- To learn how the Dyadic Adjustment Scale (DAS) can be used to assess a dyad's level of relationship adjustment

Outline
- Review of rural couples literature
  - Why study marriages
- The Dyadic Adjustment Scale (DAS)
- Current Study
  - Purpose and hypotheses
  - Methods
  - Results-CFA and EFA
  - Summary and Recommendations
Review of Rural Couples Literature

- Rural residents have been found to be characteristically different from their urban counterparts. They value self-reliance and tend to have a distrust of those not from their community. Higher poverty rates and high rates of farm stress and depression and anxiety in females have also been observed.

- Rural/Urban differences with regard to marital adjustment. Factors include age at marriage, education, religion, family size, and gender.

Why study marital adjustment?

- Couple distress has been linked to physical and psychological problems, including heart disease and reduced immune system functioning, decreased coping ability, risk factor for depression, anxiety and substance use, and negative impact on children.
Review of Marital Adjustment Literature

- Marital Adjustment\(^{15}\)
  - An ever changing process
  - Can be viewed at any point during a marriage
  - Provides a view of how the individual believes the relationship is functioning
  - Four components
    - Dyadic satisfaction, consensus, cohesion and affectional expression (also the subscales of the DAS)

Review of Marital Adjustment Literature

- Marital Satisfaction\(^{16}\)
  - Defined as a person's attitude toward their partner and relationship
- Current debate regarding marital adjustment\(^{17}\)
  - Unidimensional vs multidimensional hypotheses
    - Current study utilizes a multidimensional approach

The Dyadic Adjustment Scale (DAS)\(^{15}\)

- Normed over 30 years ago
- 32-item, paper and pencil measure
- Written at 8\textsuperscript{th} grade level
- Completed in just minutes
- Used with nontraditional couples
- Raw scores range from 0 to 151
  - Cutoff suggested at 100
Purpose and Hypotheses

- **Purpose:** To ascertain if the DAS is an acceptable measure to assess marital adjustment for rural residents
- **Hypothesis 1:** The rural sample data will adequately fit the factor structure proposed by Spanier
- **Hypothesis 2:** The current sample’s means will significantly differ from those found by Spanier

Methods

- Followed APA’s ethical guidelines and gained IRB approval
- 800 rural households, 1600 surveys
- Informed consent, demographic questionnaire, DAS
  - Follow-up postcard one week later
- Lottery for one of four $50 prizes

Results-Demographics

- 194 useable surveys (12% response)
- 92(47.4%) male /102(52.6%) female
- Average age: 52.50 (SD = 11.33)
- 100% Caucasian
- 69.1% Some higher education
- 92.8% More than 20 years rural
- 85.1% Farmers
- 4.1% Below poverty line
Results-Marriage Characteristics

- Average years married: 27.6 (SD=13.30)
- 91.2% First marriage
- Total number of children: 3.07 (SD=1.61)
  - 47.3% No children residing in home
- All but 5 reported following a religion
  - 77.3% felt their religion taught conservative beliefs

Results-DAS

<table>
<thead>
<tr>
<th></th>
<th>Males</th>
<th>Females</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean (SD)</td>
<td>Mean (SD)</td>
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<tr>
<td>D Consensus</td>
<td>45.85 (6.25)</td>
<td>46.31 (7.43)</td>
</tr>
<tr>
<td>D Satisfaction</td>
<td>39.86 (5.02)</td>
<td>38.32 (7.05)</td>
</tr>
<tr>
<td>D Cohesion</td>
<td>15.91 (3.83)</td>
<td>16.35 (4.37)</td>
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<tr>
<td>Affect Express</td>
<td>8.38 (2.10)</td>
<td>7.87 (2.30)</td>
</tr>
<tr>
<td>DAS Total</td>
<td>110.00 (14.48)</td>
<td>108.85 (18.74)</td>
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Results-CFA

- Computed a Confirmatory Factor Analysis (CFA) with Mx
  - Missing data was dealt with through Maximum Likelihood Estimation
- One factor Model
  - Significantly better fit than the null model $\chi^2$ (31) = 2339.22, $p < .001$
- Four factor model
  - Significantly better fit than the one-factor model $\chi^2$ (5) = 262.35, $p < .001$
Results-CFA

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<tr>
<th></th>
<th>X2</th>
<th>AIC</th>
<th>REMSEA</th>
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<tbody>
<tr>
<td>Null</td>
<td>3566.44</td>
<td>2574.44</td>
<td>.179 (.00, .091)</td>
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<tr>
<td>One</td>
<td>1227.22</td>
<td>297.22</td>
<td>.092 (.086, .098)</td>
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<tr>
<td>Four</td>
<td>964.87</td>
<td>44.87</td>
<td>.075 (.069, .082)</td>
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Results-CFA Model

Comparison of Means

<table>
<thead>
<tr>
<th></th>
<th>Spanier1 Mean (SD)</th>
<th>Current Mean (SD)</th>
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<tbody>
<tr>
<td>D Consensus</td>
<td>57.9 (8.5)</td>
<td>46.09 (6.88)</td>
</tr>
<tr>
<td>D Satisfaction</td>
<td>40.5 (7.2)</td>
<td>39.05 (6.21)</td>
</tr>
<tr>
<td>D Cohesion</td>
<td>13.4 (4.2)</td>
<td>16.14 (4.12)</td>
</tr>
<tr>
<td>Affect Express</td>
<td>9.0 (2.3)</td>
<td>8.11 (2.22)</td>
</tr>
<tr>
<td>DAS Total</td>
<td>114.8 (17.8)</td>
<td>109.40 (16.82)</td>
</tr>
</tbody>
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Results-EFA

- Computed an Exploratory Factor Analysis (EFA) with SPSS$^{21}$
  - Combined-gender, male and female
    - Null, one, two, three and four factor models computed

Results-EFA

- Combined-gender Sample
  - One factor model accounted for 37.68% of the variance
  - Four factor model accounted for 53.03% of the variance
    - All four subscales were able to be extracted with little movement of items

Results-EFA

- Male Sample
  - With the addition of each factor more variance was accounted for
  - Four factor model accounted for 51.98% of the variance
  - Subscales could be extracted though not as clear as the combined sample
Results-EFA

- Female Sample
  - Variance accounted for increased with each additional factor
  - Four factor model accounted for 57.17% of the total variance
  - Spanier’s four factors were not easily recognized in the four factor model
    - Dyadic Cohesion was extracted but the remaining loadings did not group as hypothesized

Limitations

- Self-report measure
  - There is indication that participants took the survey seriously
  - The DAS is a self-report measure
- Small number of participants
  - Could only compute the CFA with a combined-gender sample

Summary

- Overall, this sample was a rural, older, religious, farming sample
  - Satisfied with their marriages
- Important to remember the DAS will not be changed
  - Study was only trying to support the use of the DAS as an adequate instrument for this rural sample
Summary

- Combined-gender sample
  - Support for the four factor model was seen
  - Clinicians may wish to utilize means specific to rural residents in South Dakota
- Future research should continue to examine specific populations and develop appropriate norms

Thank you for your time.

Any additional questions?

*References located on attached page*