Independent but not Interdependent Self-Construal Increases Risk for Development of Chronic Pain

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Introduction

• Self-construal is the way in which people identify themselves in relation to others.
• Independent • Value their uniqueness from others • Focused on individual pursuits and self-actualization
• Interdependent • Value social obligations and relationships • Focused on suppressing distinction from others and achieving collective goals
• No prior longitudinal study on the effect of self-construal on the development of chronic pain
• Interdependence has a positive effect on several health-related measures including • Well-being • Memory • Mental health
• Health messages are more effective when their goal orientation aligns with the self-construal of the consumer.

Objectives

• To determine whether self-construal can predict the development of chronic pain over a 9-10 year period
• Having an interdependent (but not independent) self-construal will buffer against the development of chronic pain

Methods

• Open source dataset MIDUS was used to assess longitudinal effects of self-construal on the development of chronic pain over time
• Subjects with no chronic pain at Wave 2 were used for the analysis
• Self-Construal Scale
• Independence • Being able to take care of myself is a primary concern for me • Interdependence • My happiness depends on the happiness of those around me • Scored on a scale of 1 (strongly agree) to 7 (strongly disagree)
• Chronic pain was self-reported as yes/no to "pain that persists beyond the time of normal healing and has lasted from anywhere from a few months to many years"
• Binary logistic regression performed to longitudinally assess the development of chronic pain in relation to both independent and interdependent self-construal

Distinctions Between Self-Construals

<table>
<thead>
<tr>
<th>Independence</th>
<th>Interdependence</th>
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<tbody>
<tr>
<td>Individualist</td>
<td>Collectivist</td>
</tr>
<tr>
<td>Promotion-oriented</td>
<td>Prevention-oriented</td>
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<tr>
<td>Identity is in uniqueness from others</td>
<td>Identity is in relationships with others</td>
</tr>
<tr>
<td>Achievement, Autonomy, Distinction</td>
<td>Harmony &amp; Fulfillment of Obligations</td>
</tr>
</tbody>
</table>

Results

Longitudinal Predictors of the Development of Chronic Pain

<table>
<thead>
<tr>
<th>Variables</th>
<th>OR</th>
<th>95% CI</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>BMI</td>
<td>1.002</td>
<td>[0.977, 1.027]</td>
<td>.902</td>
</tr>
<tr>
<td>Depression</td>
<td>.960</td>
<td>[.885, 1.042]</td>
<td>.332</td>
</tr>
<tr>
<td>Anxiety</td>
<td>1.085</td>
<td>[.888, 1.326]</td>
<td>.425</td>
</tr>
<tr>
<td>Physical Health</td>
<td>.896</td>
<td>[.756, 1.062]</td>
<td>.206</td>
</tr>
<tr>
<td>Mental Health</td>
<td>.906</td>
<td>[.763, 1.075]</td>
<td>.258</td>
</tr>
<tr>
<td># Chronic Conditions</td>
<td>.919</td>
<td>[.828, .927]</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>Independence</td>
<td>.877</td>
<td>[.780, .987]</td>
<td>.029</td>
</tr>
<tr>
<td>Interdependence</td>
<td>.984</td>
<td>[.883, 1.097]</td>
<td>.771</td>
</tr>
</tbody>
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Table 1. Binary logistic regression with independent and interdependent self-construal predicting the development of chronic pain between Waves 2 and 3 of the MIDUS (controlling for age, sex, education, marital status, and race). The interdependent construal predicting the development of chronic pain was associated with an increased risk for developing chronic pain.

Discussion

• Independent individuals may be more likely to develop chronic pain because they • Are less reliant on social support • Do not prioritize prevention-oriented information as much as they do promotion-oriented information • Interdependent individuals may not be more likely to develop chronic pain because they • Are prevention-oriented, and humans avoid loss more than they seek gain

• And more easily persuaded to engage in health behaviors that prevent chronic pain or other losses of health
• Are more accepting of negative health information and may be more likely to adjust their habits accordingly
• Focus on others and spend time with interdependent individuals who empathize with their pain

References