The effect of humor on retention of lecture material was studied with 100 undergraduate students at California State University, Dominguez Hills. Within each class, students were divided into four equal groups, and four versions of a lecture on language development were presented on videotape by a college faculty member. The lectures were identical in content and varied only in type of humor: (1) humor related directly to items in the learning test; (2) humor unrelated to the items being tested; (3) no humor; and (4) a repetition of the concept that preceded the related joke (repetition control condition). Both the related and unrelated jokes were inserted in identical places within the lecture content. A joke was considered related if it was associated with, or served as, a mnemonic device for the concept to be learned and recalled. Information learned or recalled from the lectures and data regarding each subject's attitude toward the lecture and the speaker were assessed, along with ratings of the level of humor in the 10 jokes from the related humor lecture. The related humor lecture facilitated retention of information significantly more than both the unrelated humor and the nonrepetition control lectures. The nonrepetition control and the unrelated humor conditions were recalled equally well. That is, repetition, whether or not through the use of humor, enhanced recall. Furthermore, subjects found the humorous presentation more enjoyable. It is concluded that in cases of rote learning, related jokes contribute by both repeating the concept and making the learning process more enjoyable. (SW)
THE EFFECT OF HUMOR ON RETENTION OF LECTURE MATERIAL

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LECTURE MATERIAL

Previous studies have had contradictory results regarding the effect of humor on acquisition and retention of information. Taylor (1964, 1972), Gruner (1965, 1967, 1970) and Kennedy (1972) are among those who found that humor did not affect learning or memory. On the other hand, studies by Gibb (1964) and Kaplan & Pascoe (1976) found evidence that humor facilitated retention. This study was an attempt to investigate the effect of humor by correcting some methodological problems that existed in earlier studies: (1) more control for degree of perceived humor; (2) measuring learning in relation to the placement of humorous inserts; (3) finding the relation between humor, learning and subjects' evaluation of the lecture and of the speaker.

Method

Subjects

The subjects for this experiment were 100 students from undergraduate classes at California State University Dominguez Hills. They were randomly divided within each class into four equal groups to serve in the four conditions. The subjects received class credit for participating in the study.

Materials

All four versions of the lecture were presented on videotape by a college faculty member. The subject matter of the four lectures dealt with language development. They were identical in content, varying only in type of humor. One lecture contained humor which related directly to items in the learning test. A second lecture contained humor which was unrelated to the items being
tested. Both the related and unrelated jokes were inserted in identical places within the lecture content. A joke was considered related if it was associated with, or served as, a mnemonic device for the concept to be learned and recalled. A joke was considered unrelated if it was not associated with the concepts in the lectures. A third lecture contained no humor, only the subject matter of the lecture. This lecture was called the nonrepetition control condition. A fourth lecture contained a repetition of the concept that preceded the related joke. The repetition of the concept acted as a frequency control for the related jokes. This fourth lecture was called the repetition control condition.

For the related and unrelated humor lectures, ten items from the learning test involved concepts which related to the humorous material, and ten items involved concepts which were in relatively low proximity to the humor inserts. There was an attempt to equalize the difficulty of the two sets of ten questions. The test items were designed to compare the degree of recall between the concepts with and without jokes. The control conditions were tested on the same concepts as were the humor conditions. Each set of test items was presented for learning and retention of the same concepts, although these were presented under the four lecture conditions.

Four separate rooms in an audio-visual facility were used to present the four separate conditions. The lectures were presented on four closed-circuit videotape machines which were operating simultaneously during the study.

Four types of response sheets were used. The learning tests had twenty multiple choice items which were to assess the amount of information learned or recalled from the lectures. The attitude questionnaire, consisting of a semantic differential with a five-point scale, was used to collect data regarding each subject’s attitude toward the lecture and the speaker. A joke rating sheet was used to evaluate the level of humor in the ten jokes from the related humor lecture.
Procedure

Each class which provided subjects was randomly divided into four groups. The groups were simultaneously given the four conditions of the lecture by use of closed circuit videotape machines. The presentations took place in four separate classrooms in the audio-visual center. The process was repeated until the twenty-five subjects for each condition was complete.

Design

This study was a 4 X 2 X 2 factorial design. The lecture condition (related, unrelated, nonrepetition control, and repetition control) was varied between subjects. There were two within-subject variables: joke test items versus no-joke test items and immediate versus delayed test was the dependent variable. In addition, the responses on the affective questionnaire were compared among the four lecture conditions.

Results and Discussion

The hypothesis that related humor, compared to unrelated humor or the control conditions, would generally facilitate learning and memory has not been supported.

A three-way analysis of variance was conducted to analyze the effects of the lecture conditions (related, unrelated, nonrepetition control and repetition control), the question context (joke and no-joke), and the recall interval (immediate and delayed). The lecture conditions did not yield differences in recall for all twenty questions, $F (3,288) = 0.6092$, $MSe=1.95$, $p > .05$. Subjects had higher recall on joke questions than on the non-joke questions, $F (1,96) = 10.0602$, $MSe=37.21$, $p < .001$. Subjects did better on immediate test than on the delayed test, $F (1,96) = 8.4785$, $MSe=31.36$, $p < .001$.

Duncan's New Multiple Range Test was used to compare the four lecture conditions. With regard to the joke questions, the related humor and repetition
control conditions were statistically equal. Also, the nonrepetition control, and unrelated humor conditions were statistically equal.

The non-joke questions did not produce a significant difference of means among the four lecture conditions. The difference between conditions on all questions was not statistically significant.

The results of the present study were similar to the studies done by Kaplan and Pascoe (1976) and Desberg, et.al. (1979). It was found that under some conditions, retention of information was facilitated by the use of humor. In this study, results on joke questions showed that the related humor lecture facilitated retention of information significantly more than both the unrelated humor and the nonrepetition control lectures. The nonrepetition control, and the unrelated humor conditions recalled equally well. Because the related humor condition and the repetition control condition did not differ in retention, it may be assumed that these two conditions served the same purpose of verbally underlining the fact to be learned. Furthermore, based on the analysis of the affective questionnaire, subjects seemed to enjoy the jokes in the related humor lecture more than the repetition lecture. That is, subjects’ rating of both questions on the affective questionnaire which focused on humor of the speaker and lecture were significant. Subjects basically found the related humor lecture more humorous than the repetition control lecture. In addition, both related and unrelated conditions were rated more humorous than the nonrepetition or the repetition control versions of the lecture. Interestingly, only those two questions on the questionnaire revealed significance. In summary, repetition, whether or not through the use of humor, enhances recall. Furthermore, subjects report finding the humorous presentation more enjoyable. Therefore, in cases of rote learning, related jokes contribute by both repeating and concept and making the learning process more enjoyable.
References


