Refinement and Replication of an Internet-Based Intervention for Internalized Heterosexism

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Abstract

Internalized heterosexism (IH), a sexual minority person’s negative beliefs and attitudes about their sexual orientation, is associated with numerous negative mental health outcomes, including depression, suicide, and substance use. While the impact of IH is well-understood, few intervention studies have sought to address this construct. We refined and replicated Lin & Israel’s (2012) successful online IH intervention for same-sex attracted men. Using a sample from Amazon Mechanical Turk (n = 484), we tested Lin & Israel’s intervention with a population recruited outside of LGBTQ community organizations. Compared to Lin & Israel, our sample had higher baseline IH. Results indicated that intervention participants had significantly lower personal homonegativity and higher gay affirmation compared to a control, with no significant difference in moral attitudes. These findings, and the magnitude of results, mirror those found by Lin & Israel, supporting the efficacy of their intervention and its effectiveness with participants recruited outside of LGBTQ communities.

Rationale & Research Question

- A large body of research has found internalized heterosexism (IH) to be associated with negative mental health outcomes, including depression, suicide, anxiety, and substance use (Szymanski, Kashubeck-West, & Meyer, 2008).
- There is a lack of intervention research to address this known predictor of mental health: 4 out of 200+ publications (Berg, Munthe-Kaas, & Ross, 2016).
- Lin & Israel’s (2012) IH intervention is one of few to produce significant results. One limitation is that they recruited from LGBTQ community organizations, which may not be representative of IH in the larger LGBTQ population.
- No results from IH research have been replicated. Replicating findings can support the efficacy of a study, but many replication studies produce insignificant results (Open Science Collaboration, 2015).
- Research Question: Will the findings of Lin & Israel’s (2012) be reproduced with a sample of gay men recruited from outside of LGBTQ communities?

Comparison to Lin & Israel’s Sample:
- Lin & Israel’s sample had a similar proportion of ethnic minority participants (31.9%), was older (M = 34.9) and more educated (59.4% Bachelor’s degree or higher).
- They included bisexual participants and other same-sex attracted men

Techniques

- Four Modules:
  - Combat Stereotypes
  - Identify and Reject Negative Messages
  - Reinforce Rejection of Neg. Messages
  - Enhance Affirmation

- Personal narrative of a gay man
- Writing response to a vignette
- Slideshow with gay-affirming imagery
- Positive aspects of being gay

We made minor modifications to Lin & Israel’s intervention, including changes in wording, updated videos, and aesthetic changes.

Measures

- Internalized Homonegativity Inventory (IHNI): The IHNI is a 23-item measure of IH with three subscales: personal homonegativity, morality of homosexuality, and gay affirmation. It has good internal consistency (α = .88 in this sample).
- Nebraska Outness Scale-Concealment (NOS-C): The NOS-C is a five-item measure of active concealment of sexual orientation with family, friends, coworkers, and strangers.
- Rosenberg Self-Esteem Scale (RSE): The RSE is an 10-item measure of self-esteem.
- Positive and Negative Affect Scale (PANAS): The PANAS is a 20-item measure of current affect. It includes 10-item subscales for both positive and negative affect.

Procedure

- Participants were recruited through Amazon Mechanical Turk (MTurk).
- Participants who met criteria (gay identity or exclusively attracted to men) were randomly sorted into an intervention or control condition.
- Intervention participants completed the four modules described above; control participants completed a parallel set of stress management activities.
- All participants completed the RSE and NOS-C before their condition and the IHNI and PANAS afterward.
- Participants were paid $1.50 and entered into a lottery for a $50 or $100 bonus

Discussion

Implications:
- Our significant findings of reduced personal homonegativity and increased gay affirmation support the efficacy of Lin & Israel’s intervention.
- Replicated findings with a sample recruited outside of LGBTQ communities support the external validity of the intervention.
- Our sample, recruited through MTurk, had substantially higher IH compared to Lin & Israel’s, which was recruited through LGBTQ communities. This speaks to the importance of reaching this segment of the population in future research efforts.
- Our null findings for moral attitudes, like Lin & Israel’s, suggest that other approaches may be better-suited to address this aspect of IH

Limitation:
- We did not examine connectedness to LGBTQ communities, a variable which may explain the higher IH in our sample relative to Lin & Israel’s.

Future Directions:
- Longitudinal research can evaluate the endurance of results over time.
- This intervention may be adapted for use with gay youth, a population particularly vulnerable to the effects of IH

Results

Table: Comparison of Results between Lin & Israel (2012) and Current Study

<table>
<thead>
<tr>
<th>IHNI Subscale</th>
<th>Current Study</th>
<th>Lin &amp; Israel</th>
<th>Cohen's d</th>
<th>Mean Difference</th>
<th>p Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personal Homonegativity</td>
<td>Mean</td>
<td>2.20</td>
<td>2.09</td>
<td>0.19</td>
<td>0.19</td>
</tr>
<tr>
<td>Morality of Homosexuality</td>
<td>Mean</td>
<td>0.95</td>
<td>0.55</td>
<td>0.45</td>
<td>0.19</td>
</tr>
<tr>
<td>Gay Affirmation</td>
<td>Mean</td>
<td>1.38</td>
<td>1.19</td>
<td>0.23</td>
<td>0.17</td>
</tr>
</tbody>
</table>

Figure 1. Mean scores per item on each subscale of the IHNI. * p < .05, ** p < .01

- An ANCOVA with the NOS-C and RSE as covariates yielded significant differences on two out of the three IHNI subscales (see Figure 1).
- IH in both conditions was higher on each subscale of the IHNI in our sample than Lin & Israel’s.
- Results on the PANAS indicated significantly higher positive affect at post-test for intervention participants (p = .005) and no difference in negative affect.