

**Method.** Subjects were 777 students enrolled in a large General Psychology course at the University of Arkansas. All students enrolled in the course were allowed to attend optional study sessions held prior to the final exam. The sessions were conducted by one of four graduate assistants and were of one of two types; questions or organization. The questions sessions consisted of a graduate assistant answering questions asked by the students. The organization sessions consisted of a graduate assistant organizing the text and lecture material in outline form and presenting the material to the students via an overhead projector. The graduate assistant went over all of the major concepts from the text and lecture in this manner and also answered any questions asked by the students.

The outcome measure used was a 50 point multiple choice exam covering the Personality, Abnormal, and Therapy chapters from Baron, Byrne, and Kantowitz (1978). Forty-five of the items came from the item pool supplied by the text authors and the remaining five were constructed by the instructor for material covered in the lecture only. On a separate sheet of paper, the students indicated how far in advance of the test they preferred the study sessions to be held.

**Results and Discussion.** As indicated in Table 1, an analysis of variance using the General Linear Model procedure of the

## A Closer Look at the Study Session

In a recent study, Aamodt (1982) found that overall, students who attended a study session prior to an exam performed better on the exam than did those students who did not attend. Moreover, it was found that the study sessions helped the students in the higher and middle academic range but not those in the lower range. However, it was not possible from the experimental design of the earlier study to determine the reason for the success of the study session.

Three possible reasons for the effectiveness of the study session were considered: (a) the repetition of information, (b) the chance to ask questions, or (c) the organization of the material. It was also noted that another possible explanation was that it was not the study session itself that was effective, but rather, that it was only the most motivated students who attended the sessions. Thus, the increased test performance was an artifact of student motivation rather than the result of the study session. Although the motivation hypothesis is possible, the fact that similar proportions of students in all academic levels attended, combined with the fact that the session did not help students in the lower range, made this hypothesis less plausible.

It was the purpose of the present study to investigate the reason for the effectiveness of the study session. To do so, two types of sessions were held; one in which students only asked questions and another in which in addition to asking questions, the major concepts were organized and presented to the students. If both types of sessions were helpful, then the reason for the study session effectiveness would not be due to the increased organization of the material. However, if only the organized sessions were helpful, then the effectiveness of the study session would be due to organization rather than the chance to ask questions or to the motivational effect. In addition, in order to help instructors schedule study sessions in the future, the students were asked to indicate how far in advance of the exam they preferred the study sessions to be held.

**Table 1. Means and Standard Deviations of Test Scores by Type of Study Session**

	Type of Study Session		
	No Session	Questions	Organization
<i>M</i>	39.81	40.30	43.08
<i>SD</i>	7.47	5.44	5.03
<i>n</i>	144	23	108

Note. No attempt was made to equalize *n* by assigning subjects to a particular condition. *N* = 275

Statistical Analysis System (Barr, Goodnight, Sall, & Helwig, 1976) revealed a significant overall effect for the type of study session attended ( $F(2,272) = 7.53, p < .001$ ). Using the Least Significant Difference test, students who attended the organized session ( $M = 43.08$ ) performed better on the exam than did students who did not attend a study session ( $M = 39.81$ ) and better than those who attended the questions session ( $M = 40.30$ ). However, the subjects attending the questions session ( $M = 40.30$ ) did not differ significantly from the students who did not attend. Thus, it appears that for a review session to be effective, some type of organization of the material is essential; merely answering questions is not enough to produce an improvement in exam scores. These results also seem to rule out the motivation hypothesis.

As shown in the lower part of Table 2, students prefer the study sessions to be held within two days of the exam. Furthermore, as depicted in the upper part of Table 2, when students were segmented by their final course grade, it appeared there was a slightly greater preference by the A and B students for the sessions to be held the day before the exam and a slightly greater preference by the D and F students for the sessions to be held at least two days before the exam. Thus, it might be possible for two types of study sessions to be held, one on the night before the exam for the superior students and one or two days before for the others.

**Table 2. Percent of Each Grade Category  
Indicating Preference for Study Session Times**

Grade Category	Number of Days Before Exam						
	1	2	3	4	5	6	7
A	48.00	44.00	8.00	0.0	0.0	0.0	0.0
B	53.16	31.65	12.66	1.27	1.27	0.0	0.0
C	43.55	38.71	11.29	4.84	1.61	0.0	0.0
D/F	32.32	42.42	17.17	3.03	4.04	0.0	1.01
All Students							
N	113	102	36	7	6	0	1
%	42.64	38.49	13.59	2.64	2.26	0.0	38

N = 265

In the earlier session, the material could be presented at a slower pace with more individualized instruction than would be possible if only one study session were held.

In summary, the present study concerned the effectiveness of two study session methods and student preference for when these sessions should be held. The results indicated that organization, rather than motivation, repetition of material, or the opportunity to ask questions is what makes the study session effective. Furthermore, in order to make the most preferred study session scheduling, a review session should be held one day prior to the exam for the A and B students and two days prior to the exam for the D and F students.

#### References

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