

The background is a deep blue gradient with a subtle pattern of small white dots. Overlaid on the left side are several concentric circles and a large circular scale with degree markings from 140 to 260. Some of the circles have dashed lines and arrows, suggesting a sense of motion or rotation.

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# TITLE

❖ Knowledge of HIV/AIDS and Attitudes toward Condom Use among African American Men Ages 18 to 35

# AGENDA

## ❖ Chapter One

- ❖ Introduction
- ❖ Background/Significant
- ❖ Statement of the Purpose

## ❖ Chapter Two

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- ❖ Theoretical Frameworks
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- ❖ Hypotheses

## ❖ Chapter Three

- ❖ Design
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## ❖ Chapter Five

- ❖ Strengths
- ❖ Limitations
- ❖ Implementation
- ❖ Recommendation

# CHAPTER ONE: INTRODUCTION



# BACKGROUND OVERVIEW

- ❖ HIV leading cause of death worldwide among individuals ages 15-59 years
- ❖ Third leading cause of death among African American (AA) men 35 – 44 yrs. old
- ❖ Fourth leading cause of death for Latinos of the same age group
- ❖ Very debilitating disease
- ❖ Threat to the economic, society, & political wellbeing of a nation

# SIGNIFICANCE OF THE PROBLEM

- Worldwide, 35 million people are living with HIV
- HIV & AIDS remain a persistent problem for the United States & countries around the world
- CDC (2014), reported that the death rate for Blacks was higher (25.0 per 100,000) compared with any other racial ethnic groups
- AA represented 49% of all deaths with HIV in 2010
- AA men accounted for 42% of HIV cases diagnosed among men in 2012
- AA men are at a higher risk, with a 1 in 16 lifetime chance of acquiring HIV, compared to White men, who bear a 1 in 104 risk

# PURPOSE OF THE STUDY

- ❖ To determine whether attitude towards condom use differed according to knowledge of HIV/AIDS, and demographics such as age, education, income, length of relationships, and years sexually active among AA men.

# CHAPTER TWO: LITERATURE REVIEW



# METHODS OF REVIEW

- ❖ MEDLINE, PsychINFO, Academic Search Premier, PubMed, Science Direct, SpringerLink, The Cochrane Library, Journals@Ovid, PsychiatryOnline and CINAHL (Jan 1995- February 2017)
- ❖ Key search words and phrases were:
  - ❖ HIV/AIDS, African American men, People Living with HIV/AIDS (PLWHA), health care behaviors, and attitudes towards condoms
- ❖ The search yielded a total of 18,239 citations
- ❖ Articles reviewed for relevance

# ATTITUDE TOWARDS CONDOMS

- ❖ Ramiro, Reis, de Matos, & Diniz, (2012) found that:
  - ❖ Despite poor knowledge of HIV/AIDS transmission and prevention, males participant had a positive attitude towards condom use
- ❖ Geter & Cosby (2014) concluded:
  - ❖ Condom refusal stems from belief that sexual enjoyment is compromised by condom use

# ATTITUDE TOWARD CONDOM USE

- ❖ Masoda, & Govender, (2013) found:
  - ❖ 24% of the 138 University students in the Democratic Republic of Congo had negative attitudes towards using condoms
- ❖ Cornelius et. al, (2013) found:
  - ❖ Attitude toward condom use were associated with both gender and age. Gender interacted with time
  - ❖ Older men had more positive attitudes toward condoms than younger men

# KNOWLEDGE OF HIV/AIDS

- ❖ Klein, Sterk, & Elifson, (2016), found:
  - ❖ low knowledge of HIV in a community sample of urban African Americans in the South despite community-based efforts to improve HIV knowledge.
- ❖ Niccolai, Farley, Ayoub, Magnus, & Kissinger, (2002) found:
  - ❖ HIV-infected individuals had poor knowledge regarding their partners' infection status which may influence sexual behaviors that results in increased transmission.
- ❖ Pellowski et, al. (2013) theorizes:
  - ❖ Poor knowledge of HIV/AIDS transmission increases risk of HIV infection among AA men ages 18 through 35



# KNOWLEDGE OF HIV/AIDS

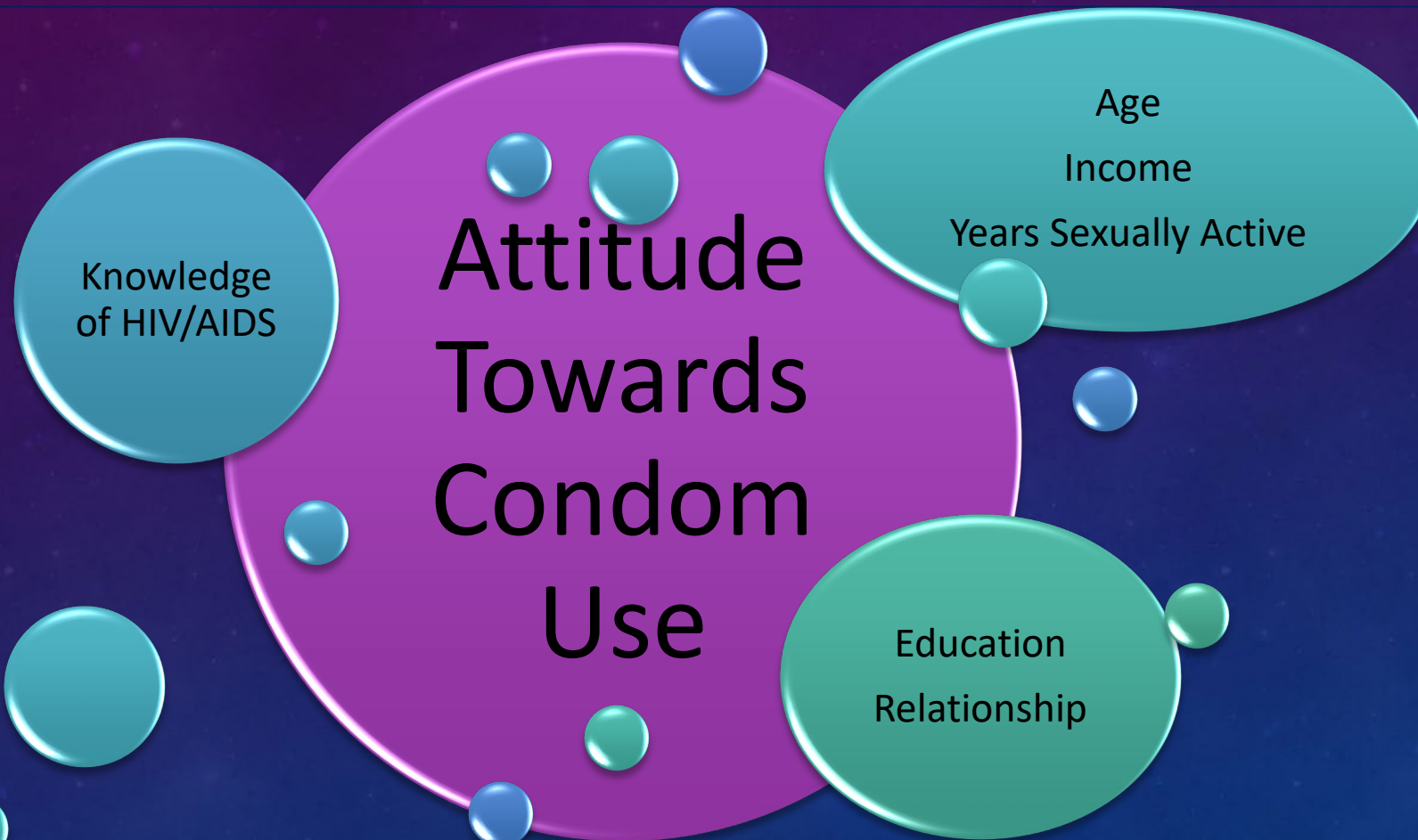
- ❖ Nelson, et al (2015) found:
  - ❖ Participants from Ghana who reported consistent condom use also reported greater HIV knowledge
- ❖ Memish, Filemban, Kasule, & Al-Tawfiq, (2015) found:
  - ❖ A significant proportion of the participants (78.3%) who had not heard about HIV/AIDS were men.

# THEORETICAL FRAMEWORKS

Tenets from three main theories were used as a framework for this study:

- Theory of Reasoned Action (Ajzen & Fishbein, 1980; Al-Suqri & Al-Kharusi, 2015) provided the theoretical basis for understanding attitudes.
- The Health Belief Model (Rosenstock, 1966) was used to propose a way of explaining the role of knowledge in relationship to behavior.
- Social Cognitive Theory (Bandura, 1986) was used to better understand AA men's attitudes toward condom use.

# HYPOTHESIZED CONCEPTUAL MODEL



# RESEARCH QUESTIONS

- ❖ Are attitudes toward condom use related to knowledge of HIV/AIDS, and demographics such as age, education, income, length of relationships, and years sexually active among AA males?
- ❖ Does knowledge of HIV/AIDS affect attitudes toward condom use among AA males?



# STUDY HYPOTHESES

- ❖ Four hypotheses were tested to answer the research questions
- ❖ Ho1: Knowledge of HIV/AIDS is not related to attitude towards condom use.
- ❖ H<sub>A</sub>1: Knowledge of HIV/AIDS is related to attitude toward condom use.
- ❖ Ho2: Age, income, and years sexually active are not related to attitude towards condom use
- ❖ H<sub>A</sub>2: Age, income, and years sexually active are related to attitude towards condom use
- ❖ Ho3: Length of relationship and Educational level are not related to attitude toward condom use
- ❖ H<sub>A</sub>3: Length of relationship and Educational level are related to attitude toward condom use
- Ho4: Knowledge of HIV/AIDS does not affect attitude toward condom use.
- H<sub>A</sub>4: Knowledge of HIV/AIDS affects attitude toward condom use.

# CHAPTER THREE: METHOD

# RESEARCH DESIGN

- ❖ This was a quantitative study with descriptive correlational design and simple linear regression
- ❖ Dependent variable was attitude towards condom use
- ❖ Independent variable was:
  - ❖ knowledge of HIV/AIDS,
  - ❖ demographic characteristics were:
    - ❖ age
    - ❖ level of education
    - ❖ income
    - ❖ length of relationship
    - ❖ years of sexual activity

## MCAS Multidimensional Condom Attitudes Scale

Please respond to all questions even if you are not sexually active or have never used (or had a partner who used) condoms. In such cases indicate how you think you would feel in such a situation.

Choose a number on the scale below that best represents your feelings about each statement. There are no right or wrong responses to any of these statements. Write the number that best represents your opinion in the blank beside each question.

|                   |          |                   |   |                |       |                |
|-------------------|----------|-------------------|---|----------------|-------|----------------|
| Strongly Disagree | Disagree | Slightly Disagree |   | Slightly Agree | Agree | Strongly Agree |
| 1                 | 2        | 3                 | 4 | 5              | 6     | 7              |

- \_\_\_\_\_ 1. It is really hard to bring up the issue of using condoms to my partner.
- \_\_\_\_\_ 2. Use of a condom is an interruption of foreplay.
- \_\_\_\_\_ 3. Women think men who use condoms are jerks.
- \_\_\_\_\_ 4. Condoms are an effective method of preventing the spread of AIDS and other sexually transmitted diseases.
- \_\_\_\_\_ 5. I always feel really uncomfortable when I buy condoms.
- \_\_\_\_\_ 6. Condoms are unreliable.
- \_\_\_\_\_ 7. When I suggest using a condom I am almost always embarrassed.
- \_\_\_\_\_ 8. Condoms ruin the sex act.
- \_\_\_\_\_ 9. I think condoms are an excellent means of contraception.
- \_\_\_\_\_ 10. I don't think that buying condoms is awkward.
- \_\_\_\_\_ 11. It is very embarrassing to buy condoms.
- \_\_\_\_\_ 12. It is easy to suggest to my partner that we use a condom.
- \_\_\_\_\_ 13. If a couple is about to have sex and the man suggests using a condom, it is less likely that they will have sex.
- \_\_\_\_\_ 14. Condoms do not offer reliable protection.
- \_\_\_\_\_ 15. Condoms are a lot of fun.
- \_\_\_\_\_ 16. I never know what to say when my partner and I need to talk about condoms or other protection.
- \_\_\_\_\_ 17. It would be embarrassing to be seen buying condoms in a store.
- \_\_\_\_\_ 18. People who suggest condom use are a little bit geeky.
- \_\_\_\_\_ 19. The use of condoms can make sex more stimulating.
- \_\_\_\_\_ 20. Condoms are an effective method of birth control.
- \_\_\_\_\_ 21. I'm comfortable talking about condoms with my partner.
- \_\_\_\_\_ 22. Men who suggest using a condom are really boring.
- \_\_\_\_\_ 23. When I need condoms, I often dread having to get them.
- \_\_\_\_\_ 24. A woman who suggests using a condom does not trust her partner.
- \_\_\_\_\_ 25. Condoms are uncomfortable for both parties.

Source. Copyright © 1994 by the American Psychological Association. Adapted with permission. The official citation that should be used in referencing this material is Helweg-Larsen, M., & Collins, B. E. (1994). The UCLA Multidimensional Condom Attitudes Scale: Documenting the complex determinants of condom use in college students. *Health Psychology, 13*, 224–237.

## INSTRUMENTS

- 5-items were chosen from the 25-item Multidimensional Condom Attitude Scale that had established reliability and validity among numerous groups (Helweg-Larsen & Collins, 1994).



# INSTRUMENTS

- 5-items were chosen from the 45-item HIV Knowledge Questionnaire that had a Cronbach alpha of .83-91. Validity of the 45-item HIV-KQ was established by a panel of experts and discriminant analysis (Carey, Morrison-Beedy & Johnson, 1997)

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| For each statement, please circle True (T), False (F), or I Don't Know (DK). If you do not know, please do not guess; instead, please circle "DK." |      |       |            |
|--|------|-------|------------|
|  | True | False | Don't Know |
| 1. HIV and AIDS are the same thing.  | T    | F     | DK         |
| 2. There is a cure for AIDS.   | T    | F     | DK         |
| 3. A person can get HIV from a toilet seat.  | T    | F     | DK         |
| 4. Coughing and sneezing DO NOT spread HIV.  | T    | F     | DK         |
| 5. HIV can be spread by mosquitoes.  | T    | F     | DK         |
| 6. AIDS is the cause of HIV.   | T    | F     | DK         |
| 7. A person can get HIV by sharing a glass of water with someone who has HIV.  | T    | F     | DK         |
| 8. HIV is killed by bleach.  | T    | F     | DK         |
| 9. It is possible to get HIV when a person gets a tattoo.  | T    | F     | DK         |
| 10. A pregnant woman with HIV can give the virus to her unborn baby.   | T    | F     | DK         |
| 11. Pulling out the penis before a man climaxes/cums keeps a woman from getting HIV during sex.  | T    | F     | DK         |

|  | True | False | Don't Know |
|--|------|-------|------------|
| 17. A person with HIV can look and feel healthy.   | T    | F     | DK         |
| 18. People who have been infected with HIV quickly show serious signs of being infected.       | T    | F     | DK         |
| 19. A person can be infected with HIV for 5 years or more without getting AIDS.                | T    | F     | DK         |
| 20. There is a vaccine that can stop adults from getting HIV.                                  | T    | F     | DK         |
| 21. Some drugs have been made for the treatment of AIDS.                                       | T    | F     | DK         |
| 22. Women are always tested for HIV during their pap smears.                                   | T    | F     | DK         |
| 23. A person <u>cannot</u> get HIV by having oral sex, mouth-to-penis, with a man who has HIV. | T    | F     | DK         |

# INSTRUMENTS

Paper and pencil questionnaire were used to collect data.

## ❖ Knowledge

- ❖ Five true/false questions were used to measure HIV/AIDS knowledge.
- ❖ Respondents who marked Don't Know were scored as an incorrect answer.
- ❖ Each question was worth 20-points, the higher the test score, the more knowledge of HIV/AIDS.

## ❖ Attitude

- ❖ Five questions measured attitudes towards condom use on a 7-point Likert-type scale, ranging from Strongly Agree to Strongly Disagree.
- ❖ Total scores from five questions range from 5 - 35; the higher the score, the more positive attitude toward condom use.

Cronbach Alpha was .724 among the AA men of this dissertation

## Appendix E: Survey Questionnaire



Nursing Leadership Education (Ph. D.) Department of Nursing  
Young African American Men's Survey Questionnaire

### HIV Knowledge

Many of the questions we will be asking related to sexual matters and it is possible that you may feel a bit uncomfortable. But please remember that your responses are completely confidential and that you may indicate if there are any questions you do not wish to answer.

I would like to ask you some general questions about AIDS. Your answer can be "True", "False.", or "I Don't Know".

|  | True | False | Don't Know |
|--|------|-------|------------|
| 1) HIV and AIDS are the same thing.  |      |       |            |
| 2) There is a cure for AIDS.   |      |       |            |
| 3) Pulling out the penis before a man climaxes/cums keeps a man from getting HIV during sex. |      |       |            |
| 4) A person cannot get HIV by having oral sex, mouth-to-penis, with a man who has HIV.       |      |       |            |
| 5) A person can be infected with HIV for 5 years or more without getting AIDS                |      |       |            |

### Condom Usage Attitude

There are no right or wrong responses to any of these statements. Write the number that best represents your opinion in the blank beside each question.

|  | Strongly Disagree | Disagree | Slightly Disagree | Neutral | Slightly Agree | Agree | Strongly Agree |
|--|-------------------|----------|-------------------|---------|----------------|-------|----------------|
| 1) Use of a condom is an interruption of foreplay.       |                   |          |                   |         |                |       |                |
| 2) Condoms are unreliable.                               |                   |          |                   |         |                |       |                |
| 3) Condoms ruin the sex act.                             |                   |          |                   |         |                |       |                |
| 4) People who suggest condom use are a little bit geeky. |                   |          |                   |         |                |       |                |
| 5) Condoms are uncomfortable for both parties.           |                   |          |                   |         |                |       |                |

Thank you for completing the questions above. Please share your background information.

|           |  |  |                                       |                             |
|-----------|--|--|---------------------------------------|-----------------------------|
| Age _____ | Education _____<br>1) Grade School<br>2) High School<br>3) Associate Degree<br>4) Bachelor's Degree<br>5) Master's Degree<br>6) Doctorate Degree | In a committed Relationship _____<br>1) No<br>2) Less than one year<br>3) 1-3 year<br>4) More than 3 years | Annual Income _____<br>Example: \$40K | Years sexually active _____ |
|-----------|--|--|---------------------------------------|-----------------------------|

# PROTECTION OF HUMAN SUBJECTS

- ❖ Kean and St. Michael's IRB approvals were obtained
- ❖ Confidentiality was ensured through the use of aggregate result format because this study involved more than minimal risk to the participants due to the collection of sensitive information.
- ❖ Only aggregate data is shared, no responses were linked to individual participant.



# PROCEDURE FOR DATA COLLECTION

- Recruitment Flyers were placed at the front entrance of the Infectious Disease Clinic of St. Michael's Hospital and at the bulletin boards of the faith-based organizations/Community Centers.
- Potential participants were giving information on how to individually contact the Principal Investigator (PI) if interested in the study.
- Interested participants were then sequestered into a pre-arranged private conference room at the Faith-based Organizations/Community Centers and into a private examination room at St. Michael's .
- Once situated in the private rooms, the purpose of the study was announced to the participant.
- Voluntary participation was emphasized, as well as the confidentiality/anonymity of data collected.
- Data collection lasted about 15 – 20 mins per participant.

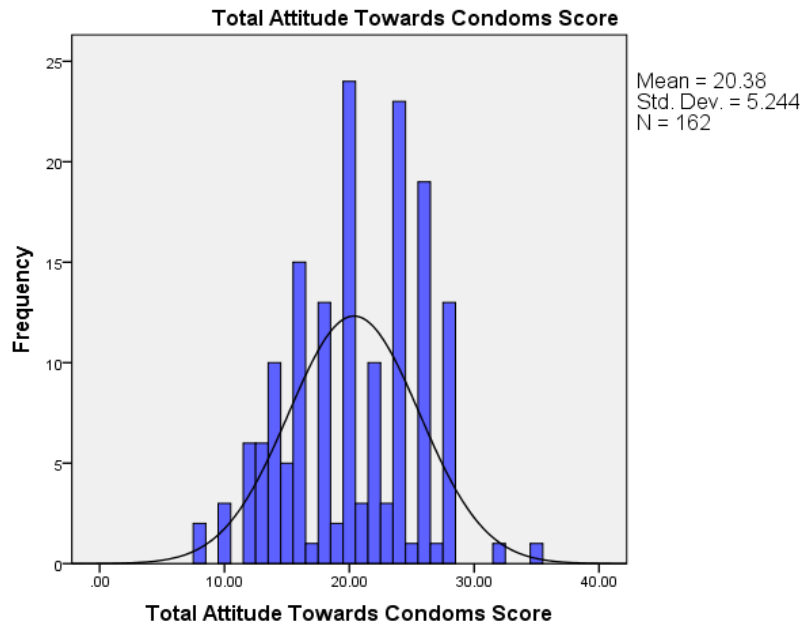


# DATA ANALYSIS

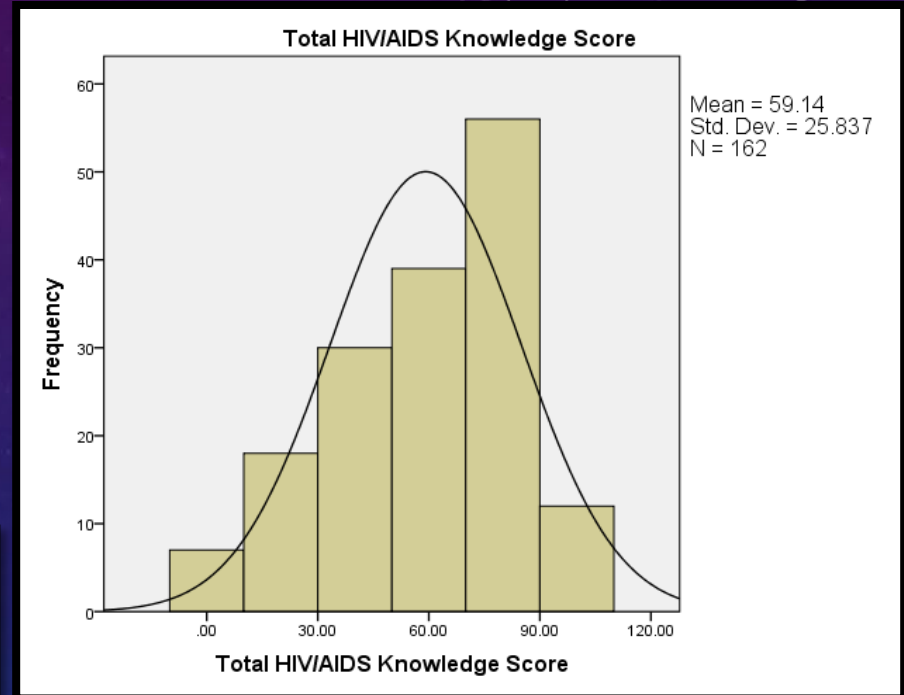
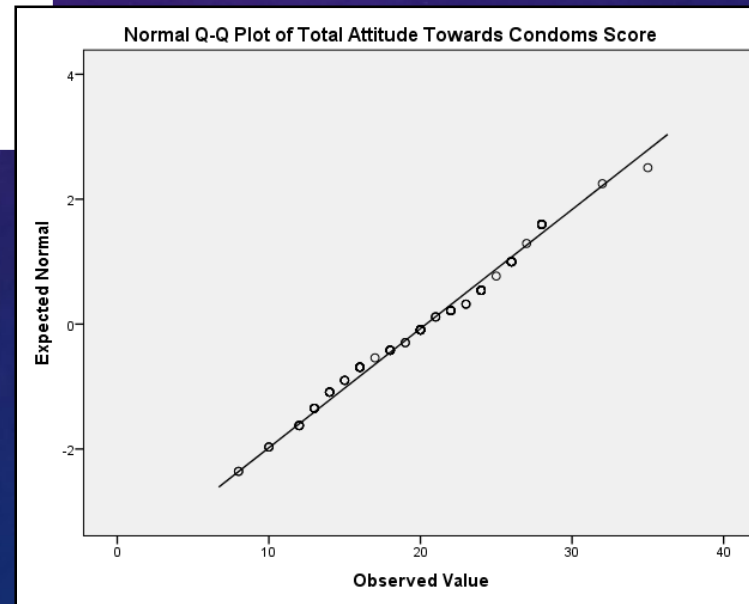
- ❖ Data was analyzed using:
  - ❖ IBM SPSS version 23.0
  - ❖ Frequency distribution
  - ❖ Descriptive statistics (Mean, Standard Deviation, Range)
  - ❖ Pearson and Spearman correlation
  - ❖ Scatter Plot
  - ❖ Cronbach Alpha
  - ❖ Simple Linear Regression

# CHAPTER FOUR RESULTS

# DATA DISTRIBUTION



Skewness =  $-.10$



Skewness =  $-.50$

| Variables                   | Mean   | SD      |
|-----------------------------|--------|---------|
| Attitude towards condom use | 20.38  | 5.24    |
| Knowledge of HIV/AIDS       | 59.13  | 25.83   |
| Age                         | 24.06  | 3.35    |
| Income                      | 27.17  | 5.97    |
| Years sexually active       | 2.13   | 1.86    |
| Level of Education          | Number | Percent |
| High School                 | 20     | 12.4    |
| Associate Degree            | 70     | 43.2    |
| Bachelor's Degree           | 53     | 32.9    |
| Master's Degree             | 18     | 11.2    |
| Length of Relationship      |        |         |
| Not in a relationship       | 19     | 11.8    |
| Less than 1 Year            | 30     | 18.6    |
| 1-3 Years                   | 48     | 29.8    |
| More than 3 Years           | 64     | 39.8    |

(n=162 men)

SAMPLE



# DESCRIPTIVE ANALYSIS

| Attitude Towards Condom Use                           | Strongly Disagree | Disagree | Slightly Disagree | Neutral | Slightly Agree | Agree | Strongly Agree |
|---|-------------------|----------|-------------------|---------|----------------|-------|----------------|
| Use of a condom is an interruption of foreplay.       | 2.4%              | 17.9%    |                   | 66.7%   | .6%            | 9.9%  | 2.5%           |
| Condoms are unreliable.                               | 3.7%              | 49.4%    |                   | 34.6%   |                | 12.3% |                |
| Condoms ruin the sex act.                             | 2.5%              | 35.8%    | .6%               | 14.2%   |                | 37%   | 9.9%           |
| People who suggest condom use are a little bit geeky. | 1.2%              | 3.7%     | .6%               | 89%     | 1.2%           | 3.1%  | 1.2%           |
| Condoms are uncomfortable for both parties.           | 1.9%              | 25.9%    |                   | 30.8%   |                | 27.2% | 14.2%          |

# DESCRIPTIVE ANALYSIS

| HIV/AIDS Knowledge Questions  | Correct |
|---|---------|
| HIV and AIDS are the same thing.  | 82.1%   |
| There is a cure for AIDS.   | 81.5%   |
| Pulling out the penis before a man climaxes/cums keeps a man from getting HIV during sex. | 45.7%   |
| A person cannot get HIV by having oral sex, mouth-to-penis, with a man who has HIV.       | 45.7%   |
| A person can be infected with HIV for 5 years or more without getting AIDS                | 40.7%   |

# HYPOTHESES

❖ Hypothesis 1 & 2 were supported, meaning we rejected the null hypotheses

|   | 1      | 2      | 3      | 4      | 5       | 6      | 7 |
|---|--------|--------|--------|--------|---------|--------|---|
| 1. Age                                  | 1      |        |        |        |         |        |   |
| 2. Education                            | .727** | 1      |        |        |         |        |   |
| 3. Length of Relationship               | .452** | .332** | 1      |        |         |        |   |
| 4. Income                               | .791** | .769** | .446** | 1      |         |        |   |
| 5. Years Sexually Active                | .427** | .300** | .493** | .308** | 1       |        |   |
| 6. Total HIV/AIDS Knowledge Score       | .411** | .418** | .211** | .481** | .176*   | 1      |   |
| 7. Total Attitude Towards Condoms Score | .204** | .149   | .058   | .299** | -.230** | .394** | 1 |

\*\* . Correlation is significant at the 0.01 level (2-tailed).

\* . Correlation is significant at the 0.05 level (2-tailed).

❖ Ho1: Knowledge of HIV/AIDS is not related to attitude towards condom use.

❖ Ho2: Age, income, and years sexually active are not related to attitude towards condom use

# HYPOTHESIS 3

❖Ho3: Length of relationship and Educational level are not related to attitude toward condom use

- ❖ Could not reject the null hypothesis
- ❖ Spearman Correlation showed:
  - ❖ Education ( $p = .07$ ) not related to attitude towards condom use
  - ❖ Length of relationship ( $p = .46$ ) not related to attitude towards condom use

|   | 1      | 2      | 3      | 4      | 5       | 6      | 7     |
|---|--------|--------|--------|--------|---------|--------|-------|
| 1) Age                                  | 1.000  |        |        |        |         |        |       |
| 2) Education                            | .719** | 1.000  |        |        |         |        |       |
| 3) Length of Relationship               | .477** | .339** | 1.000  |        |         |        |       |
| 4) Income                               | .808** | .792** | .475** | 1.000  |         |        |       |
| 5) Years Sexually Active                | .403** | .323** | .483** | .314** | 1.000   |        |       |
| 6) Total HIV/AIDS Knowledge Score       | .419** | .414** | .199*  | .488** | .179*   | 1.000  |       |
| 7) Total Attitude Towards Condoms Score | .230** | .142   | .058   | .258** | -.257** | .390** | 1.000 |



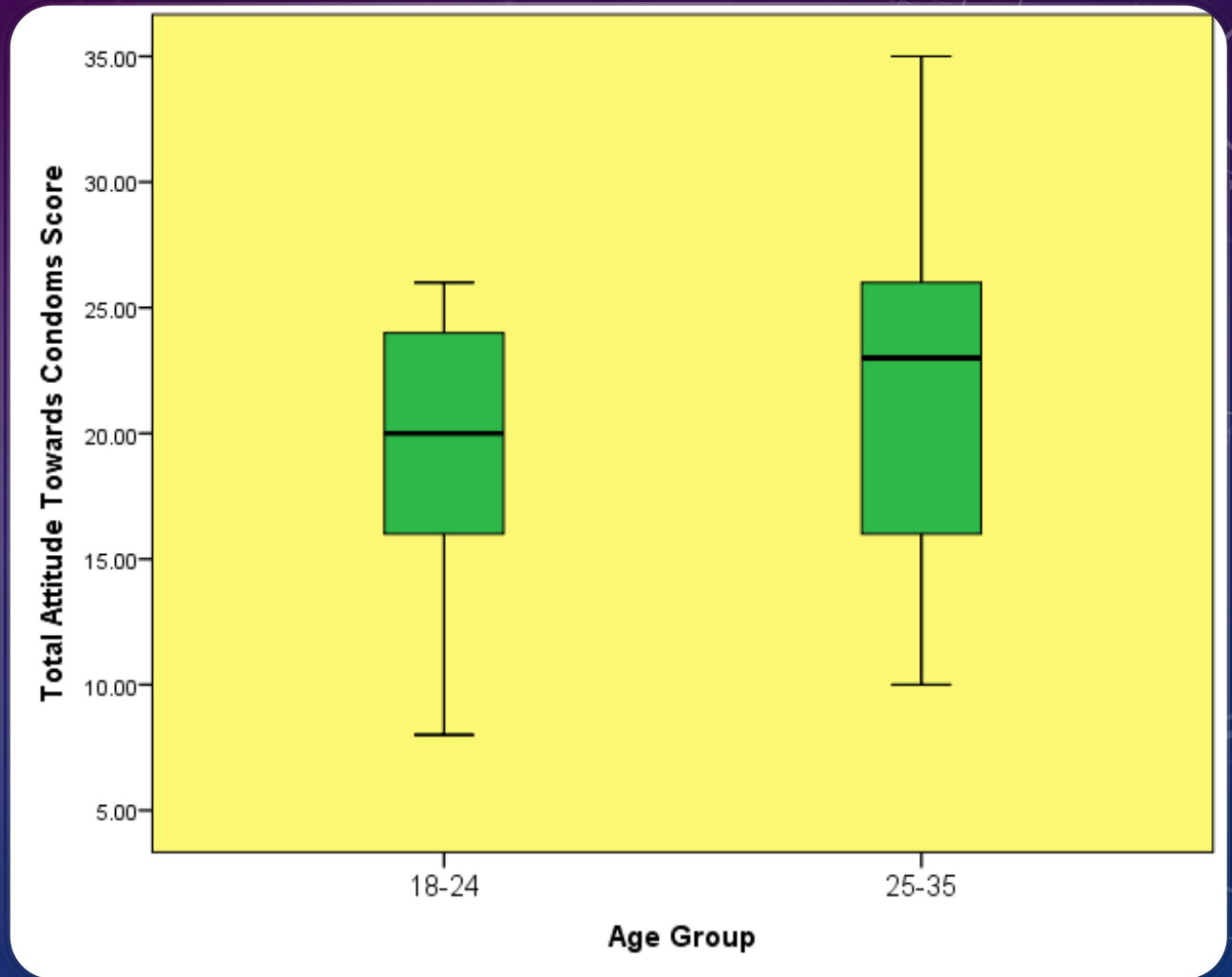
# HYPOTHESIS 4

Ho4: Knowledge of HIV/AIDS does not affect attitude toward condom use.

- The Null Hypothesis was: Knowledge of HIV/AIDS does not affect attitude towards condom use.
- To determine whether Knowledge of HIV/AIDS affects attitude toward condom use, a **simple linear regression** was conducted. Knowledge of HIV/AIDS was found to predict 15% of the variance in attitude towards condom use [ $R = .394$ ,  $R^2 = .155$ ,  $F(1,160) = 29.381$ ,  $p = .000$ ].

# ANCILLARY ANALYSIS

An independent-sample  $t$ -test was conducted to evaluate whether there was a significant difference in attitude towards condom use based on the participants' age group. The  $t$ -test  $t(160) = -2.58$ ,  $p = .011$  was significant showing that the participants in the age group 18-24 had a mean score of 19.42, ( $SD = 4.54$ ), and the age group 24-35 had a statistically significant higher mean score of 21.53, ( $SD = 5.80$ )



# CHAPTER FIVE: DISCUSSION, IMPLICATIONS, AND RECOMMENDATIONS

# DISCUSSION

- ❖ Unlike this dissertation, Harris, Sutherland, & Hutchinson (2013) reported more positive attitude toward condom among young AA men ( $n=138$ ,  $M = 20.1$ ,  $SD = 1.5$ ) who had increased communication with their parents about sex. This may be due in part to the fact that the participants for this dissertation may not have had an open communication with their parents about sex.
- ❖ Literature suggests that if young people were equipped with adequate knowledge of HIV/AIDS their attitudes toward condom use would improve (Beltzer, et.al, 2013; Cornelius, et. al, 2013).



# STUDY STRENGTHS

- ❖ A large population of AA men were in the geographic area of New Jersey where recruitment took place.
- ❖ A major hospital in this urban area was used for recruitment
- ❖ Several other faith based organizations in the same area were used in the recruitment process ( A total of four sites).

# LIMITATIONS

- ❖ The non-experimental, descriptive correlational design limits generalizability (Salkind, 2013).
- ❖ The study's results cannot be generalized to all AA men.
- ❖ This study included modified self-administered sexual health surveys.

# IMPLICATIONS

- ❖ Since this dissertation found decreased knowledge of HIV/AIDS and negative attitude towards condom use, and the literature provides evidence (Kennedy, et. al, 2007) that educational programs improve knowledge, health care providers should develop educational interventions to improve HIV/AIDS knowledge, attitude toward condom use and combat the high prevalence of HIV/AIDS in this population.
- ❖ Further research is also needed to determine physiological factors that influence sexual activity among young AA men.



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# QUESTIONS

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