
An Analysis of domains associated with levels of basic HIV/AIDS knowledge among Latinos in two universities

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Goal of the current study

Explore the associations between demographic factors and HIV testing history with the level of HIV/AIDS knowledge among Latinos in two Hispanic serving universities in south Florida.

Background and significance

- 50% new HIV infection in the US were among adolescents or young adults (CDC, 2002).
- 25% of AIDS patients in Florida acquired HIV during adolescence (FDH, 2003)
- Miami have had the highest HIV rate in the state of Florida (FDH, 2003)
- Most people acquired HIV through unprotected sex (CDC, 2004)
- HIV/AIDS among Latinos have increased in Miami Dade (CDC, 2004)

Literature

- Age, gender, and HIV testing history have been significantly associated with HIV knowledge (DuRant et al. 1992, Polacek 2007)
- HIV knowledge have been associated with safer sex among young adults (Bazargan et al. 2000, Stigum et al. 1995, Maxuel et al. 1999)
- Stigmatizing attitudes are strongly correlated with misunderstanding the mechanism of HIV transmission and overestimating the risk of casual contact (Herek et al. 2002).

Literature (cont')

- Attitudes= Condom use was related to perceiving negative or positive attitudes from their main partners (boyfriend, lover)
 - Lescano and Vazquez et al.(2006) - study included, Miami, Providence, Atlanta
- HIV knowledge= Conflicting results
 - Robertson et al. 2006, not associated
 - DiClemente et al. (1991)- some association in incarcerated youths

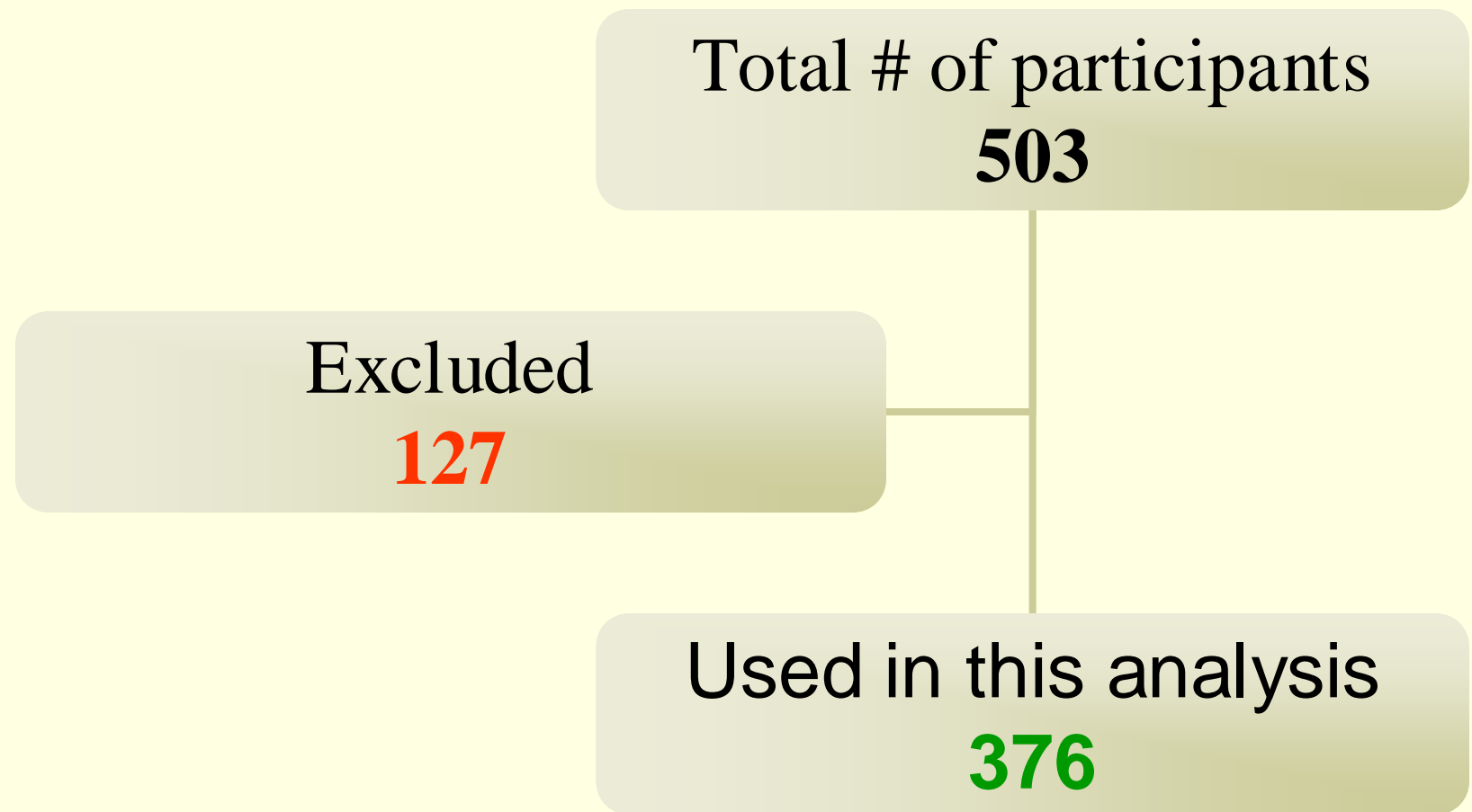
Literature (cont')

- Youth's exposure to HIV - combination of:
 - Tendency to underestimate the risk of acquiring HIV (Magura, Shapiro & Kanga, 1994)
 - Tendency to experiment with alcohol and other drugs (Cooper 2002, Rotheram-Borus, 2000; Lowry, 1994)

Method: study design

- N= 376 (17 years and older)
- Approved by FIU IRB
- Self-administered 12 question survey
- Questions on three areas of HIV knowledge:
 - HIV/AIDS stigma
 - HIV/AIDS prevention
 - HIV/AIDS transmission
- Recruitment was done on campus (student center, cafeterias and student fairs)
- Two Hispanic Serving universities

Method: Participants



Example of questions:

- Can you get HIV if you work with someone who has HIV?
 - a. yes
 - b. no
- You can get infected with HIV by having oral sex without a condom
 - a. true
 - b. false
- Who is at risk of acquiring HIV?
 - a. gay men
 - b. people who is having unprotected sex
 - c. everyone
- Have you ever been tested for HIV?
- Do you know what a female condom is?

Data Collection

- Recruited by graduate level students
- Compensation gifts for their time (including literature and referral information)
- Evaluation of their English skill and willingness to participate in the 5 min. survey

Variables

■ Independent

- Demographics:
 - gender,
 - age groups (17-24, 25-35, 36-older)
- Awareness about female condoms
- History of HIV testing

■ Dependent

- HIV Basic Knowledge
- HIV Stigma
- HIV Prevention
- HIV Transmission

Data Analysis

1. Descriptive analysis for the demographic and outcome variables

- Means±SD
- Frequencies
- Crosstabs

2. Statistical analysis (SPSS and SAS)

- Logistic regressions
- Chi-square

Results

1. Participants' demographics

	<u>Count</u>	<u>%</u>
Gender	0	0
Male	89	23.7
Female	281	74.7
Missing	6	1.6
Age (by group)		
17-24	206	54.8
25-36	71	18.9
37-older	95	25.2
Missing	4	1.1

	<u>Mean</u>	<u>SD</u>
Age (by year)	27.8	23.0

Results

2. Survey answers

	<u>Count</u>	<u>%</u>
HIV <u>knowledge</u> questions (answered correctly)	62	16.5
HIV <u>stigma</u> questions (answered correctly)	188	50.0
HIV <u>prevention</u> questions (answered correctly)	181	48.1
HIV <u>transmission</u> questions (answered correctly)	197	52.4

Have you ever been tested for HIV? (yes)	185	49.2
Do you know what a female condom is? (yes)	314	83.5

Results:

- Age was positively associated with HIV overall knowledge, stigma, prevention, and transmission
- Being a female was associated with a higher stigmatized perception of HIV ($p < 0.01$)
- Having knowledge about female condoms was positively associated with knowledge on HIV prevention (marginal significance at $p = 0.07$)

Discussion: HIV/AIDS knowledge

Participants ages 25-35 were 2.4 times more likely to answer HIV knowledge questions correctly than younger participants (17-24)

Discussion: stigma

- Participants ages 25-35 and 36-older were 2.3 and 1.9 times correspondingly more likely to answer correctly HIV-stigma related questions than younger participants (17-24).
- Males were 49% more likely to answer correctly HIV-stigma related questions than females.
- Participants who had been tested for HIV in the past were 38% more likely to answer correctly HIV-stigma related questions than the respondents who have never been tested.

Discussion: prevention

- Participants ages 25-35 and 36-older were 3.8 and 1.9 times correspondingly more likely to answer correctly HIV-prevention related questions than younger participants (17-24).
- Participants who were familiar with female condoms were nearly 2 times (1.8) more likely to answer correctly HIV-prevention related questions than participants who were unfamiliar with a female condom.

Discussion: transmission

- Participants ages 25-35 were nearly 2 times (1.7) more likely to answer correctly HIV-transmission related questions than younger participants (17-24).
- Participants that have been tested for HIV were over 2 times (2.2) more likely to answer correctly HIV-transmission related questions than those who have never been tested.

Limitations

- Typical limitations of self reported data
- Sampling non-randomized
- Double entries
- Limited generalizability
- Mostly Females (75%)
- Relatively small sample (N=376)

In spite the limitations...

■ **Social work & public health policy**

- Health behavior approach to Hispanic serving colleges

■ **Social work intervention**

- Risky health behaviors approach in universities
- More college and high school education
- Attitudinal changes programs
- Awareness for students

■ **Future Research**

- Multiple health behavior issues
- Longitudinal approach- development of programs