

A Pilot Study of a Prevention Program for Latino Gay Men in Canada: Results in Terms of Effectiveness



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Background:

- The rates of unprotected anal sex among Latino MSM in North America range between 35% to 55%, and are higher in HIV-positive MSM than in HIV-negative Latino MSM (1).
- Among HIV cases attributed to MSM exposure between 1998 and 2014 in Ontario, Latinos were 6.7% of cases, becoming the second most highly exposed ethno-racial group after the Black ethno-racial group (2). In 2016, this percentage had grown to 9.6% (3).
- There is a need in Canada for behavioural interventions that can reduce unprotected sex in Latino gay men. These can accompany biomedical interventions such as HIV PrEP as recommended by HIV PrEP guidelines (4).
- Therefore, we decided to adapt an existent intervention, Gay Poz Sex: Finding Your Own Way (GPS) for the Latino cultural context.

Objectives: A one-armed trial was designed to evaluate the pilot implementation of GPS in a gay immigrant population in Toronto, Canada. We examined preliminary results of the GPS intervention after 12 months of implementation, on sexual behaviors (condom-less anal sex) and on psychosocial factors including depression, loneliness, the self-efficacy of condom use and negotiation, and sexual compulsivity

Intervention:

- GPS is based on the Information-Motivation-Behavioral Skills (IMB) theoretical model along with Motivational-interview based (MI) counseling (5). Previous studies have found this theoretical model useful in explaining sexual and other practices related to HIV among HIV-positive individuals (6).
- GPS was originally delivered groups of participants by peers who were trained in MI and GPS.
- GPS in English-Speaking HIV positive gay men had resulted in the reduction of loneliness, sexual compulsivity, and incidents of condom-less anal sex with HIV-negative and unknown HIV-status partners (from 53.9% at baseline to 28.9% at 3-month follow-up) (7).
- Originally delivered in 8 sessions, the first two focus on reviews of STI and HIV transmission, disclosure and legal issues; sessions 3 and 4 focus on current sexual behaviours and challenges related to safe sexual decisions; weeks 5 and 6 focus on creating sexual goals and means to improve sexual health; and week 7 and 8 concentrate in strategies for changes and achieving personal goals.

METHODS

Training of local Facilitators

- One peer selected from the community
- Fifteen hours of training in Motivational Interviewing
- 20 hours of training in GPS by very experienced peer motivational interviewers

Measures

- Condom-less anal sex with: 1) regular partners, 2) casual partners, HIV positive, HIV negative or of unknown serostatus. CAS was defined as engaging at least once in insertive or receptive anal sex within the last three months without using condom.
- Psychosocial measures as table 1.

Piloting the adapted version of GPS

- A one-armed trial
- 21 participants who 1) self-identified as gay, 2) reported engaging CAS with another male during the past 3 months, and 3) be over the age of 18.
- Were assessed at baseline and after 12 months.
- Participants attended six weekly 2-hour individual sessions which were led by the facilitator.

Analysis

- The McNemar test and a T-paired test : significance of change between the baseline and the follow-up.
- Mid-P values for the McNemar test for small samples (8).
- Analysis with the entire sample and then separately by participants' HIV status since GPS had been developed for HIV-positive gay men.

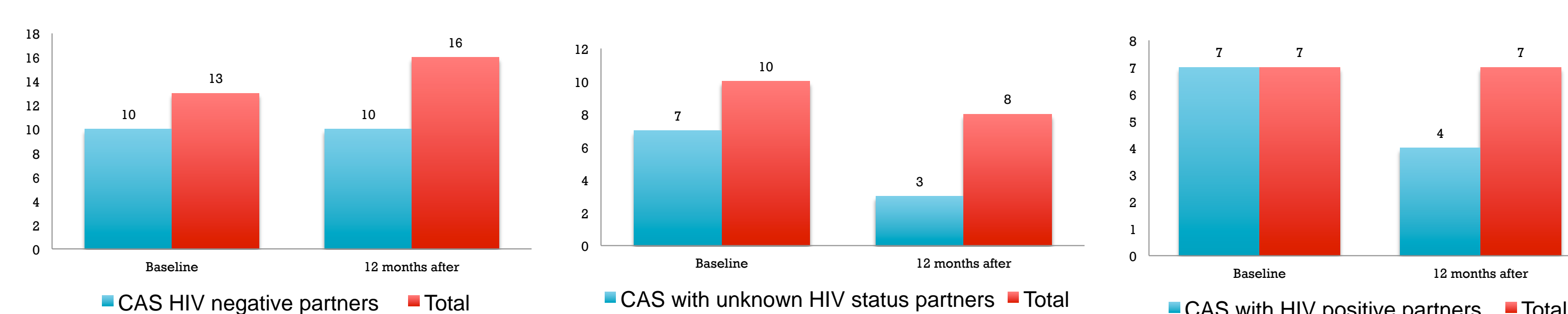
Table 1. Psychosocial constructs assessed in GPS

Depression, CES-D, Mueses et al (Biomedica, in press)	4-point Likert-type scale (ranging from 0 = rarely or none of the time to 3 = most or all of the time). Total scores range: 0 to 60 higher total scores denote higher depressive symptomatology.	Cronbach's α coefficients of 0.85
Loneliness, Borges A, Prieto P, Ricchetti G, Hernandez-C., E. R-N. Validación cruzada de la factorización del Test UCLA de Soledad. <i>Psicotema</i> . 2008;20(4):924-7.	4-point Likert-type scale (ranging from 1 = never to 4 = often) Total scores range from 20 to 80, where higher total scores indicate higher loneliness.	Cronbach's α coefficients of 0.89
Fear of Sexual Rejection, translated and back translated for this study by Spanish-English speakers with good reliability	5-point Likert-type scale (ranging from 1 = strongly disagree to 5 = strongly agree) Total scores range from 8 to 40, where higher total scores indicate greater concerns of sexual rejection.	Cronbach's α coefficients of 0.85
Social Cognitive Theory Constructs, self-efficacy- translated and back translated for this study by Spanish-English speakers with good reliability. Kalichman SC, Rompa D, Cage M, DiFonzo K, Simpson D, Austin J, et al. Effectiveness of an intervention to reduce HIV transmission risks in HIV-positive people. <i>American journal of preventive medicine</i> . 2001;21(2):84-92.	4-point Likert-type scale (ranging from 1 = strongly disagree to 4 = strongly agree). Total scores for self-efficacy range from 6 to 24, where higher total scores indicate higher self-efficacy.	Cronbach's α coefficients of 0.75, increase to 0.80 when items 7 and 8 are deleted; thus, both items were deleted for our analysis.
Sexual Sensation Seeking, Teva I, Paz M. Adaptación castellana y propiedades psicométricas de la escala de búsqueda de sensaciones sexuales en adolescentes españoles. <i>Revista Mexicana de Psicología</i> . 2008;25(1):129-37.	4-point Likert-type scale (ranging from 1 = not at all like me to 4 = very much like me). Total scores range from 11 to 44, where higher total scores indicate greater sexual sensation seeking, propensity to seek out novel and uninhibited sexual stimulation.	Cronbach's α coefficients of 0.84
Sexual Compulsivity Scale, translated and back translated for this study by Spanish-English speakers with good reliability. Kalichman SC, Rompa D, Cage M, DiFonzo K, Simpson D, Austin J, et al. Effectiveness of an intervention to reduce HIV transmission risks in HIV-positive people. <i>American journal of preventive medicine</i> . 2001;21(2):84-92.	5-point Likert-type scale (ranging from 1 = Never feel like this to 5 = Always feel like this). Total scores range from 10 to 50, where higher total scores indicate higher sexual compulsivity.	Cronbach's α coefficients of 0.86

RESULTS

Of 21 eligible participants, 11 HIV-positive and 10 HIV-negative men enrolled in the study and completed all assessments. The sample were all gay men of whom 100% had least one year of university degree, 40% were unemployed and 70% were living under the poverty line (in Canada is < CA \$20,000 for a single person per year).

Effects of GPS in the 21 participants, condomless anal sex- CAS

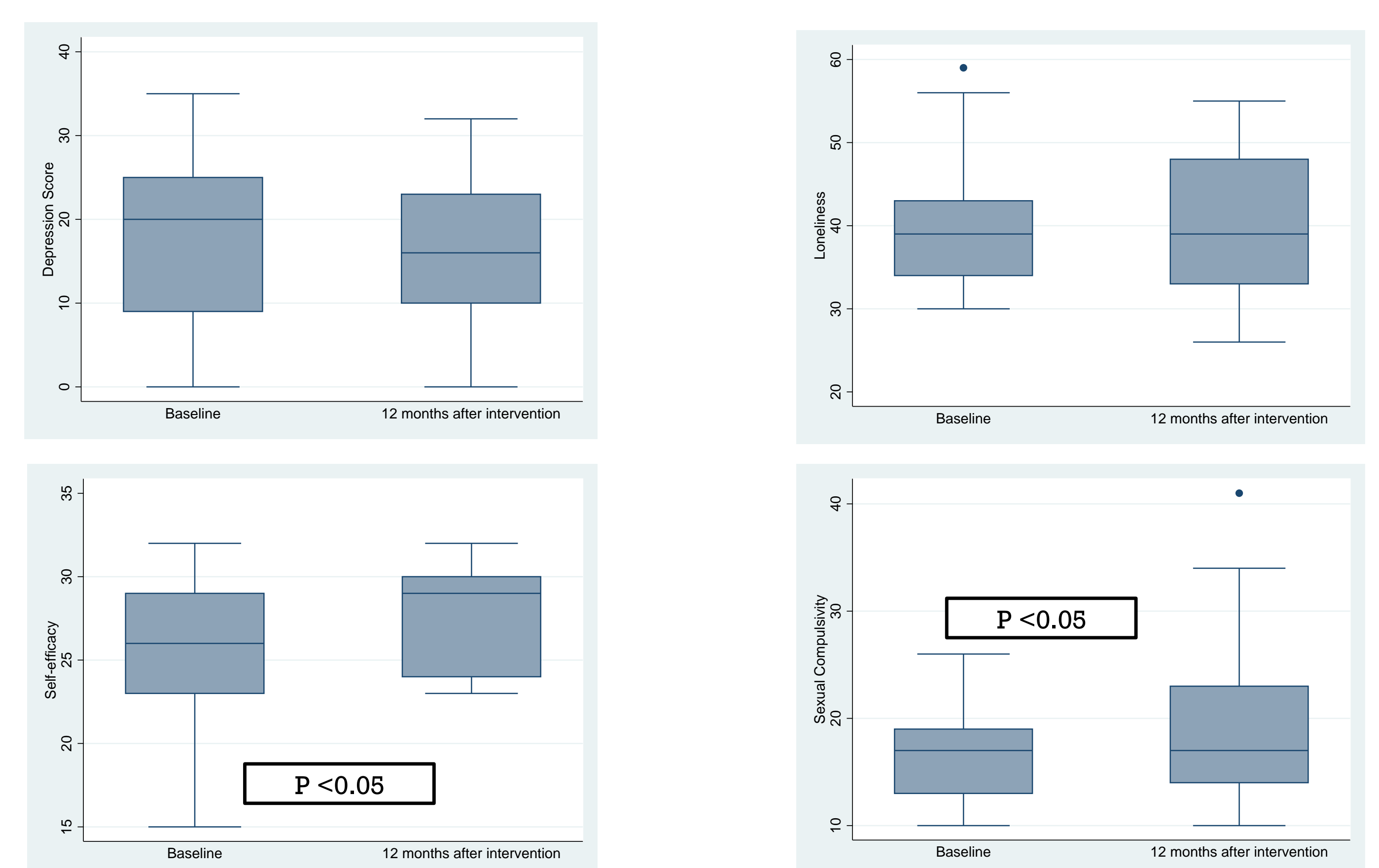


We did not observe a statistically significant effect on CAS. However, there was a trend towards reduction of CAS events over time. CAS with any partner, was 90% at baseline and 62% after intervention, mid-P value: 0.06. A reduction in CAS with regular partners in HIV positive participants was also observed, from 100% to 33%, mid-P value: 0.06. We observed an increase in self-efficacy and increase in sexual compulsivity, and no effects on depression, loneliness, fear of sexual rejection or sexual sensation seeking. The effects on self efficacy in HIV negative participants was greater than in HIV positive participants (not shown).

Conclusions: This pilot study provides preliminary evidence that adapted GPS led by peers for Latino gay men could increase self-efficacy in condom use in both HIV positive and HIV negative gay men. Given the importance of condom negotiation self-efficacy on risk of HIV transmission, future studies on GPS implementation in community settings with larger samples are needed that can test efficacy on CAS and condom-negotiation self-efficacy. Studies that incorporate the adapted GPS in HIV PrEP implementation could be the most valuable.

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Effects of GPS in the 21 participants, psychosocial variables



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