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## ABSTRACT

The devaluation of racial, ethnic, or religious groups, sometimes disguised as humor, is a major contributor to violence and aggression against these groups. In an effort to understand this process, five factors of humor: negative ethnic stereotype jokes, play-on-word jokes, academic/social referent cartoons, gender/establishment jokes, and gross cartoons, are examined in this paper. Responses to a broad sampling of jokes and cartoons were obtained so as to identify these factors. The factors were related to humor theories and to the roles of emotional sensitivity and cognitive abilities as part of a program of research to determine who will find different humor materials amusing and to discover what contexts affect the humorousness of jokes and cartoons. It is hypothesized that responses to specific types of humor may provide a window to negative beliefs and feelings about ethnic groups. It was found that emotional empathy was negatively correlated only with the humorousness of negative ethnic stereotype jokes. Added laughter amplified this negative correlation. Cognitive dissonance theory instruction reduced humor ratings on negative stereotype jokes but not other humor factors. It is concluded that the presence of ethnic jokes indicates a need for increased emotional empathy and greater bicultural competence. (RJM)

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HUMOR, EMOTIONAL EMPATHY,  
CREATIVITY  
and  
COGNITIVE DISSONANCE

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## Humor, Emotional Empathy, Creativity and Cognitive Dissonance

Almost 350 years ago, British philosopher Thomas Hobbes proposed a superiority theory of humor suggesting that we laugh at perceived imperfections or defects of others as a way of making ourselves feel superior (Hobbes, 1968). In more recent times, balance theory has provided a useful way of explaining why jokes or cartoons that insult others may be found to amuse someone who has negative attitudes toward the individuals who are the target of the joke or cartoon (LaFave, Haddad, & Maesen, 1976). Aronson (1995) proposed that prejudice may emerge as the result of conformity to social norms. He labeled insensitivity to others as the key construct underlying prejudice.

Many other theorists (e.g., Freud, 1960; Harter, 1974; Schultz & Horibe, 1974; Zigler, Levine, & Gould, 1969) posited that recognizing and solving incongruities provide the amusement underlying the appreciation of humor. Whatever the theory of humor proposed, researchers adhering to a particular theoretical perspective usually identify stimulus materials (i.e., jokes and/or cartoons) that are most likely to demonstrate support for their theory. In the present study, humor responses to a broad sampling of jokes and cartoons were obtained to identify several factors of humor. These factors were related to humor theories and to the roles of emotional sensitivity and cognitive abilities as part of a program of research to determine who will find

different humor materials amusing and what contexts affect the humorousness of jokes and cartoons.

Despite efforts to control overt discrimination and violent behavior, negative cognitive beliefs and aversive feelings toward other races or ethnic groups continue as pervasive in our society. However, discrimination now takes a much more subtle form (Blanchard, Lilly, & Vaughn, 1991).

Responses to specific types of humor stimuli may provide a window to these negative beliefs and feelings about ethnic groups. In the present study, responses to different types of humor were correlated with feelings of empathy toward others.

The social situation also plays a critical role in determining humorousness of jokes and cartoons (Chapman, 1976). The laughter of others viewing humor stimuli can affect humor responses and these responses can affect our prejudices via cognitive dissonance reduction (Aronson, 1995). Conversely, an understanding of the power of cognitive dissonance theory might prevent individuals from creating cognitive tension by laughing along with others in response to negative-stereotyped ethnic humor.

Because dehumanizing a group is central to violence and aggression toward members of that group (Feshbach, 1971) and because emotional empathy can be altered (Baron, 1976; Hammock & Richardson, 1992), one goal of this paper was to examine the relationship of negative-stereotyped humor appreciation and emotional empathy. Being empathic is an important component of

the philosophy of nonviolence (Mayton, Diessner, & Grahby, 1996). Therefore, we hypothesized that individuals lower in emotional empathy will be more likely than high-empathy persons to rate negative-stereotyped ethnic jokes or cartoons as humorous, but that these groups will not differ in their appreciation of other factors of humor. We also explored the degree to which creativity is related to humor appreciation.

### Method

#### Participants

A total of 660 undergraduate students at a primarily white state-owned university in Pennsylvania participated in one or more phases of this study. All were enrolled in sections of a general psychology course and received extra credit for participation. Ethical principles of the A.P.A. were followed including a warning to participants that many people find some of the jokes or cartoons to be offensive. Despite informing participants that they could leave the study at any time and still receive extra credit if they were uncomfortable continuing in the study, every volunteer completed the humor survey and other scales administered at the other sessions.

#### Materials

A humor booklet consisting of 99 jokes and cartoons was created by the researchers from humor material found in books and magazines sold in a large bookstore chain. The jokes and cartoons were selected to include a wide range of content as well as calling for different types of

cognitive processing skills. Because of our interests in humor at the expense of others, extra effort was made to include such material despite the personal distaste all three of us have for such jokes and cartoons. The 7-point scale for rating humorousness included a zero if participants considered a joke or a cartoon not funny at all and a minus one for those that not only lacked funniness, but were offensive. In addition to the humor survey, participants completed an emotional empathy scale (Mehrabian & Epstein, 1972), an unusual uses verbal creativity test, and the circles figural creativity test (Torrance, 1966).

### Procedure

All participants in the study completed the humor survey rating at least once. Those in courses with the researchers completed the emotional empathy scale and creativity tests in different sessions than when they took the humor survey, but within three weeks of completing that survey. Separate sign-up procedures for these tests and the humor survey along with instructor introductions of the extra credit opportunity were designed to keep participants from associating the humor survey with the other scales.

Confederates provided added laughter to selected jokes and cartoons for 97 participants. The laughter was introduced by different confederates on an equal number of jokes and cartoons from each of five factors of humor.

The humor survey was administered twice to 58 participants from two sections of general psychology. The second

administration followed discussions and exercises illustrating the applications of cognitive dissonance theory.

### Results

A principle-components factor analysis of humor ratings of the 99 jokes and cartoons resulted in five factors with eigenvalues greater than 1.5. The rotated factor loadings were used to select the jokes or cartoons that best represent each of the five factors. Each of the five clusters included only jokes or only cartoons. The first factor consisted of jokes in which a racial, ethnic, or religious group was presented with a negative-stereotype. The second factor consisted of play-on-word jokes. The third factor included cartoons for which there was either an academic or social-issue referent. The fourth factor included jokes based on gender, lawyer, police, or politician negative stereotyping. The fifth factor consisted of gross cartoons. Examples of the jokes and cartoons representative of each humor factor are available from the researchers.

An intercorrelation matrix was obtained for humorousness ratings on each of the five humor factors, scores on the emotional empathy scale, scores on the verbal creativity test, and scores on the figural creativity test. The emotional empathy scale correlated significantly only with the humorousness ratings on factor 1 (negative ethnic stereotype) jokes with lower empathy students rating those jokes as more humorous ( $r = -.62, p < .01$ ). Thus, over 38% of the variability in ethnic humor appreciation was accountable by knowing a participant's level of emotional

empathy. No other humor factor correlated significantly with emotional empathy ( $p > .05$ ).

Verbal creativity correlated positively with play-on-word jokes ( $r = .31$ ,  $p < .01$ ), but not with any other humor factor ( $p > .05$ ). Figural creativity correlated positively with academic/social-issue cartoons ( $r = .29$ ,  $p < .01$ ), but not with any other humor factor ( $p > .05$ ).

The added laughter study data were analyzed with a 2 x 5 mixed factorial analysis of variance consisting of two levels of added laughter (none or laughter on half of each factor's jokes or cartoons) and the five types of humor. Simple main effect analyses of the significant interaction indicated a facilitating humorousness effect due to laughter only for the play-on-word jokes and the academic/social referent cartoons. Also evident in these data was a violation of the homogeneity-of-variance assumption with the laughter group having a very large variance on the factor 1 negative ethnic-stereotyped jokes. Follow-up analyses with a median split on the laughter group's emotional empathy scores revealed that added laughter increased factor 1 humorousness ratings for low emotional empathy students while decreasing factor 1 humorousness ratings for high emotional empathy students while decreasing factor 1 ratings for high emotional empathy students.

Data were also analyzed from the study involving administration of the humor survey at the beginning of the semester in general psychology and again after completing the



cognitive-dissonance discussion and exercises as part of the social psychology portion of the course. The second administration of the scale was in class period following the test on social psychology. A 2 (grade-level on the social psychology test--A and B vs. C or below) by 2 (pre-post) by 5 (humor factors) mixed analysis of variance with repeated measures on the last two factors was used to analyze the data. Simple-simple main effect analyses resulting from the large three-way-interaction variability ( $p < .05$ ) indicated that the A/B students selectively declined from pre to post on the ethnic jokes and gender/establishment jokes ( $p < .05$ ). The C or below students rated all five humor factors as less funny the second time. A follow up analysis revealed that this pattern was primarily a function of D and F students rating almost every joke or cartoon as a -1, 0, or +1 on the rating scale that ranged from -1 to +5.

### Discussion

The five factors of humor indicate the importance of taking a psychometric approach to identifying different types of humor before exploring the validity of theories of humor. The separate clustering of jokes and cartoons into different humor factors along with the correlation of verbal creativity with play-on-word jokes and figural creativity with academic/social issues cartoons indicate the need to include cognitive information-processing abilities in studies of humor in which incongruity plays an important role in humor appreciation. The humor factors also

support a broader sampling of humor materials than is included in standardized humor scales such as the IPAT Humor Test (Tollefson & Cattell, 1963).

The emotional empathy and humorousness correlations lend strong support to the superiority theory of emotion as an explanation for appreciation of negative ethnic stereotyped jokes. Those most likely to devalue others in a humor situation also score low on empathy for others experiencing problems.

Further research is needed to examine other factors that correlate with gender/establishment jokes. The emotional empathy correlated with minority-group negative stereotyping, but not with negative stereotyping based on gender, police, lawyer, or politician status. Manipulation of the jokes as well as the addition of jokes is needed to determine the basis of this factor. Stereotyping of police, lawyers, and politicians as males may have led to this factor simply being gender-related jokes. Another possibility is that another type of humor consists of jokes in which the target groups consist of those perceived to have power over those rating the jokes. Follow-up research is needed to see if there is a differentiation of jokes that ridicule males or females vs. establishment authoritarian figures such as police, lawyers, bosses, and politicians.

The increased variability in negative stereotyped ethnic humor responses with added laughter and the relation of that

variability to emotional empathy further strengthens the suggestion that emotional empathy is related to the superiority response to ethnic humor. This might provide a context for helping to reduce the devaluing of groups that results from such humor. Follow up discussions with participants in the added laughter study revealed that several high-emotional-empathy participants were angered by the laughter to the ethnic jokes. Previous research has neglected to examine the differential effects of added laughter on different types of cartoons and jokes (Gruner, 1993; Lightstone & Nosanduk, 1974; Olson, 1992).

The increase in humor ratings on jokes and cartoons that are correlated with verbal and figural creativity suggests that added laughter may operate by increasing one's openness to thinking creatively rather than there being a general response conformity to the added laughter.

Finally, the effect of instruction with exercises to illustrate cognitive dissonance theory suggests that such instruction may be effective in reducing the devaluation of groups that occurs when responding to negative-stereotyped ethnic jokes with humor. However, the finding that understanding cognitive dissonance also reduced gender/establishment joke humorousness raises the question of whether the results reflected a general response conformity rather than altered emotional empathy for oppressed groups. Perhaps the most appropriate follow-up study is to use ethnic humor materials with trained target-group members present to

discuss the hurt such humor causes. This would be followed by having non-target persons convey to others how this humor is so harmful. Those advocating the cessation of such joke telling should be less likely to emit that devaluing behavior.

In light of the emotional empathy relationship to judged humorousness of negative-stereotyped ethnic jokes, research is needed to explore the impact of such jokes being told by those who are members of the groups targeted by the jokes vs those who have no such identification. We expect that ethnic joke telling by individuals in the targeted group communicates that is acceptable to laugh at such humor. Cognitive dissonance theory suggests that this devaluing behavior may reduce empathy and increase acceptance of devaluing of and violence to such individuals.

In summary, humor provides an excellent window into the beliefs and feelings that underlie prejudice against devalued groups. At the same campus where these data were collected, a student survey found that 93% responded affirmatively that they valued all cultural groups and 94% believed it important to have diversity in the student population. However, approximately one-third reported telling jokes about specific ethnic or racial groups. An even higher proportion self reported telling jokes about homosexuals. The prevalence of such humor in our society indicates the need for efforts to increase emotional empathy and strive toward greater bicultural competence.

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Brief Summary

Devaluing racial, ethnic, or religious groups is a major contributor to directing violence and aggression to that group. Negative ethnic stereotyped humor involves people in such devaluing. The current study identified five factors of humor: negative ethnic stereotype jokes, play on word jokes, academic/social referent cartoons, gender/establishment jokes, and gross cartoons. Emotional empathy was negatively correlated only with humorousness of negative ethnic stereotype jokes. Added laughter amplified this negative correlation. Cognitive dissonance theory instruction reduced humor ratings on negative stereotype jokes but not other humor factors.

The results are discussed in terms of social psychology theories and the use of humor to understand devaluing others.





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