Substitutability of Physical and Social Warmth  
Mehak Hafeez, Dalia Martinez, Max Burns and Tamia Polk  
Illinois Institute of Technology, Department of Psychology

INTRODUCTION

Bargh and Shalev (2012) investigated the question of whether people compensate for a lack of social warmth with physical warmth in their daily lives. In the original study, they found that people experiencing loneliness in their daily lives substitute social warmth with physical warmth – such as by taking hot showers, for longer periods.

In social psychology, there have been many research studies done to understand the link between interpersonal warmth or coldness and physical warmth. Previous studies on embodied cognition has suggested that feelings of social warmth or coldness is linked to physical warmth or coldness. Due to the previous findings, researchers explore as to whether people tend to self-regulate their feelings of social warmth or coldness with physical warmth or coldness or vice versa. This is one of the reasons that we replicated this study in order to explore the previous suggestions among college students.

We are replicating Bargh and Shalev (2012) study 1a, who found that people self-regulate their feelings of social warmth through physical warmth in their daily lives, even though they may not be fully aware of it.

METHOD

Participants = 65
- Gender: 42 male (64.6%) & 23 female (34.54%)

Procedure:
1. Participants were approached and invited to participate.
2. Participants were offered a bag of chips and a bar of candy as a “thank you” for their participation.
3. If the participants agreed to participate a consent form was given
4. Participants were given a questionnaire about their lifestyle habits (e.g., physical activity, eating habits) which included the three original showering items from Bargh and Shalev (2012)
5. Participants answered a second questionnaire about their feelings of loneliness using the UCLA loneliness scale (α = .88)
6. Participants were asked what they thought the study was about. No participants identified study hypotheses and no one was excluded from analyses

Deviation:
- Candy and chips instead of $2.00 Dollars
- 65 participants instead of 51 participants

DISCUSSION

We found that there were no correlations between showering items and loneliness, thus failing to replicate findings from Bargh & Shalev (2011). However we did find other correlations: 1) the more active people tend to be, the less lonely they are; 2) eating more meals related to loneliness; 3) more time spent on Facebook linked with less loneliness

While we did not find that shower warmth or frequency related to loneliness, we did find that other factors did: physical activity, eating meals, and consuming social media were all related to less loneliness. There are implications for interventions with these results. Interventions with lonely people might focus on helping people socialize with others, even online through social media, as opposed to increasing people’s physical warmth.

The study didn’t replicate Bargh & Shalev (2011) but still provided useful information. We found that the more active they were, the less lonely they were; the more frequent their meals were, the less lonely they were; and the more time a person spent on Facebook, the less lonely they were.

The differences between this replication and the original (the difference in sample size, the male to female ratio, and the incentive that was offered) could have also impacted results. Some of the limitations included the number of participants, the weather, sampling season time and gender ratios

RESULTS

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Gender</td>
<td>--</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Loneliness</td>
<td>.092</td>
<td>--</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Physical Activity</td>
<td>-.247*</td>
<td>-.421**</td>
<td>--</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Meals Per Day</td>
<td>.062</td>
<td>-.308*</td>
<td>.332**</td>
<td>--</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Social Media Consumption</td>
<td>-.155</td>
<td>-.253*</td>
<td>.205</td>
<td>-.078</td>
<td>--</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Shower Length</td>
<td>.295*</td>
<td>-.010</td>
<td>.114</td>
<td>.051</td>
<td>-.033</td>
<td>--</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Shower Frequency</td>
<td>.026</td>
<td>-.106</td>
<td>-.144</td>
<td>.137</td>
<td>.123</td>
<td>-.047</td>
<td>-.184</td>
<td>--</td>
</tr>
</tbody>
</table>