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# A study of the relationship between self-esteem and high-risk sexual behaviors in college- aged black women

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A Study of the Relationship Between Self-Esteem and  
High-Risk Sexual Behaviors in College- Aged Black Women

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An Honors Program Project Presented to  
the Faculty of the Undergraduate  
College of Health and Behavioral Studies  
James Madison University

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by Deborah Patrice Cameron

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Accepted by the faculty of the Department of Health Sciences, James Madison University, in partial fulfillment of the requirements for the Honors Program.

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## **Acknowledgements**

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## **Abstract**

The purpose of this research study was to examine the relationship between self-esteem and high-risk sexual behaviors. This project aimed to determine if there was a significant difference in this relationship in Black females and non-Black females. Exploring self-esteem and high-risk sexual behaviors could enhance sexual health programs. A pilot survey was developed to measure high-risk behaviors, self-esteem and intentions of practicing safe sex. The survey was distributed via email to all female undergraduate students attending James Madison University during the Spring 2015 semester. SPSS was used to analyze the data collected. The participants of the study (n=268) were given scores based on their responses in the categories of risk behaviors, self-esteem and intentions. It was found that Black females have significantly higher self-esteem than their non-Black counterparts using the t-test ( $p=0.018$ ). Findings of this study also suggested high-risk behavior and self-esteem have no correlation ( $p=0.051$ ). High-risk behaviors and intentions to practice safe sex also had no correlation ( $p=0.014$ ). Neither of these correlations were statistically significant and both were found using Pearson's correlation. Of the 268 participants, only 21 were Black. In the future, a larger scale study where all races were equally represented may lead to more generalizable and significant results. Future studies on this topic should also examine the origin of high or low self-esteem.

## **Chapter 1**

### **Introduction**

The purpose of this research project was to explore the correlation between self-esteem and high-risk sexual behaviors of college-aged Black women. This research project is beneficial because there have been mixed results in past research (Mendolia, 2014; Swenson, 2012). Some concluded self-esteem and high risk sexual behaviors have no relationship (Goodson, 2010; Ethier, 2006) and others concluded self-esteem and high-risk sexual behaviors have a strong relationship (Faloon, n.d.; Adams, 2010). This research is relevant because studies that determined a strong correlation between these two factors suggest implementing programs that increase self-esteem will decrease high-risk sexual behaviors (Wild, 2004).

According to a previous study, future research should be facet-specific, meaning the research should look at a particular group of individuals with a commonality such as gender for accurate results (Goodson, 2006). A strength of the current project is that it compared college-aged Black women with college-aged non-Black women. In a study of White and Black adolescent females (Malanchuk & Eccles, 1999) it was determined that while the level of self-esteem of the two groups did not vary significantly, the source of self-esteem did. According to the authors, self-esteem among Black females developed from familial relationships while self-esteem among White females was deep-rooted more in their social lives at school (Malanchuk & Eccles, 1999).

The present study had several limitations. First, data were collected at one Mid-Atlantic University and the results may not be generalizable to the larger college aged, Black female community. Second, historically Blacks have been apprehensive to participate in studies. Between the years of 1932 and 1972, 600 impoverished Black

sharecroppers were used so researchers could study the natural progression of syphilis (Center for Disease Control and Prevention [CDC], 2013). These men were not aware that they were participating in a study, that they could be treated, or that they even had syphilis (CDC, 2013). This study was found to be unethical and may be the root of Black distrust in participating in research studies to this day. Third, dishonesty in the sample of all females who participated in the study may also be a limitation.

Self-esteem is the way we value ourselves as well as how valuable we view ourselves to be to others (UCDavis, n.d.). High-risk sexual behaviors include: unprotected vaginal, anal or oral sex, early sexual activity before age 18, multiple sex partners, exchanging sex for money and/or drugs and having a sexual partner who has ever injected drugs (WebMD, 2012). The current study attempted to answer the following questions: What is the relationship between self-esteem and high-risk sexual behaviors among college-aged women? How does the relationship between self-esteem and high-risk sexual behaviors differ between women of different ethnicities? How does the relationship between self-esteem and high-risk sexual behaviors differ between intentions and actions? The assumption is that as self-esteem decreases, high-risk sexual behaviors increase. It is also plausible that several factors link self-esteem and high-risk sexual behaviors, such as familial relations, self-efficacy, depression, and social status.

## **Chapter 2**

### **Literature Review**

Wild, Flisher, Bhana & Lombard (2004) conducted a study evaluating self-esteem across peers, school, family, sports/athletics, body image and global self-worth using a representative sample of multiple races. Lower self-esteem in a family setting and among peers were found to have a strong correlation with risky behaviors in both males and females. Negative body image and feelings of self-worth globally in relation to risky behaviors were found to be significant mostly in females (Wild et al., 2004). Overall according to these findings, interventions aimed at promoting positive self-esteem were most effective in discouraging high-risk sexual behaviors (Wild et al., 2004). The factors self-esteem and sexual behaviors were also found to have a strong correlation in a longitudinal study examining self-concept in women (Hensel, Fortenberry, O'Sullivan & Orr, 2011). The results of this study stated self-esteem was a result of personal sexual behaviors and whether or not the female was anxious, reserved, and/or comfortable during intercourse (Hensel et al., 2011).

Using a pool of adolescents from several difference races, a study by Goodson, Buhi & Dunsmore (2006) measured the relationship between self-esteem and sexual behaviors, attitudes, and intentions. This study found that there was no statistically significant correlation between any of the factors. The study did not differentiate between sex or age of the participants. The researchers of this study concluded that self-esteem was trivial in healthy sexual behavior interventions (Goodson et al., 2006).

In a study by Travis & Bowman (2012) results linked the content of rap music, which is prevalent within Black culture, with a range of unhealthy sexual behaviors. Rap music is known to have themes of violence, aggression, and belittlement towards women. Travis and Bowman

(2012) specifically highlighted the fact that several forms of media have a strong effect on this generation, including the music. In Blacks especially, sense of ethnic identity and self-esteem have a strong correlation with many factors such as risky sexual behaviors among ages 18-24 (Travis & Bowman, 2012). Overall, the study found that Black males were more likely to have a music-influenced risk in relation to positive self-esteem and lower sexual risk behaviors than their Black female counterparts (Travis

& Bowman, 2012). Bucchiarneri, Eisenbert, Wall, Piran & Neumark-Sztainer (2013) studied self-esteem factors in mostly Black (81%) young people. Unhealthy behaviors were linked to lower self-esteem and negative body image in both males and females. Females were found to have more depressive symptoms in relation to negative self-esteem (Bucchiarner et al., 2013).

In past years, Whites were believed to have higher self-esteem in relation to Blacks. Research has actually shown that Blacks have higher self-esteem than Whites, Asians and Hispanics (Sprecher, Brooks & Avogo, 2012). Black males in particular have the highest self-esteem among races and both genders. Sprecher, Brooks, & Avogo (2012) found that self-esteem did not differ among social classes, domains, or even periods of time. Consistent with the previous study, Portia Adams (2010) determined White females have a lower overall self-esteem than Black females. White females reported significantly higher levels of self-deprecation than did Black females in all social and life situations (Adams, 2010). Additionally, Black females had a higher locus of control (Adams, 2010). Locus of control is a person's belief that outcomes are dependent on what they do or outside forces (AboutEducation, 2014). A study conducted by Faloon (n.d) at Ohio State University found that self-esteem and high-risk sexual behaviors have a statistically significant correlation across several races. In order to assess self-esteem,

participants (ages 18-27) were asked how they felt about their personal qualities (Faloon, n.d.). This study also examined how low self-esteem could be linked with higher consumption of alcohol, multiple sex partners and behaviors that could potentially increase risk of contracting HIV (Faloon, n.d.).

Women who reported to have more of a negative self-worth overall had additional negative attitudes towards the proper use of condoms and higher rates of illegal drug use in comparison to women with higher self-worth (Faloon, n.d.).

## **Chapter 3**

### **Methodology**

The current study answered the following questions: What is the relationship between self-esteem and high-risk sexual behaviors among college-aged women? How does the relationship between self-esteem and high-risk sexual behaviors differ between women of different ethnicities? How does the relationship between self-esteem and high-risk sexual behaviors differ between intentions and actions?

Self-esteem was assessed using the Rosenberg's self-esteem scale (Rosenberg, 1989). The scale was originally used in a social sciences study to assess positive or negative orientation towards oneself of high-school juniors and seniors randomly selected in the state of New York (Rosenberg, 1989). Participants answered a series of ten statements using a 4-point Likert scale from strongly agree to strongly disagree. Each item is scored on a scale of 1-5 with a higher score indicated a higher self-esteem. The scoring range is from 0-50. A score below 30 suggests lower self-esteem.

In order to assess high-risk sexual behavior, an instrument developed by the Center for HIV Identification, Prevention and Treatment Service (CHIPTS), using constructs of both the Health Belief Model and the Social Cognitive Theory (Lux & Petosa, 1994) was used. The original intention of this survey was to assess condom use among adolescents. This instrument consists of 5 questions using a 4-point Likert's scale scored from 0-3. Higher scores will suggest lower intentions of high-risk sexual behaviors while lower scores will suggest higher intentions for high-risk sexual behaviors.

In addition, an instrument developed by the University of California in San Francisco for the Center for AIDS Prevention Studies to assess sexual behaviors was used. This survey is

intended to assess HIV risk. For this study, the HIV component was eliminated so the survey is appropriate for this particular study. This questionnaire consists of four questions. The first three questions are yes or no questions about sexual activity and sexual partners. The fourth question consists of 6 statements (A-F) answered either yes or no to determine the use/lack of use of barriers during specific sexual activities. Statements A and C will be eliminated from this study as they are statements intended for males.

The instruments were adapted into a Qualtrics® survey that was distributed via bulk email to all undergraduate female students attending James Madison University in the Spring 2015 semester (see Appendix for the comprehensive survey). Two reminder emails followed the initial email. All three emails were sent within a two- week time period (Dillman, Smyth & Christian, 2009). The link for the survey was advertised via social media (Facebook, Twitter, Instagram) and word of mouth to recruit a representative sample. The minimum recommended sample size to provide valid results for this project based on the number of undergraduate students attending JMU is 377 subjects. The data collected was analyzed using SPSS Statistics.

### **Participants**

The participants in the current study were 268 female undergraduate students attending James Madison University during the Spring 2015 semester. The response rate was about 2.8%. Of the participants, 7.8% identified as Black, 75% identified as White, 3.4% identified as Hispanic or Latina, 1.9% as Asian/Pacific Islander/Indian, 4.1% as

Biracial or Multiracial, 1.5% as Other, and 1.1% chose not to self-identify. An equal number of study participants reported being either 3<sup>rd</sup> or 4<sup>th</sup> year undergraduate students (29%). Twenty-three percent 2<sup>nd</sup> year undergraduate students and 22.4% were 1<sup>st</sup> year undergraduate students. All other participants identified as 5<sup>th</sup> year or more undergraduates or “Other”. The majority of the participants (94.4%) were between the ages of 18-22. All other participants were

23 or older. The participants had a wide variety of majors. Health Sciences, Public Administration and Biology majors accounted for 22.5% of study participants.

## Chapter 4

### Results

The data collected from the participants (n=268) were used to give each participant a score in the categories self-esteem, intentions, and high-risk behavior. These scores were based on their responses to a series of questions. The first 10 questions of the survey were used to assess self-esteem. These questions were Likert scale. A “strongly agree” response to any of these question yielded a score of 5, “agree” a score of 4, “neither agree nor disagree” a score of 3, “disagree” a score of 2, and “strongly disagree” a score of 1. The responses for each participant were added up using this system with the highest score being 50, which equates to very high self-esteem. A score of 10 would equate very low self-esteem. The intentions and high risk-behavior categories were scored in the same manner. For questions such as “In the past 3 months how many sexual partners have you had?” The response “none” was scored 4, “1” was given a 3, “2” was given a 2, “3” was given a 1 and “4 or more” was given a 0. The participants were also grouped into Black and non-Black categories. A significance value was set at 0.05 and a confidence interval was set at 95% for all tests run.

The correlation between self-esteem and high-risk behaviors was found to have a Pearson coefficient of  $r=0.051$  and a p-value of 0.420 (Table 1). The correlation between high-risk behavior and intentions were found to have a Pearson coefficient of  $r=-0.014$  and a p-value of 0.828 (Table 1). Both correlations were not statistically significant.

Table 1

*The Pearson coefficient and p-values between self-esteem and high-risk behavior and high-risk behavior and intentions.*

	<b>Self-Esteem and High Risk Behavior</b>	<b>High Risk Behavior and Intentions</b>
<b>Pearson coefficient</b>	0.051	-0.014
<b>P-value</b>	0.420	0.828

*\*p-value for significance set at .05*

An independent sample t-test and a bar graph were used to determine if Blacks and non-Blacks had different levels of self-esteem (Figure 1). The data were slightly skewed to the left but not enough to eliminate the analysis. The t-test for self-esteem between Blacks and non-Blacks yielded a p-value of 0.018 (Table 2). The mean score for self-esteem for Blacks was about 37 while the mean score for non-Blacks was about 31. This value was statistically significant. The t-test for intentions between Blacks and non-Blacks yielded a p-value of 0.742 (Table 2). The t-test for risky behavior between Blacks and non-Blacks yielded a significance value of 0.360 (Table 2). Neither of those values were statistically significant.

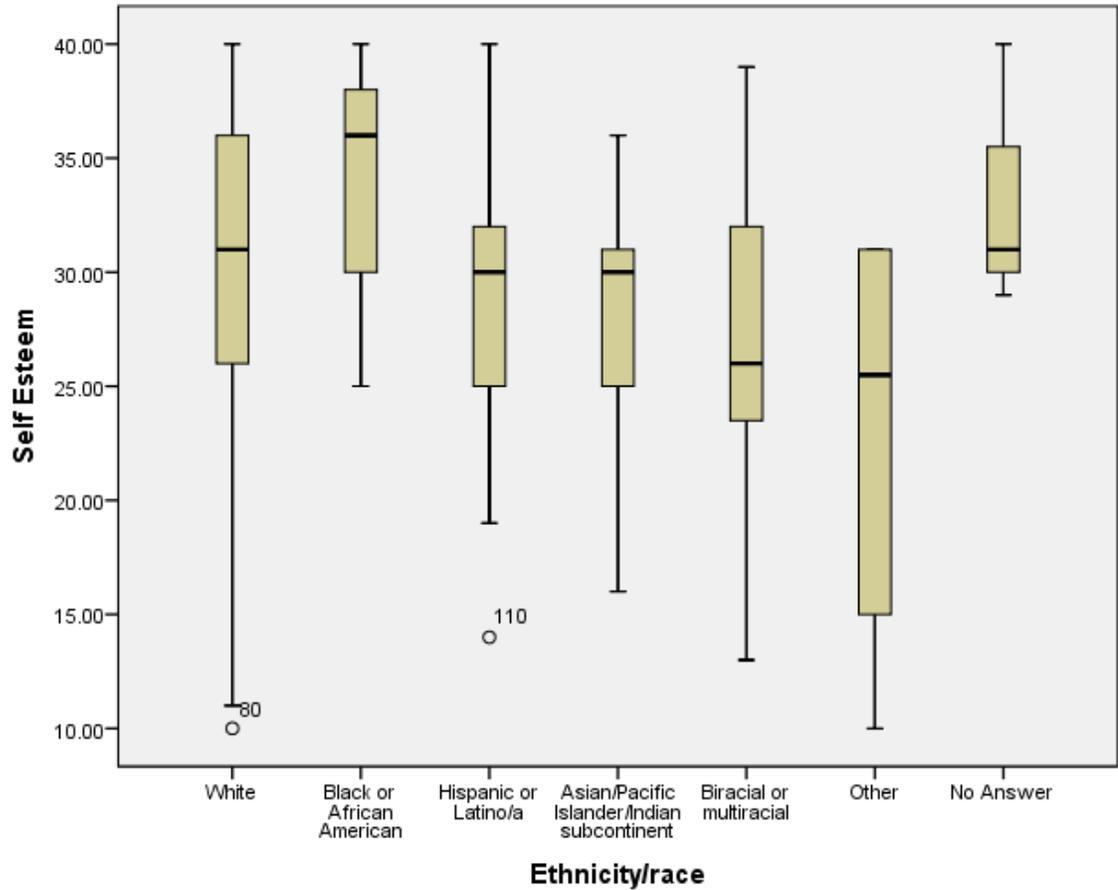


Figure 1. The self-esteem scores of the ethnicities/races.

Table 2

The p-values of the variables self-esteem, intentions, and risky behavior between Blacks and non-Blacks.

	<b>Self-esteem: Blacks and non-Blacks</b>	<b>Intentions: Blacks and non-Blacks</b>	<b>Risky Behavior: Blacks and non-Blacks</b>
<b>P-Value</b>	0.018	0.742	0.360

\*p-value for significance set at .05

## **Chapter 5**

### **Conclusion**

Black female undergraduate students were found to have higher self-esteem than their non-Black peers. This is consistent with past findings which concluded non-Black females have overall lower self-esteem than Black females (Adams 2010; Sprecher, Brooke & Avogo, 2012). Self-esteem and high-risk behaviors were found to have a weak positive correlation while high-risk and intentions were found to have a weak negative correlation (Table 1). These correlations were not statistically significant as they both yielded p-values above .05. This finding was not expected as past studies found that these variables both had a strong positive correlation (Faloon, n.d.; Wild et al., 2004).

There was no difference between the risk intentions of Blacks and non-Blacks as well as high risk-behaviors of Blacks and non-Blacks (Table 2). No particular racial group as a whole had higher or lower intentions or high-risk behaviors than that other.

Significance values were all above .05 for these two factors. Therefore, the results were not statistically significant and may not be applicable to the general population.

This study contained several threats to internal validity. Selection was a factor that may have skewed results of the study. Though the sample population was representative of the University make up of Black students, there were only 21 Black female participants and 226 non-Black participants making the two groups compared nonequivalent. Instrumentation may have also been a threat to internal validity. The survey used was a pilot survey so it had not been evaluated for reliability or validity. History could have been a possible threat to internal validity as certain uncontrolled circumstances may have affected the responses of participants of one group but not the other. This particular study was also only performed one time for this sample

population.

This study also did not have external validity. The data from this study were collected at one Mid-Atlantic University and therefore may not be generalizable to the larger college-aged, Black female community.

For future research on this topic, the study could be improved by using a larger sample population so that the findings can be applied to the general college population. It also may be helpful to get equal numbers of participants within each racial group so that no racial group is under or over represented. The survey also may need to be revised so that the LGBT community can accurately respond to the questions. For example, certain questions such as “I will not have sex with someone if they don't use a condom” are biased towards women who have sex with men. Women who have sex with women may have answered this question in the negative, which scored as a high risk behavior, when in fact they may not be engaging in high risk unprotected penile-vaginal intercourse.

Additional research on this topic could be useful in sexual health programming. If future studies were to be conducted and found self-esteem and high-risk sexual behaviors have a statistically significant link, adding a self-esteem component could make sexual health programs more successful. On the contrary, if a future study of larger proportion determined self-esteem and high-risk sexual behaviors have no link, this could prompt sexual health programs that currently have a self-esteem component to eliminate this objective and save money. Also, in finding that Blacks and non-Blacks have statistically significant different levels of self-esteem the two groups may need to be handled differently in programs that aim to increase self-esteem. This project did not delve into the origin of high or low self-esteem. A project that studies the cause and finds common root(s) may be able to successfully improve the self-esteem of all

females. First finding the source of high or low self-esteem then specifically creating a program that targets these areas would be most beneficial. Doing this would also allow Blacks and non-Blacks who may have statistically different levels of self-esteem to equally gain knowledge and a deeper sense of well-being from the program(s).

## Appendix

1. I feel that I am a person of worth, at least on an equal plane with others. .... 1 2 3 4 5
  2. I feel that I have a number of good qualities. .... 1 2 3 4 5
  3. All in all, I am inclined to feel that I am successful. .... 1 2 3 4 5
  4. I am able to do things as well as most other people. .... 1 2 3 4 5
  5. I feel I have much to be proud of. .... 1 2 3 4 5
  6. I take a positive attitude toward myself. .... 1 2 3 4 5
  7. On the whole, I am satisfied with myself. .... 1 2 3 4 5
  8. I have respect for myself. .... 1 2 3 4 5
  9. I certainly feel important to others. .... 1 2 3 4 5
  10. I think I have a purpose. .... 1 2 3 4 5
- 
1. I will make sure a condom is used when I have sex. .... 1 2 3 4 5
  2. I will only have one sexual relationship at a time. .... 1 2 3 4 5
  3. I do not plan on having sex until I am married. .... 1 2 3 4 5
  4. I would only have sex with a person who I have along-term relationship with. 1 2 3 4 5
  5. I will not have sex with someone who refuses to use a condom. 1 2 3 4 5
- 
1. In the past 3 months how many sexual partners have you had? .... Vaginal (None, 1, 2 3, 4 or more), Anal (None, 1, 2 3, 4 or more), Oral (None, 1, 2 3,4 or more)
  2. During the past 3 months have you practiced receptive anal sex with men (your partner puts his penis in your anus)? .... With a condom, without a condom/without ejaculation, without a condom/with ejaculation, Have not done this in the past 3 months.

3. During the past 3 months have you practiced receptive oral sex with men (your partner puts his penis in your mouth)? .... With a condom, without a condom/without ejaculation, without a condom/with ejaculation, Have not done this in the past 3 months

4. During the past 3 months have you practiced vaginal sex? ... With a condom, without a condom/without ejaculation, without a condom/with ejaculation, Have not done this in the past 3 months

5. During the past 3 months have you practiced oral sex with women? ... with a barrier (dental dam, saran wrap, etc.), without a barrier, have not done this in the past 3 months

6. In the past 3 months have you or your partner used any of the following methods of contraception during vaginal intercourse? (Click on all that apply) birth control pills, birth control ring, birth control patch, birth control implant, birth control injection, emergency contraception, hormonal intrauterine device (IUD), copper intrauterine device (IUD), diaphragm, cervical cap, sponges, spermicide, creams, jellies, foams, male condom, female condom, withdrawal

1. How old are you? .... 18 19 20 21 22 23 24 25

2. What is your ethnicity/race? .... White, Black/African-American, Hispanic, Native American, Asian/Pacific Islander/Indian subcontinent, Other

3. Year in School? .... 1<sup>st</sup> year undergraduate, 2<sup>nd</sup> year undergraduate, 3<sup>rd</sup> year undergraduate, 4<sup>th</sup> year undergraduate, 5<sup>th</sup> or more year undergraduate, graduate student, other

4. Major? ....

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