An Investigation of Counterfactual Thinking in Individuals Diagnosed with Diabetes

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ABSTRACT
Diabetes affects both the physical and emotional well-being of over 29 million Americans. Thus, it is important to investigate the psychological factors that can influence appropriate diabetes self-care. The present study investigates whether counterfactual thoughts might be related to how an individual copes with diabetes. The study utilizes a mixed-methods approach consisting of a quantitative survey assessing psychosocial factors, and a qualitative interview with the participant. The interview includes questions about the participant’s thoughts and feelings with their experience of diabetes. Currently, 31 people have completed the protocol. These preliminary results suggest that an increase in counterfactual thinking is marginally associated with higher levels of guilt. Further, these higher levels of guilt are strongly associated with the maladaptive coping mechanisms of self-blame and behavioral disengagement. Notably, high levels of self-blame and behavioral disengagement were marginally associated with lower levels of diabetes self-efficacy. This preliminary evidence suggests that certain types of counterfactual thoughts may undermine appropriate diabetes self-care. Further research on counterfactual thinking may assist in the design of educational initiatives to encourage successful diabetes self-care.

INTRODUCTION
Counterfactual Thinking

Counterfactual thinking refers to the thoughts one has regarding alternative outcomes to events that have already happened.

Coping Mechanisms

Various ways of coping with a negative stressor include self-blame, planning, behavioral disengagement, and denial (Carver, Scheier, & Weintraub, 1989).

PURPOSE

The study investigated how individuals’ thoughts, attitudes, and emotions regarding their diabetes might influence their experience with the disease. Ultimately, this will help us understand what constitutes appropriate diabetes self-care.

METHODS

Participants. Currently, 31 participants (12 males and 19 females) have fully completed the protocol. These participants ranged in age from 19-93 years (M = 50.6) and they have lived with the disease for an average of 15.1 years. Fifteen individuals report having type 1 diabetes, and 16 report having type 2 diabetes.

Materials. The administered survey included:
- Counterfactual Thinking for Negative Events Scale (CTNES)
- Diabetes Self-Efficacy (MDQ)
- Summary of Diabetes Self-Care Activities Questionnaire (SDSCA)
- Shame and Guilt Scale

Brief COPE

Procedure. Participants were recruited from local senior living facilities, diabetes education centers, and through a snowball method. In addition to the quantitative measures, we also conducted a 60-75-minute semi-structured interview to examine each participant’s cognitive and affective reactions to their experiences with diabetes. Each participant received a $25 gift card for their participation.

QUANTITATIVE RESULTS

Self-referent upward CFT was marginally associated with increased levels of guilt (r(29) = .33, p < .05).

Increased levels of guilt were associated with tendency to cope through behavioral disengagement (r(29) = .63, p < .001).

SUMMARY OF DIABETES SELF-CARE ACTIVITIES QUESTIONNAIRE (SDSCA)

<table>
<thead>
<tr>
<th>Item</th>
<th>Type 1</th>
<th>Type 2</th>
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</thead>
<tbody>
<tr>
<td>CTNES</td>
<td>1.00</td>
<td>.33</td>
</tr>
<tr>
<td>Guilt</td>
<td>.59*</td>
<td>.43*</td>
</tr>
<tr>
<td>COPE-SB</td>
<td>1.00</td>
<td>.45*</td>
</tr>
<tr>
<td>CES-D</td>
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<tr>
<td>COPEBehDis</td>
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<td>55.9</td>
</tr>
<tr>
<td>Self-efficacy</td>
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</tr>
<tr>
<td>Diet</td>
<td>3.83</td>
<td>2.73</td>
</tr>
<tr>
<td>Exercise</td>
<td>5.8</td>
<td>3.33</td>
</tr>
</tbody>
</table>

QUALITATIVE RESULTS

- "It just makes me feel guilty, but it doesn't change my actions. When I hear people around the table in the dining room, you know, passing up dessert--and a lot of them do--I just think to myself, 'Well, I can't do that.'"
- "It could lead to my longevity. I mean I know that, and still I don't shape up."
- "I wish that I could have avoided it, but I didn't so now I have to manage it."
- "I like to think that my actions and my willingness to take responsibility have had a direct impact on my ability to manage this."

DISCUSSION

Counterfactual thinking may be related to feelings of guilt which may lead to coping by behavioral disengagement. The challenge may be to encourage upward counterfactuals without a concomitant increase in guilt.

IMPLICATIONS

This research may be of direct relevance to understanding the implications of counterfactual thinking for diabetes patients. However, it is plausible that the effects of information about responsibility for diabetes onset could extend further. These results may be applicable to individuals living with other potentially preventable diseases, such as lung cancer or heart disease.

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REFERENCES


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REFERENCES


