BACKGROUND

Most people who drink heavily, but are not alcohol dependent never seek treatment. According to the CDC, the cost of excessive alcohol consumption in the United States reached $223.5 billion in 2006 or about $1.90 per drink. Almost three-quarters of these costs were due to binge drinking which is the most common form of excessive alcohol consumption in the United States.

Recent evidence suggests that text messaging may help to reduce problem drinking as an adjunct to in-person services but very little is known about the effectiveness of remote messaging as a stand-alone intervention that can reduce problem drinking remotely at low cost.

OBJECTIVES

The primary goal of this study was to develop and test a text messaging program to reduce problem drinking in individuals seeking information about alcohol on the internet but were not seeking or enrolled in formal treatment. The secondary goal was to test which types of text messages might be most helpful in reducing problem drinking.

METHODS

We compared different types of text messages to weekly text assessment only to determine their impact on drinking outcomes for a 12 week period in 171 participants seeking to reduce their drinking remotely on the internet in an exploratory pilot study.

Messaging interventions included:

<table>
<thead>
<tr>
<th>Condition</th>
<th>Description</th>
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<tr>
<td>Control Group(MA)</td>
<td>Four questions once a week via text message (MA)</td>
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<tr>
<td>Loss Frame (LF)</td>
<td>Daily consequence-based text messages plus weekly MA</td>
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<tr>
<td>Gain Frame (GF)</td>
<td>Daily benefit-based text messages plus weekly MA</td>
</tr>
<tr>
<td>Tailored Static (TS)</td>
<td>Daily static tailored text messages plus weekly MA</td>
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<tr>
<td>Tailored Adaptive (TA)</td>
<td>Daily or more frequent adaptive tailored text messages with just-in-time content plus weekly MA</td>
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<tr>
<td>Non-alcoholic* (NA)</td>
<td>Daily text messages that refer only generally to the participant’s goals plus weekly MA</td>
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RESULTS

Over 80% of individuals wanted to continue messaging after the 12 week trial and 64% took the effort to recontact the research team to sign-up for additional messaging.

The largest effects were for changes in binge drinking. People want to continue messaging beyond 12 weeks.

Mobile text messaging interventions are a means to engage and treat non-treatment seeking individuals who are drinking heavily.

More research is needed to understand how to build the most effective mobile interventions.

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Automated Adaptive Remote Mobile Messaging to Reduce Problem Drinking

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