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

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RESEARCH AND
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SEXUAL MINORITY
EMPOWERMENT

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.
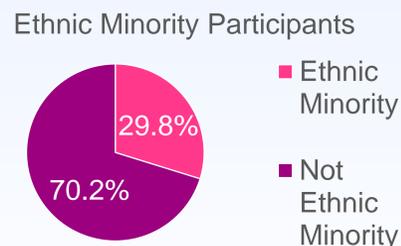
Rationale & Research Question

- 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 (2012) be reproduced with a sample of gay men recruited from outside of LGBTQ communities?

Participants

Current Study:
- 484 U.S. adults with gay identity or exclusive same sex-attraction
  - 246 intervention, 238 control
- Ethnicity

75.6%	European/White	(n = 366)
9.9%	Latino	(n = 48)
9.5%	Asian/Pacific Islander	(n = 46)
8.3%	African American/Black	(n = 40)
2.5%	Native American	(n = 12)
0.8%	Middle Eastern	(n = 4)

Ethnic Minority Participants

29.8% Ethnic Minority
70.2% Not Ethnic Minority

- Age: M = 30.1, SD = 8.5
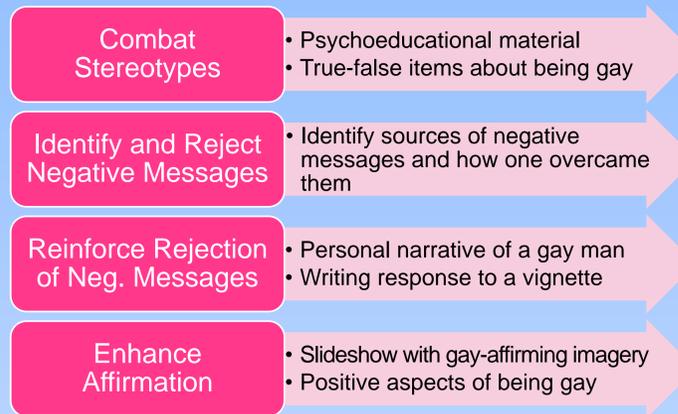- Education: 47.3% (n = 229) with at least a Bachelor's degree

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

Intervention

Four Modules:

Combat Stereotypes	• Psychoeducational material • True-false items about being gay
Identify and Reject Negative Messages	• Identify sources of negative messages and how one overcame them
Reinforce Rejection of Neg. Messages	• Personal narrative of a gay man • Writing response to a vignette
Enhance Affirmation	• 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 a 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

Results
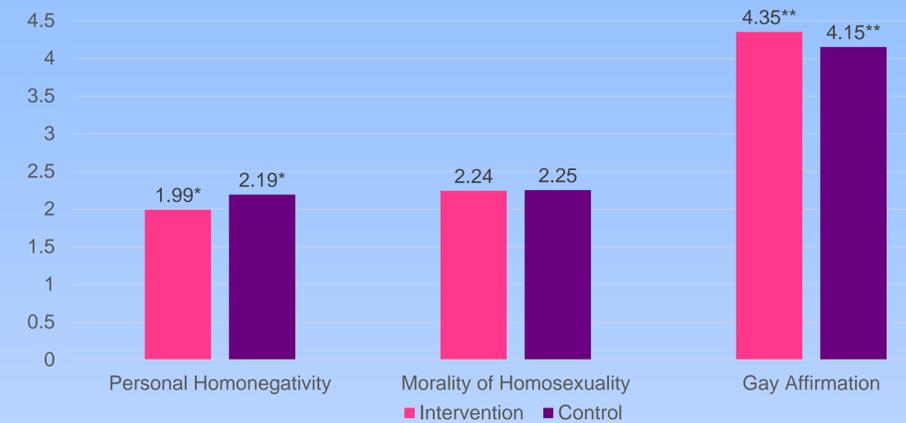

Internalized Heterosexism at Post-Test

Personal Homonegativity: Intervention 1.99*, Control 2.19*
Morality of Homosexuality: Intervention 2.24, Control 2.25
Gay Affirmation: Intervention 4.35**, Control 4.15**

■ Intervention ■ Control

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

Comparison of Results between Lin & Israel (2012) and Current Study			
IHNI Subscale		Current Study	Lin & Israel
Personal Homonegativity	Mean Difference	**2.20***	**2.09***
	Cohen's d	0.18	0.19
Morality of Homosexuality	Mean Difference	0.05	0.45
	Cohen's d	0.02	0.10
Gay Affirmation	Mean Difference	**1.38***	**1.19***
	Cohen's d	0.23	0.17

*p < 0.05, ** p < 0.01

- 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

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