

**Humor Research: The Difference between Males and  
Females in their Responses to Humor**

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## Review of Literature

The first advancements into the study of humor were done by Sigmund Freud. In his paper he determined the difference between jokes and dreams, along with deciphering what the different types of jokes are and how they are used (1905). Some psychologists studied humor in the brain, how humor affects the brain and which area(s) of the brain are used in the telling of and listening to humor, while others looked at humor being used in society and how humor affects people's emotions.

Neurologically, humor has been studied by scientists in order to find out where in the brain humor response occurs and to see which types of thinkers, left- or right-brained thinkers, are more prone to finding things funny. The understanding of the physical brain and how and where humor is processed and analyzed is still being studied. The use of right-hemisphere-damaged (RHD) patients and left-hemisphere-damaged (LHD) patients has been looked at by many researchers, including Bihrlé, Brownell, Powelson, and Gardner. These scientists have helped advance the understanding of the brain and which aspects of humor come from which side of the brain. In Bihrlé, Brownell, Powelson, and Gardner's study it was seen that in RHD patients displayed a liking for the sense of surprise in a joke but could not comprehend the storyline, where as in LHD patients they could comprehend the storyline but showed an impaired sensitivity to the surprise element of humor (Bihrlé, 1984). This study's findings added to a previous study done by Brownell, Michel, Powelson and Gardner which just looked at RHD patients. This study discovered the same as in the later study, that these patients liked the sense of surprise at the end of a joke even if it didn't fit the storyline, mostly because they couldn't follow the storyline to begin with (Brownell, 1981).

Other researchers, such as Gallagher et al., have studied the physical brain by use of Functional Magnetic Resonance Imaging (fMRI) to see which portions of the brain become active while reading, listening to, or telling a joke or humorous stories. In Gallagher et al.'s study, the researchers probed the brains of their patients and found, using an fMRI, that the portion of the brain where stories and jokes are comprehended has a lot of overlap. This can be used to help further explain the previous studies about RHD and LHD patients (Gallagher, 1999).

Humor has also been thought of from a psychological point of view. These studies, as opposed to the neurological studies, differ because the psychological studies focus more on "Why?" rather than "How?" Olsen and Klein have discovered different factors that can affect humor appreciation in people and have studied those different factors. Olsen is looking at what outside elements can affect a person's sense of humor. In one study sixty women read two sets of jokes, one while listening to nothing and one while listening to a "laugh track". The female subjects laughed more when reading the joke and listening to the "laugh track" than when just reading the joke alone (Olson, 1991). Other such outside influences which have been looked at are the effects of humor after a crisis situation. It has been seen that humor can be used as a coping tool to help people deal with what happened, but it can not be used right after a crisis; it has to be held off until people can get mental and physical distance from the problem (Klein, 1998).

There are many other factors that affect humor and humor perception such as race, religion, sex, age, career, economic status, and other elements. Though humor research is just in the beginning stages, one researcher and her team, Graesser et al., are

running tests in order to find out “Why something is funny?” and “Why a speaker would tell this joke?” (Graesser et al., 1989).

Gender especially has been a large area of research in the humor field, many researchers have focused on the differences between men and women and how they respond to humor. The responses of men’s and women’s reactions to male- and female-bashing jokes have been tested. During this experiment, conducted by Marek and Tingley, it was seen that the men find both types of jokes funny and can laugh at either one while women find both types of jokes offensive, but are a little more laid back when listening to male-bashing jokes (Marek and Tingley, 2000). The responses of females to humor have been studied more in-depth since it has been perceived as the more intriguing of the two genders. It has been noticed that women tell more depreciative jokes, putting down other women, and women tell more personal anecdotes and gender discriminating jokes in order to gain attention (Kotthoff, 2000). Functions of humor occurring in groups of friends have been classified, by Hay, under the three broad labels: solidarity-based, power-based and psychological functions, while further distinctions can still be made in these three categories (Hay, 2000).

Crawford and Gressley (1991) conducted research on the differences in males’ and females’ appreciation for humor. In Crawford’s paper she conducted a study involving 72 males and 131 females, ranging in age from 16-84 (median age 25), to see in which areas males and females differed in their appreciation of humor. This experiment included the completion of a 68- item Humor Questionnaire by each of the subjects. The questionnaire was comprised of multiple choice questions based upon an “A, B, C, D, E” scale, “A” being never and “E” being always. Crawford and Gressley

then analyzed the data and found that there was only a significant difference in the “Creativity” subgroup, the ability to make up jokes “on the spot” (Crawford and Gressley, 1991). The main focus of this study was the differences in collegiate males and females.

There have been no studies done which focus on high school students and their appreciation of humor. This is why it is imperative to study the differences in teenage males and females and their appreciation for humor, and also see how their senses of humor compare to that of college-age students and adults. This study will utilize the t-tests for independent samples. This study will compare males and females and see if there is any correlation to the results of Crawford and Gressley’s study.

### Hypothesis and Research Objectives

This researcher's first hypothesis is that there is a difference between males and females, ages 14-18, in their appreciation of different types of humor. This researcher's second hypothesis is to show that there is a significant difference between high school males and females in their responses to humor when compared to college level males and females in the Crawford and Gressley study. Given the results from the Crawford and Gressley study, the results of this research should be similar to the previous results, with only some minor differences in how the males and females differ in their appreciation of humor.

## Methods

Research was conducted in three suburban high schools in Westchester, New York using a Humor Questionnaire form developed by the researcher. These high schools included Briarcliff High School, as the upper middle class medium, Ossining High School, as the middle class high school, and White Plains High School, as the lower middle class medium. The demographics for this study were taken from Newsweek's listings of Westchester high schools.

Before this researcher began collecting data, he first put together a study based on the concept of Crawford and Gressley's "Humor Questionnaire." This researcher's study was different than Crawford and Gressley's study because it did not include the open response question, but he still borrowed some questions from their study. This researcher also made up some questions of his own in order to better fit the high school student's sense of humor. Questions were categorized as the following; Anecdotal Humor, Creativity, Laugh at Self, Ethnic Jokes, Joking, Slapstick Humor, Cartoons and Comics, Missing the Point, Sexual Humor, and Males vs. Females. This researcher then looked through the questions determining which ones would need a 1-5 Likert Scale and which would need a 1-3 Likert scale. Then he put the questions onto two pages, depending on which scale they required, and once on the right page he put them in random order.

In the anecdotal humor category there were a number of questions which fell under this heading because different aspects of anecdotal humor needed to be covered. These questions ranged from "Do you do a lot of kidding or teasing of other people?" to see how high school students used humor to put other people down, to "Do you create humorous stories out of everyday experiences?" to see how high school students use

humor in every day life. This researcher also included questions about creativity in order to see how funny males and females perceive themselves to be and how quickly they feel they can respond with a humorous quip. Questions which this researcher included in his study under the category of creativity include, “Do you make witty or sarcastic remarks?”, “Do you create play-on-words?” and “Do you make spontaneous or “off the cuff” witty remarks?” The other major category which this researcher focused on was the Male vs. Female. This category was important to this researcher’s questionnaire because it helped to show the difference between the males and females in what gender the funniest person they know is and what makes them so funny. This category’s questions include, “Is the funniest person you know male?”, “Is the funniest person you know very spontaneous and witty?” and “Does the funniest person you know tell scripted jokes?”

The first page of this researcher’s study was a general information sheet for the students to fill out in order to run statistical analysis on the results. The general information which was collected asked about the subject’s age, their gender, their current grade, their ethnicity, and their parents’ occupation. On the last page of this researcher’s study, he included a definition sheet of words with which the participants may not be familiar.

A script was read to all participants detailing all the directions and other key information they would need to complete the study; because it was an optional and anonymous task, the students were told not to put their names anywhere on the form, and to be completely honest while filling it out. This study includes information which is to be answered from their current emotions and feelings. Students were also told “if at any time you feel uncomfortable answering this study, please stop.”

The researcher was present when the Humor Questionnaire was filled out. When the students were done, he asked them to put their questionnaires in one of two piles, one for males the other for females. This allowed for complete anonymity because this researcher did not see where the subjects put their questionnaires in the piles.

The researcher entered approximately 20 classrooms in Briarcliff and White Plains, with approximately 20-25 students in each class, and the study was conducted in 3 classrooms in Ossining where the researcher was not present. The researcher found that the study took approximately 10-15 minutes on average to fill out. All of the students who received the study in Briarcliff High School and White Plains High School filled out the questionnaire, but in Ossining High School a parental permission slip was necessary in order for the students to take the study. Only those students who returned their parental permission slip filled out the study. The Humor Questionnaire was deemed usable if all of the “personal” information was filled out. Usable Humor Questionnaires were collected from 126 females and 141 males after going into about 20 classrooms.

After collecting the studies, the t-test for independent samples was used for content analysis (using the SPSS program version 10.0 by SPSS Inc. in Chicago, Illinois). The t-test was used because this statistical formula is used to see if the means of two different sets of independent data are statistically different from each other.

The t-test for independent samples is a test used to compare two small samples which are independent from each other while looking to find patterns between the two. Any appropriately performed test of statistical significance displays the degree of confidence in accepting or rejecting a hypothesis. Typically, a hypothesis for independent samples tested with the t-test shows whether or not two different samples (of people,

texts, etc.) experience patterns in their differences. These disparities should be enough to prove whether or not the two samples will always have a difference between the two or if the results were just a fluke. This test is only valid if there is a direct relationship between the specific data points in the first sample and one specific data point in the second sample. It is also required that the data be collected from two different samples. One assumption made before using the t-test is that the dependant variable is normally distributed; the two groups have approximately equal variance on the dependant value and the two groups are independent of each other.

## Results

After receiving all of the completed studies, this researcher ran the data through a t-test for independent samples. The results of the t-test showed that there were twelve questions in the first section of the study where males and females significantly differed. Table 1 shows the questions where males and females differed in the first section, the mean score for each gender, and the significance of this difference.

Table 1:

Item	Mean		Significance Levels (2-tailed)
	F	M	
Question 1 (Anecdotal Humor)	3.21	3.60	.001
Question 5 (Hostility)	2.76	3.61	.000
Question 6 (Joking)	3.33	3.72	.001
Question 9 (Slapstick Humor)	2.21	2.62	.004
Question 11 (Anecdotal Humor)	2.80	3.22	.002
Question 15 (Cartoons and Comics)	2.33	1.94	.010
Question 21 (Anecdotal Humor)	4.25	4.01	.014
Question 23 (Sexual Humor)	3.48	4.13	.000
Question 25 (Sexual Humor)	3.30	3.96	.000
Question 26 (Slapstick Humor)	2.95	3.60	.000
Question 27 (Slapstick Humor)	2.23	2.81	.000
Question 28 (Creativity)	3.21	3.51	.015
* 1-5 Likert Scale			

In this table there are a few types of humor in which high school males and females differ. Those groups include hostility, joking, slapstick humor, anecdotal humor, cartoons and comics, sexual humor, and creativity. The males in this study were more likely to have a higher score in the categories of hostility, joking, slapstick humor, sexual humor, creativity, and anecdotal humor where the jokes are being used to put someone else down. In contrast, females had a higher score in the cartoon and comics section and anecdotal jokes about themselves. This researcher believes that these differences are due to the characteristics of each gender in response to humor, as found in previous studies. Males were more likely to score higher on types of humor thought to be more “immature” while the females were more likely to score higher on types of humor used in a more social aspect to raise their social standing.

There is one finding in each group which is surprising to this researcher. The first was that males were more likely to tell anecdotal humor used to put others down, because in Kotthoff’s study (2000) it was seen that the females were more likely to use anecdotal jokes to put others down. The second finding which surprised this researcher was the fact that females were more likely to read the comics and cartoons in the newspaper because in Crawford and Gressley’s study there is no difference between males and females in this category.

In this researcher’s study questions in one category could show differences within the category, while other questions do not show any differences within a category. In the anecdotal humor questions there were two questions which showed differences between males and females, while other questions did not. The males and females showed differences in the anecdotal humor questions when they related to pointing out the flaws

of someone else or telling funny stories about themselves, but in the general questions about everyday life the males and females showed no significant difference. In the more general questions about everyday life both males and females said that they almost always noticed funny occurrences.

As this researcher compared his findings to those of Crawford and Gressley's study he found that there were some similarities and some differences between males and females. In both studies it was found that there was a significant difference between males and females in response to the questions under the categories of hostility, joking, slapstick humor, and anecdotal humor. In the hostility, joking, and slapstick humor categories both studies revealed that males were more likely to score higher than females. Contrarily, in the anecdotal humor category males scored higher on one question where as females scored higher on another question in this researchers study. This differs from Crawford and Gressley's study females scored higher on every significant question in the anecdotal humor category. There were also similarities between categories where there was no difference between males and females.

While comparing these two studies, this researcher also found some differences between the findings in this researcher's study as compared to the results in Crawford and Gressley's study. In this researcher's study, there was a significant difference in the creativity, cartoons and comics, and sexual humor categories; in Crawford and Gressley's study there was no significant difference between the genders.

In the second section of this researcher's study there were only two questions where males and females differed significantly in their responses. These differences can be seen on Table 2.

Table 2:

Item	Mean		Significance Levels
	F	M	
Question 33 (Female vs. Male)	1.95	1.25	.000
Question 35 (Female vs. Male, Creativity)	2.63	2.24	.000
*1-3 Likert Scale			

In Table 2 it can be seen that males and females differ in relation to the funniest person they know and if the funniest person they know tells scripted jokes. While males are more likely to say that the funniest person they know is a male, the females do not say that the funniest person they know is not a male, but they seem more reluctant to say yes. Also females say that the funniest person they know is very spontaneous and witty while the males say that the funniest person they know sometimes tells scripted jokes while also being very spontaneous.

There were differences between this researcher's study and Crawford and Gressley's study in these categories. In this researcher's study males and females had a significant difference in which gender they found to be the funniest and what made them so funny. In Crawford and Gressley's study there was no significant difference between the males and the females in what gender they found to be funny, where as in this researcher's study the males tended to say the funniest person they knew was a male. Females were more likely to be unsure of the funniest person they know.

Each question in this study was used to cover the different types of humor which this researcher found to be popular with high school students. These questions helped to show the differences between the males and females in which type of humor they were

more prone to appreciate. This study helped to prove that there are differences between males and females and also displays that the two genders have the same feelings on other types of humor.

## Conclusion

This study examines the differences between high school level males and females, and compares their feelings about humor to see if there is a statistical difference between them. This study also compares the findings from this researcher's data to that of Crawford and Gressley's study to see if there is any difference between the two findings. The results of these findings help to show how genders can seem to be different on many levels, but there are also some similarities which may not normally be perceived.

Some of these researcher's findings go along with the findings of previous studies while other findings prove to show opposite outcomes from these past studies. One finding from this study, which parallels a study previously done by Kotthoff (2000), shows that females are more likely to use humor to boost themselves up in their social standing. This can be seen in question 21 which asks, "Do you tell funny stories about things that have happened to you?" The results of this question further emphasize the point that women tell anecdotal stories about themselves to boost their social standing.

Almost all of the other questions on the first page (1-5 Likert Scale) follow the patterns seen in other research. From the results of this study it can be seen that males seem to be more open to raunchier and more "juvenile" types of jokes while the females stay a little more conservative. Males show their likings for "ethnic jokes", "fart and burp jokes", "dirty jokes", "sexist jokes", and "slapstick jokes" while the females are usually undecided about these types of humor or are strongly against them.

These findings go along with results from a previous study done by Marek and Tingley. Marek and Tingley's study showed that males were more open to gender bashing jokes, both of males and females, while the females seemed to be more against

sexist jokes (2000). This conclusion goes along with this researcher's result from question 25 which asks, "Do you appreciate a joke even if it is sexist (male or female bashing)?" Based upon the results of this question it can be seen that males are more likely to "almost always" laugh at gender bashing jokes while females seem to be more reserved in their appreciation of sexist humor.

This researcher expected to see the males score statistically higher than the females on some of the questions. These questions include question number 5, 6, 9, 13, 15, 19, 22, 23, 26, 27, and 28. These questions were expected to have statistically different results by this researcher because they fit into the general public's perception of male responses to humor. Though some of the questions followed this researcher's expectations, others from the list did not. Question number 13, 19, and 22 were questions in which this researcher expected to see a statistical difference with the males scoring higher, but no statistical difference was seen. In question 15, the exact opposite of this researcher's belief came to fruition. This question showed a significant difference between the genders with the females actually scoring higher than the males, meaning they were more likely to read the comics in the newspaper than males were.

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