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EDE 9803

Table 1: Tests of Between-Subjects Effects

Dependent Variable: Scores on an arithmetic problem-solving test

Source	*SS*	*df*	*MS*	*F*	*p*	η^2
Reinfor	1249.18	2	624.59	31.86	.000	52%
Schedule	490.91	1	490.91	25.04	.000	29%
reinfor * schedule	187.36	2	93.68	4.78	.012	14%
Error	1176.36	60	19.61			
Total	59308.00	66				

Table 2: Dependent Variable: Scores on an arithmetic problem-solving test

Reinfore	Schedule	*M*	*SE*	*N*
Token	Random	19.64	1.34	11
	Spaced	26.45	1.34	11
Money	Random	28.27	1.34	11
	Spaced	37.00	1.34	11
Food	Random	31.45	1.34	11
	Spaced	32.27	1.34	11

Table 3: Scores on an arithmetic problem-solving test Scheffe

					95% Confidence Interval	
(I) reinfor	(J) reinfor	*MD*	*SE*	*p*		*Upper Bound*
Token	money	-9.59	1.34	.000	-12.94	-6.24
Token	Food	9.59	1.34	.000	-12.17	-5.47
Money	Food	.77	1.34	.846	-2.58	4.12

1a. F = 25.04

1b. Mean = 28.27

1c. Effect size equals 14% which is a large effect.

d. High significance because p<.001.

2. A follow up test would be Post-hoc because there is significant difference in the reinforcement conditions, interaction, and schedule.

3. A 3 x 2 ANOVA was shown to evaluate the effects on the arithmetic problem solving performance of second grade students and two types of reinforcement schedules. The results indicated a significant effect for reinforcement type F (2, 60) =31.9, p<.01) in GPA, a significant effect for schedule type F= (1, 60) =25.04, p < .01, and a significant effect for reinforcement type and schedule type F (2, 66) =4.78, p=.01, n^2=.14.4.

The ANOVA indicated a significance interaction between schedule and reinforcement. F (2,60)=4.78, p+012. The variance was 12.7% on the GPA.

In the case whether the schedule affects the GPA, the Two-way ANOVA indicated a significant difference between the two groups.