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Gender Influence on Perceptions of Healthy and Unhealthy Lifestyles

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Abstract

The purpose of this study was to determine if a gender bias exists in perceptions of a healthy vs. unhealthy lifestyle. The study was a 2 (male or female) x 2 (healthy or unhealthy) between subjects factorial design. College students (*N* = 53) read a scenario describing a lifestyle of a stimulus person. The participants then answered a 16-item questionnaire. The hypothesis that there is a gender difference in perceptions of a healthy lifestyle was not strongly supported. There was a strong main effect for the type of lifestyle with participants viewing the healthy lifestyle more positively. The hypothesis that participants who perceived themselves to be healthy would respond more positively to the description of the healthy lifestyle was supported for only two questions. In contrast to prior research, the results indicate that gender is not extremely important in regard to perceptions of an individual's health.

Introduction

Gender is a set of characteristics and traits socioculturally considered appropriate to males and females or traits that make up masculinity and femininity (Crawford, 2006). Gender is an important influence on how one is viewed and evaluated by other people. An individual's gender also has an impact on how that person evaluates others. Previous research indicates that gender influences perceptions of healthy and unhealthy lifestyles (von Bothmer & Fridlund, 2005) and there are gender differences in making health-related decisions (Nolen-Hoeksema, 2006).

Citing the U. S. National Center for Health Statistics, Idler reports that women have a longer life expectancy than men. This differential in life expectancy occurs at birth and continues throughout life (Idler, 2003). Idler supports the "more popular view" that women in general are more aware and more knowledgeable about health. This view is a result of women being more likely to seek help from health care sources and more likely to seek information about health. In other words, women are more knowledgeable about health, especially their own health. Idler also maintains that women are more accurate when they respond to survey questions concerning their own health.

Males and females tend to have different perspectives on what constitutes healthy behavior. Men are less likely than women to perceive themselves as being at risk for illness, injury, and a variety of health problems (Boehm, Selves, & Raleigh, 1993). Despite being at greater risk from drug and alcohol use, for example, males of all ages perceive significantly less risk associated with the use of cigarettes, alcohol, and other drugs than females do (Flynn, Slovic, & Mertz, 1994). Similarly, men and boys perceive themselves to be less susceptible to skin cancer than women and girls do and underestimate the risks associated with sun exposure.

Some theorists suggest that men and boys socialized in our American culture adopt specific beliefs and attitudes that form a set of organized cognitions, or schema, that influence men's and boy's concepts of "maleness," or masculinity. This schema guides the individual man's decisions about socially sanctioned "acceptable" and "unacceptable" behaviors. For example, traditional masculine ideology supports the importance of a man's being fearless and

invulnerable and therefore believing that risk-taking behavior, such as excessive alcohol or tobacco use, is acceptable (Nicholasd, 2000).

Mahalik, Burns and Syzdek (2007) found that masculinity and the perceptions of other men's health predict participants' own health behaviors. As men adopt traditional masculine ideals they may be adopting health practices reflecting those ideals thus putting their health at risk. These authors found no support for their hypothesis that perceptions of the norm for women's health practices would predict women's behavior.

In a study on gender differences in alcohol use, Nolen-Hoeksema (2006) demonstrated a much higher rate of alcohol use disorders in men than among women. Nolen-Hoeksema (2006) suggests that women have more negative biological and social consequences associated with alcohol abuse. The study indicates women may have a lower genetic risk for alcohol use disorders than men, and that women experience the negative physiological effects of alcohol more quickly, which could deter women from drinking. Several researchers (Blume, 1991; Gomberg, 1988) indicate women believe there is more social disapproval of drinking for them than for men. Alcohol consumption is considered part of the male gender role but is discouraged for females (Nolen-Hoeksema, 2006).

Men and women also perceive the connection between health and lifestyle in different ways, leading them to engage in health and fitness activities differently and for different reasons. While both genders understand the connection between diet, exercise and health, young men connect health with fitness and fitness with the ability to do physical work. Young women, however, look at health as being a much more "difficult and complex project" associated with maintaining their diet and exercise routines in order to obtain an "'appropriate' body shape" (Wright, O'Flynn, & Macdonald, 2006, p. 707). Al-Kandari and Vidal (2007) found significant differences between males and females in their profile of health-promoting lifestyle. Males had more positive results in physical activity, interpersonal relations, and stress management than females. In contrast Henson, Carey, Carey and Maisto (2006) indicate that females drink less, have fewer sexual partners, and are more likely to use birth control and seat belts than men.

A study of graduating seniors from a historically black college suggests there are gender differences in the "self-perception of body size, accuracy of body size perception, and understanding of acceptable weight ranges" (Gross, Gary, Browne, & LaVeist, 2005, p.1608, 1616). This study also indicates that male students are less accurate in reporting their level of being overweight

The purpose of the current research is to determine how male and female college students perceive males and females with different levels of healthy lifestyles. Participants were asked to read a scenario describing a healthy or unhealthy lifestyle in which the stimulus person was male or female. We hypothesized that participants would evaluate the healthy lifestyle more positively than the unhealthy lifestyle, particularly if the stimulus person were female. In addition participants who consider themselves healthy would respond more positively to the individuals described as living a healthy lifestyle. We also expected participants to respond more positively to the individual in their scenario if that person were the same gender as the participant.

Method

Participants

The participants were 53 students between the ages of 19 and 31 years of age who attended an urban, midsized university in the Southeast. They volunteered to participate and did

not receive extra credit or other incentives. The average age of the participant was 22 years, with a range of 19 to 31 years. There were 36 females and 17 males. The majority of the participants were White (*n*= 45), although some were Black (*n*= 7), Hispanic (*n*= 3), Asian (*n*=3), Other (*n*=1) and Native American (*n*=1).

Design

The design was a 2 (Male or Female) x 2 (Healthiness: unhealthy vs. healthy) between subjects factorial design. The dependent variable was participants' response to a 16-item questionnaire, created for the study, concerning perceptions of how healthy the person in the scenario's lifestyle was (See attached).

Scenario

John Smith (Jane Doe) is a young man (woman) in his (her) mid twenties who attends a mid-sized urban university in the southeast working on his (her) undergraduate degree. John (Jane) works part-time at a local retail store. In John's (Jane's) free time he (she) enjoys the outdoors (playing video games). John (Jane) spends a lot of time with his (her) Jack Russell Terrier he (she) adopted from the local Humane Society. Occasionally (frequently) John (Jane) goes out for drinks with friends. John (Jane) never (socially) smokes. John (Jane) volunteers three days a week at various non-profit organizations in the community. John (Jane) anticipates running (walking) in a marathon to benefit one of the organizations. John (Jane) prefers fresh, organic home cooked meals (prefers quick, easy prepared meals and eating out). John (Jane) has had no major health problems in the past year (has had some health problems in the past year).

Recently, John (Jane) has experienced minor (severe) headaches. The doctor said the headaches have been brought on by an over-exerted, busy lifestyle (stress). John (Jane) gets plenty of sleep every night (is not getting enough sleep every night). John (Jane) enjoys staying busy with an active lifestyle (complains when his/her lifestyle gets too hectic). John (Jane) is going on a skiing vacation (relaxed retreat) in the next couple of weeks.

Upon John's (Jane's) return from his (her) vacation (retreat); he (she) will begin a job search for a full-time position. John's (Jane's) graduation date is approaching. John (Jane) plans on attending graduate school and is working on preparing for the GRE. John (Jane) hopes to find a job in a fast-pasted environment (relaxed, sedentary environment). John (Jane) plans on incorporating intense (moderate) exercise at least three times per week into his (her) lifestyle.

Measures

One questionnaire was completed by each participant for this study. The questionnaire consisted of 16 questions. The first 13 questions were answered by the participants on a four-point Likert scale from 1 *(strongly disagree*) to 4 (*strongly agree)*. The remaining three questions were multiple choice. Participants provided demographic information that included: gender, ethnicity, year in school, and age (See attached).

Procedure

Participants were tested during their class time by approval of their instructors. All participants were given the same instructions and debriefing in the same testing environment of their respective classrooms, to ensure reliability and a sound level of experimental control across each administering of the test. Participants were given an informed consent to sign prior to answering the questionnaire. Participants read a scenario regarding a lifestyle. The scenario was identical for all participants with the exception of the gender of the person in the scenario and their type of lifestyle. Half of the participants read a scenario of a woman's lifestyle and the other half read a scenario of a man's lifestyle. Half of each group read a scenario of a healthy lifestyle and the other half read a scenario of an unhealthy lifestyle. Participants were randomly assigned

to one of the four scenarios. The participants responded to the questionnaire. Each participant was given a full debriefing statement after they turned in their questionnaire, explaining the nature of the study.

Results

A MANOVA was run with gender scenario (male or female) and health scenario (unhealthy or healthy) as the independent variables and the 9 questions on the evaluation as the dependent variables. A Hotelling's trace evaluation indicated a significant main effect for the health of participant [F (9, 40) = 6.29, p = .0001]. Follow-up univariate F- tests found that health of participant had a significant effect on all of the questions. See Table 1 for means.

A MANOVA was run with health scenario (unhealthy or healthy) and participant health (unhealthy or healthy) as the independent variables and two questions on the evaluation as the dependent variables. A Hotelling's trace evaluation indicated a significant main effect for the health of participant [F (2, 47) = 4.262, p = .020]. Follow-up univariate F- tests found that health of participant had a significant effect on the questions regarding the likelihood of the stimulus person developing high blood pressure or heart disease and taking vitamin supplements. See Table 2 for means.

An ANOVA was run with the gender of the stimulus person in the scenario (male or female) and health of the stimulus person in the scenario (unhealthy or healthy) as the independent variables and likelihood of stimulus person developing high blood pressure or heart disease as the dependent variable. There was a significant interaction effect [F (1, 52) = 3.9, p = .056]. See Table 3 for means.

Discussion

The primary hypothesis for this study was that participants would have more positive attitudes toward a stimulus person who led a healthy lifestyle than one who led an unhealthy lifestyle. The reason for this hypothesis was based on the increase in awareness of the effects of healthy living. The data strongly supported this hypothesis. Participants strongly endorsed the healthy lifestyle. Participants evaluated the people with a healthy lifestyle higher on questions that would indicate health and lower on questions which would indicate a lack of health. However, the corollary to that hypothesis, women leading an unhealthy lifestyle would be perceived more negatively than men doing so, received limited support. The only difference in responses based on gender of the stimulus person was to the question asking about the likelihood the stimulus person would develop high blood pressure or heart disease. The male in the unhealthy scenario was perceived to be much more likely to develop high blood pressure or heart disease than the male with the healthy lifestyle. Similarly, but to a lesser extent, the female with the unhealthy lifestyle was seen as more likely to develop high blood pressure or heart disease. Interestingly, the female with the healthy lifestyle was perceived as more likely to develop high blood pressure or heart disease than the healthy male. So rather than the unhealthy woman being perceived more negatively, it is the healthy woman who is seen as more likely to develop high blood pressure. The woman with the unhealthy lifestyle was seen as less likely than the man with the unhealthy lifestyle to develop high blood pressure or heart disease. This result might be due to the difference in perceptions of the likelihood that men and women will develop heart disease. People tend to believe men are more likely than women to develop heart disease and high blood pressure.

A possible explanation for these findings could be found in the study by Boehm, Selves, and Raleigh (1993). These researchers found than men and boys are less likely than women and girls to perceive themselves as being at risk for illness, injury, and a variety of health problems.

Women and girls tend to take these risks more seriously. In addition, research by von Bothmer and Fridlund (2005) found that among Swedish University students, females have healthier habits pertaining to eating, exercise and drinking while males tend to be more overweight and less concerned about health and nutrition than women. Related research (Idler, 2003) suggests that women are more aware and knowledgeable about health because they are the "primary consumers of health services and health information (p. 372)."

We hypothesized that participants who consider themselves healthy would respond more positively to the individual described as living a healthy lifestyle. We found this hypothesis to have limited support. Our results show that healthy people perceive unhealthy people as more likely to develop high blood pressure and heart disease. Healthy people also perceive unhealthy people as less likely to take vitamin supplements. These findings support our hypothesis. We did not expect to find the reverse – unhealthy people think people with a healthy lifestyle are more likely to develop high blood pressure or heart disease and less likely to take vitamin supplements than ones with an unhealthy lifestyle.

Biased judgments can be made in evaluating one's health in regard to lifestyle choices. One's own perception of health can strongly influence perceptions of another's health. Those who consider themselves to be healthy will most likely evaluate their own counterparts, those who share the same ideals of living a healthy lifestyle, more positively. The same apparently is true for those who perceive themselves to be unhealthy, they evaluate people with unhealthy lifestyles as less likely to develop high blood pressure. It appears we all have the potential to form biased assumptions about others who share our lifestyles and stereotypical assumptions towards those who do not.

It was hypothesized that there would be a gender difference in perceptions of living a healthy lifestyle. In other words participants would respond more favorably to people of the same gender in the scenario. The reasons for the hypothesis was that males and females already had predisposed stereotypical views, in response to their own self-schemas, prior to the experiment, which would create certain assumptions in response to the stimulus person in the scenario. There was no support for the hypothesis.

The basic premise of this research was that there would be a strong gender difference in perceptions of living a healthy or unhealthy lifestyle. Although our data did not support this hypothesis, they do suggest ideas for future research. It would be interesting to test the idea of a more androgynous role in lifestyle choices. Does our society now possess equal views of healthy lifestyle choices, without regard to gender? Do both genders have equal access to making health-related choices?

There are improvements that could be made to strengthen the study. The independent variable of gender could have been made more germane by describing the stimulus person in a more stereotypical manner. In addition, measures of the dependent variable could include more specific questions assessing health-related issues, instead of general questions of assessing overall health.

The study was limited by the lack of variation in the participants. All the participants were psychology majors and varied little in age. In addition, the vast majority were women. In future research, it would be beneficial to have the participants more varied in age and background. Future potential applications should consider the age and education level of the participant. A larger sample including people outside the college campus and participants who do not possess a college degree would increase the generalizabilty of the results. A larger sample of

participants could have included students in other courses on campus, to eliminate any biases that psychology students may bring to the study..

Although many studies have looked at gender and the perception of health, more research needs to be done to highlight the interactions between the two. In contrast to prior research, the results of the current study indicate that gender is not extremely important in regard to perceptions of an individual's health.

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Table 1

Mean Scores for Level of Healthiness of Lifestyle of Stimulus Person

	Lifestyle of Stimulus Person	
	Healthy	Unhealthy
Questions		
Healthy Eating Habits	3.48	2.00*
	n = 25	*n* = 28
Healthy Lifestyle	3.00	2.29*
	n = 25	*n*= 28
Below BMI	2.88	2.32*
	n = 25	*n* = 28
Above BMI	1.84	2.57*
	n = 25	*n* = 28
Symptoms of Anxiety	2.52	3.11*
	n = 25	*n* = 28
Symptoms of Depression	2.20	2.79*
	n = 25	*n* = 28
Exercise Frequently	3.36	2.11*
And Physically Fit	*n* = 25	*n* = 28
Develop High Blood	2.28	2.89*
Pressure or Heart Disease	*n* = 25	*n* = 28

Vitamin Supplements	2.96	2.15*
	n = 25	*n* = 28

Note.* $p < .037$
Higher score indicates more agreement.

Table 2
Healthy verses unhealthy lifestyle of stimulus person and perceived health of participant

	Healthy		Unhealthy	
	PH**	PUH**	PH**	PUH**
Questions				
Likely to develop high blood pressure or heart disease	2.14	3.33	3.00	2.25*
	n=22	*n*=3	*n* =24	*n*=4
Likely to take vitamin Supplements	3.05	2.33	2.04	2.75*
	n=22	*n*=3	*n*=23	*n*=4

Note: * $p < .03$
**PH= Participant healthy
**PUH= Participant Unhealthy

Table 3.
Mean Scores for healthiness and gender of stimulus person on likeliness of developing high blood pressure.

	Level of Healthiness	
	Unhealthy	Healthy
Gender of stimulus person		
Male	3.31	2.15*
	n=13	*n*=13
Female	2.53	2.42*
	n=15	*n*=12

Note.* p < .056
Higher score indicates more agreement.

Table 1: questionnaire
After you are finished reading the scenario provided, please answer the following in the space provided next to each question.

Answer choices are:
1 (Strongly Disagree), 2 (Somewhat Disagree), 3 (Somewhat Agree), 4 (Strongly Agree)

_____1. Jane (John) likely has or will likely develop an eating disorder.

_____2. Jane (John) has healthy eating habits.

_____3. Jane (John) has a healthy lifestyle.

_____4. Jane (John) is likely below or at an average weight listed for her (his) Body Mass Index.

_____5. Jane (John) is likely above average weight listed for her (his) Body Mass Index.

_____6. Jane (John) is likely to develop symptoms of anxiety.

_____7. Jane (John) is likely to develop symptoms of depression.

_____8. Jane (John) likely exercises frequently (at least 3 times per week) and is physically fit.

_____9. Jane (John) is likely to develop high blood pressure or heart disease.

_____10. Jane (John) will likely develop drug or alcohol abuse habits.

_____11. Jane (John) most likely takes some form of vitamin supplements.

_____12. Jane (John) will likely lead a long life.

_____13. I consider myself healthy.

Please answer the following questions by circling a, b, c, or d as your answer.

13. Jane (John)'s education level is most likely
a) some high school
b) high school graduate
c) some college/postsecondary education
d) college/postsecondary education graduate

14. Jane (John)'s income level is most likely
a) below $30,000 annually
b) $30,000 to $60,000 annually
c) $60,000 to $90,000 annually
d) above $90,000 annually

15. Jane (John) is most likely
a) African American
b) Asian
c) Native American
d) White American
e) other

Please circle your answer to each question from the choices provided.

A. Your gender
a) female
b) male

B. Your ethnicity
a) African American
b) Asian
c) Native American
d) White/Caucasian
e) other

C. Your current year in college
a) Freshman (0-30 credit hours)
b) Sophomore (30-60 credit hours)
c) Junior (60-90 credit hours)
d) Senior (90-120 credit hours)
e) Graduate Student (Post-Bachelor's Degree)

D. Your age: _____

Thank you for participating in this experiment. Please return this questionnaire to the administrator.