



# Assessing Reproductive Health Information Among Adolescents in a Mid Western City

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## Introduction

Sexually Transmitted Infections (STIs) remain a public health challenge in the United States, with 50% of new infections occurring among young adolescents (1). In the St Louis Metropolitan area, Chlamydia and Gonorrhea disproportionately affect adolescents between the ages of 15-19 (2).

This study reports the results of a sexuality and reproductive health intervention targeted to reduce pregnancies and STIs among adolescents, and increase communication of medically accurate sexuality information.

A peer delivered comprehensive reproductive health education curriculum was conducted over 36-contact-hours to school based adolescents from the St. Louis metropolitan area.

Participants (n=248) completed a 21-item Reproductive Health Information (RHI) Scale assessing knowledge, behaviors, and attitudes before and after the curriculum was administered.

## Methods

The study used secondary data from baseline and post assessment information

Participants were both male and female, age range 11 – 18 years. Majority (85%) were African American participants.

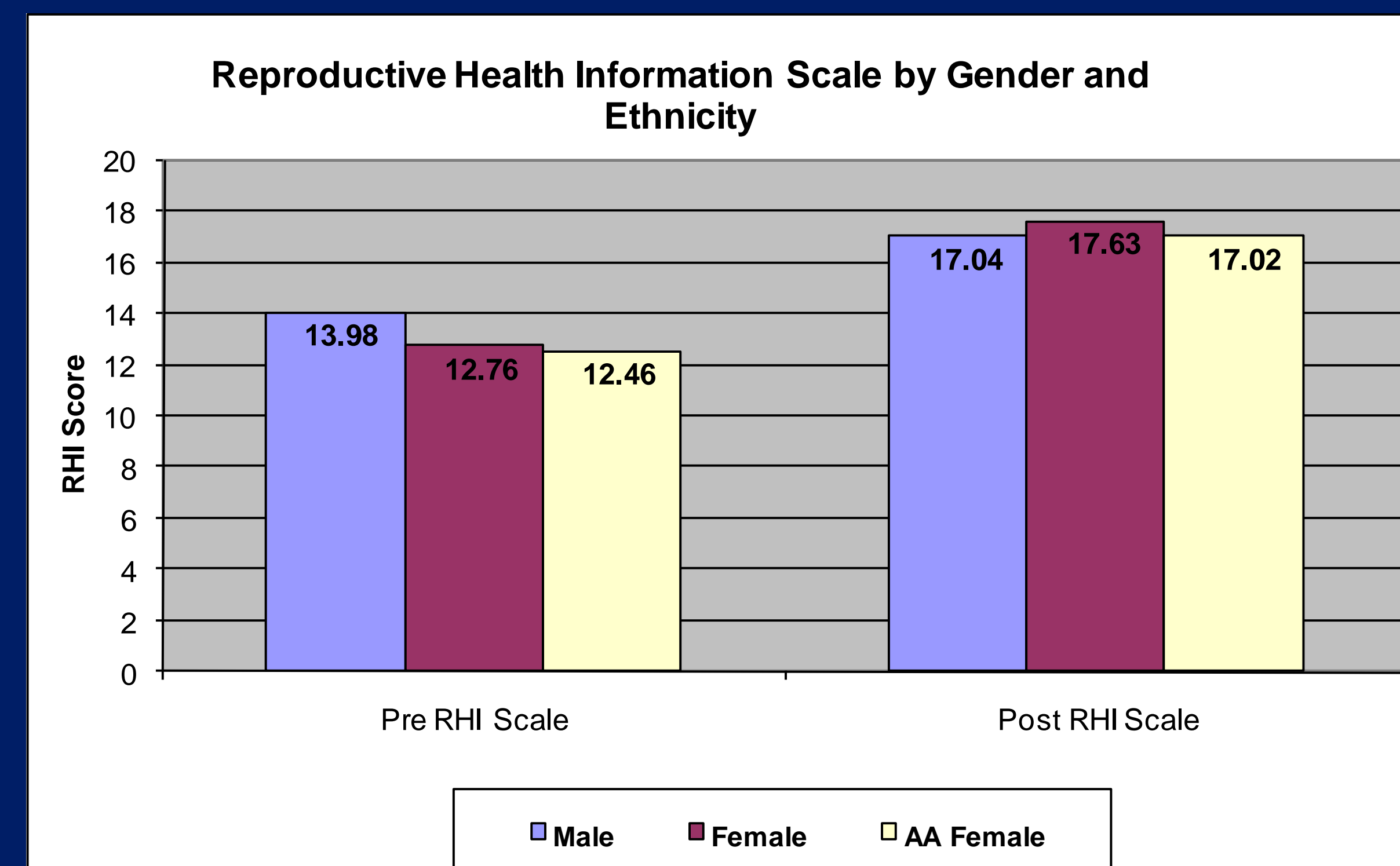
Measures included the Reproductive Health Information Scale with good internal consistency reliability (0.75) measuring knowledge, attitudes, skills and self reported behaviors pertaining to sexuality, reproduction, contraception and STIs.

Other self reported measures assessed communication patterns, sexual behavior, pregnancy and contraception and help seeking behavior pertaining to HIV and STIs.

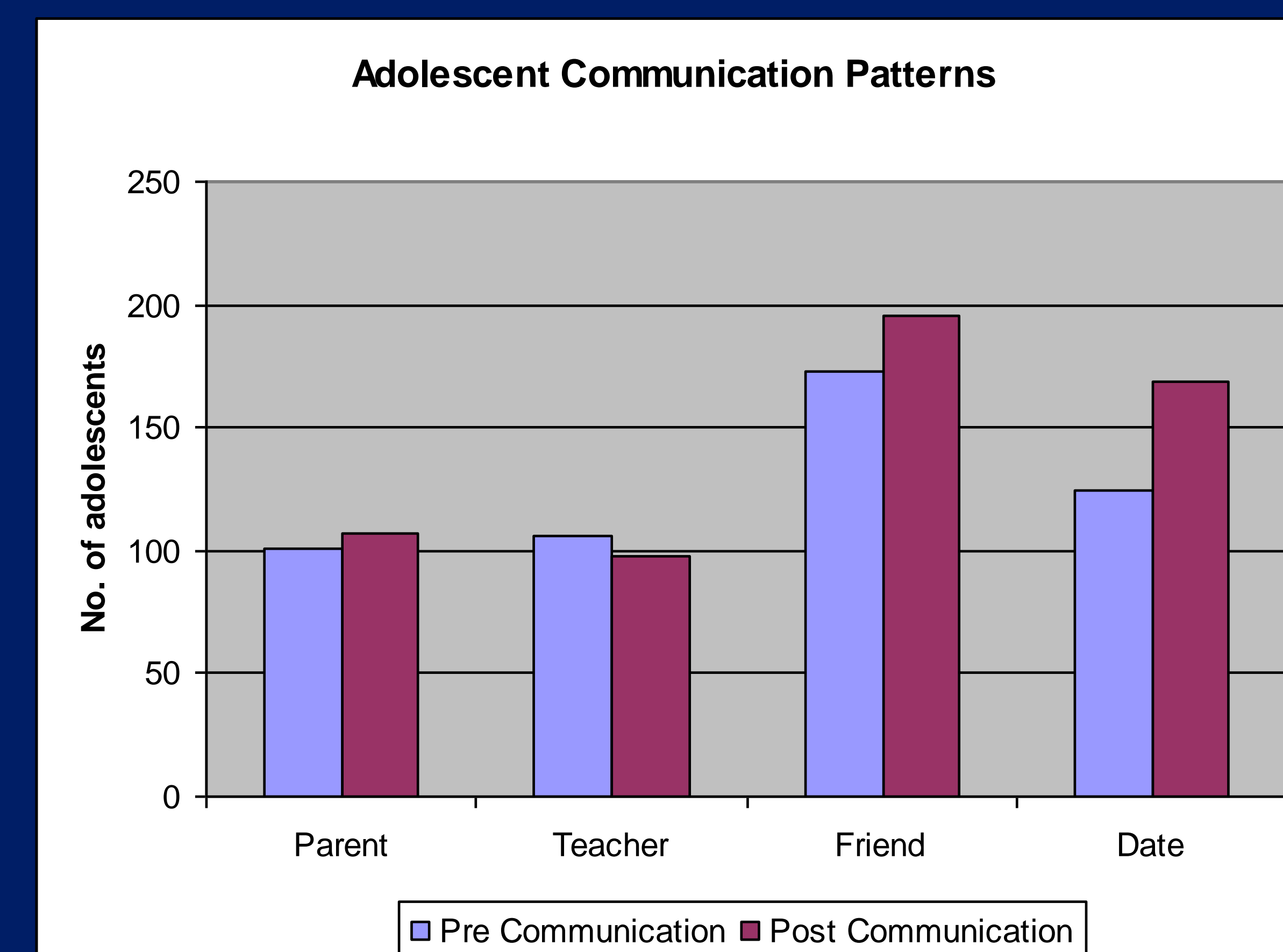
Bivariate and multivariate analyses were conducted to reveal significant predictors of the RHI Scale.

## Results

Adolescent boys and girls in this sample reported being sexually active at an average age of 13 years. Sexuality and reproductive health knowledge was measured by the RHI Scale. The overall RHI score was low at pre test (mean 13.01) with female (mean 12.76) and African American (mean 12.46) participants scoring significantly lower. Such within group differences were eliminated at post assessment [t=-18.19, p<0.0001].



Sexuality related topics were more likely to be discussed with friends and dates, rather than parents, caregivers or teachers. This finding was consistent at both pre and post assessments. At post test, adolescents reported higher comfort levels regarding talking about sexuality related topics with friends and dates.



Ordinary Least Squares Regression analysis revealed significant models accounting for 15.5% and 8.5% of the change in the dependent variable (RHI scale score) at pre and post assessments respectively.

| Pre test for RHI<br>F=55.96***, R <sup>2</sup> =15.5% |  | B      | t        |
|---|--|--------|----------|
| Talking to date about sex                             |  | 0.269  | 8.95***  |
| African American female                               |  | -0.170 | -6.30*** |
| Talking to friend about sex                           |  | 0.078  | 2.63**   |
| Tested for STI  |  | 0.060  | 2.27*    |
| Post test for RHI<br>F=16.49***, R <sup>2</sup> =8.5% |  | B      | t        |
| Saying no to sex                                      |  | 0.187  | 6.05***  |
| Gender  |  | -0.160 | -5.35*** |
| Talking to teacher about problems                     |  | 0.086  | 2.82**   |
| Talking to friend about sex                           |  | 0.080  | 2.49*    |

\*p<0.01; \*\*p<0.001; \*\*\*p<0.0001

## Discussion

This study is important and timely in exploring adolescents' sexual behavior and reproductive health knowledge in the context of Missouri's abstinence-based sexuality education program in effect since 1996. This abstinence based sexuality education program does not mandate contraception information (3).

This study reiterates that adolescents, especially minority females, continue to be at risk for unplanned pregnancies and STIs as they do not have adequate knowledge to protect themselves from unsafe sex, have limited resources in the event that they are infected, and have limited access to medically accurate information.

Adolescents use their peers as the main source of sexuality and reproductive information as parents are not preferred sources of information concerning sexual health or even problems at school.

Females from ethnic minority groups have low sexual and reproductive health knowledge compared to their white counterparts.

## Limitations

School-based adolescents self selected to participate in this study and being underage required parental permission to participate.

Missing data prevented conducting higher level statistical procedures to identify significant predictors of sexual behavior.

Limited information about individual characteristics such as mental health status, family composition, socio economic background limited the identification of significant predictors.

## Conclusion

The intervention was effective in increasing knowledge about reproductive health information. For young adolescents, communication with peers and friends was consistently identified as a significant source of obtaining sexuality and reproductive health related information.

Ongoing information and training needs to be made available to reinforce accurate information. Longitudinal research is needed to assess the retention of knowledge and behavior change over time.

The findings of low reproductive health knowledge combined with self-reported sexual activity and communication with peers about reproductive health information raises concerns about the quality and credibility of the reproductive health education currently provided to Saint Louis adolescents.

## References

1. CDC. Sexually Transmitted Disease Surveillance 2008. Atlanta, GA: U.S. Department of Health and Human Services 2009.
2. Missouri DHSS. Epidemiologic Profiles of HIV, STD, and Hepatitis in Missouri. Bureau of HIV, STD, & Hepatitis: Division of Community and Public Health 2008.
3. Sexuality Information and Education Council of the United States. Missouri State Profile. 2009

## Acknowledgements

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