The association between self-compassion and diabetes distress: Results from the second Diabetes MILES-Australia (MILES-2) study

Ventura AD, Browne JL, Nefs G, Friis AM, Power F, Speight J.

1. School of Psychology, Deakin University, Geelong, VIC, Australia; 2. The Australian Centre for Behavioural Research in Diabetest, Diabetes Victoria, Melbourne, VIC, Australia; 3. Department of Medical and Clinical Psychology, Curtin University, Perth, Western Australia; 4. Diabeter, Rotterdam, The Netherlands; 5. Department of Psychological Medicine, University of Auckland, Auckland, New Zealand.

Background

- Diabetes distress involves the worries, concerns and fears arising specifically from living with and managing diabetes.1
- Few interventions exist to address the problem of diabetes distress and more research is needed to determine what works best.2
- Self-compassion is an emerging area of clinical practice which may offer a framework for the management of diabetes distress.1
- Higher self-compassion has been associated with better psychological well-being and physical health outcomes in various chronic conditions.3
- Few studies have explored the association between self-compassion and diabetes distress.2

Aim

- To investigate the relationship between self-compassion and diabetes distress among Australian adults (aged 18-75) with type 1 (T1D) or type 2 (T2D; insulin-using or non-insulin-using) diabetes (T2D-I or T2D-NI respectively).

Method

- Study Design
  - This study reports on cross-sectional data from adults with T1D, T2D-I or T2D-NI who participated in MILES-2 in 2015. A national online survey hosted by Qualtrics.

Participants

- Adults with T1D or T2D who were eligible if aged 18-75 years; proficient in English; currently living in Australia.
- Sample size: N = 1,919
  - T1D: 883 (46%)
  - T2D-I: 447 (23%)
  - T2D-NI: 589 (31%)

Measures

- Demographic and clinical characteristics: Age, Gender, Diabetes duration, HbA1c, Number of complications, Employment status, Relationship status
- Psychological outcomes: Self-compassion (SCS-SF), Diabetes distress (PAID-4), Depression symptoms severity (PHQ-8), Anxiety symptoms severity (GAD-7), Self-compassion (CIDS-1 and CIDS-2)

Statistical Analysis

- Participants with ‘severe diabetes distress’ (PAID > 40) and ‘no/mild diabetes distress’ (PAID < 40) were compared in terms of self-compassion using ANOVA.
- Hierarchical regression models were analysed for each of the three participant groups (T1D, T2D-I and T2D-NI), with diabetes distress as the dependent variable.
  - Step 1: gender, age employment status, relationship status
  - Step 2: diabetes duration, diabetes complications, HbA1c
  - Step 3: depressive symptoms, anxiety symptoms, self-efficacy
  - Step 4: self-compassion

Results

- Demographic, clinical and psychological characteristics of the sample are displayed in Table 1.
- Participants with severe diabetes distress had significantly lower self-compassion scores than those with no/mild diabetes distress. This was true for all sub-groups (Figure 1).
- The results of the hierarchical regression are displayed in Table 2. All models were significant.
  - Self-compassion had a significant, independent negative association with diabetes distress in the T1D and the T2D-I groups, but not in the T2D-NI group.

Conclusions

- Participants with severe diabetes distress had significantly lower self-compassion than those with no/mild diabetes distress. This finding corroborates past research.4
- Self-compassion had a significant independent negative association with diabetes distress in the insulin-using participants only. More research is needed to explain this association.
- Overall, the results suggest that self-compassion may offer a valid approach to reducing diabetes distress. Research exploring the impact of a self-compassion intervention on diabetes distress is warranted.

Table 1. Sample characteristics

<table>
<thead>
<tr>
<th>Variable</th>
<th>T1D</th>
<th>T2D-I</th>
<th>T2D-NI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean self-compassion score</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>T1D:</td>
<td>3.97</td>
<td>2.98</td>
<td>2.35</td>
</tr>
<tr>
<td>T2D-I:</td>
<td>3.85</td>
<td>2.75</td>
<td>2.47</td>
</tr>
<tr>
<td>T2D-NI:</td>
<td>3.69</td>
<td>2.51</td>
<td>2.32</td>
</tr>
</tbody>
</table>

Table 2. Hierarchical regression models for predictors of diabetes distress by diabetes type

<table>
<thead>
<tr>
<th>Variable</th>
<th>T1D</th>
<th>T2D-I</th>
<th>T2D-NI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beta (95% CI for F)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gender</td>
<td>-3.91</td>
<td>(-5.14, -.67)</td>
<td>-3.16</td>
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<tr>
<td>Age</td>
<td>1.25</td>
<td>(-0.19, 3.66)</td>
<td>1.62</td>
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<tr>
<td>Work status</td>
<td>1.31</td>
<td>(-0.56, 3.18)</td>
<td>1.37</td>
</tr>
<tr>
<td>Education</td>
<td>-1.23</td>
<td>(-3.03, 0.58)</td>
<td>-1.20</td>
</tr>
<tr>
<td>Relationship</td>
<td>1.52</td>
<td>(-1.01, 4.05)</td>
<td>1.72</td>
</tr>
<tr>
<td>Diabetes duration</td>
<td>-0.22</td>
<td>(-0.44, 0.00)</td>
<td>1.29</td>
</tr>
<tr>
<td>Comorbidities</td>
<td>-3.30</td>
<td>(-5.54, -1.06)</td>
<td>3.00</td>
</tr>
<tr>
<td>Depression</td>
<td>1.98</td>
<td>(-0.06, 4.92)</td>
<td>2.00</td>
</tr>
<tr>
<td>Anxiety symptom severity</td>
<td>1.88</td>
<td>(-0.84, 4.59)</td>
<td>1.92</td>
</tr>
<tr>
<td>Anxiety</td>
<td>0.75</td>
<td>(-2.24, 3.74)</td>
<td>0.73</td>
</tr>
<tr>
<td>Self-efficacy</td>
<td>0.54</td>
<td>(-1.02, 1.05)</td>
<td>0.54</td>
</tr>
</tbody>
</table>

References


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Enquiries

Dr Adriana Ventura
aventura@acbrd.org.au