

Chapter III

Presentation of Results

Figure VIII shows the performance of each group by day. It clearly indicates that the performance of the WC group is superior to those of the other two. These differences are statistically significant. ($F = 4.81$, $df = 2, 38$; $p < .05$)

To account for the difference between the three groups in their learning, Table I and Table II are introduced.

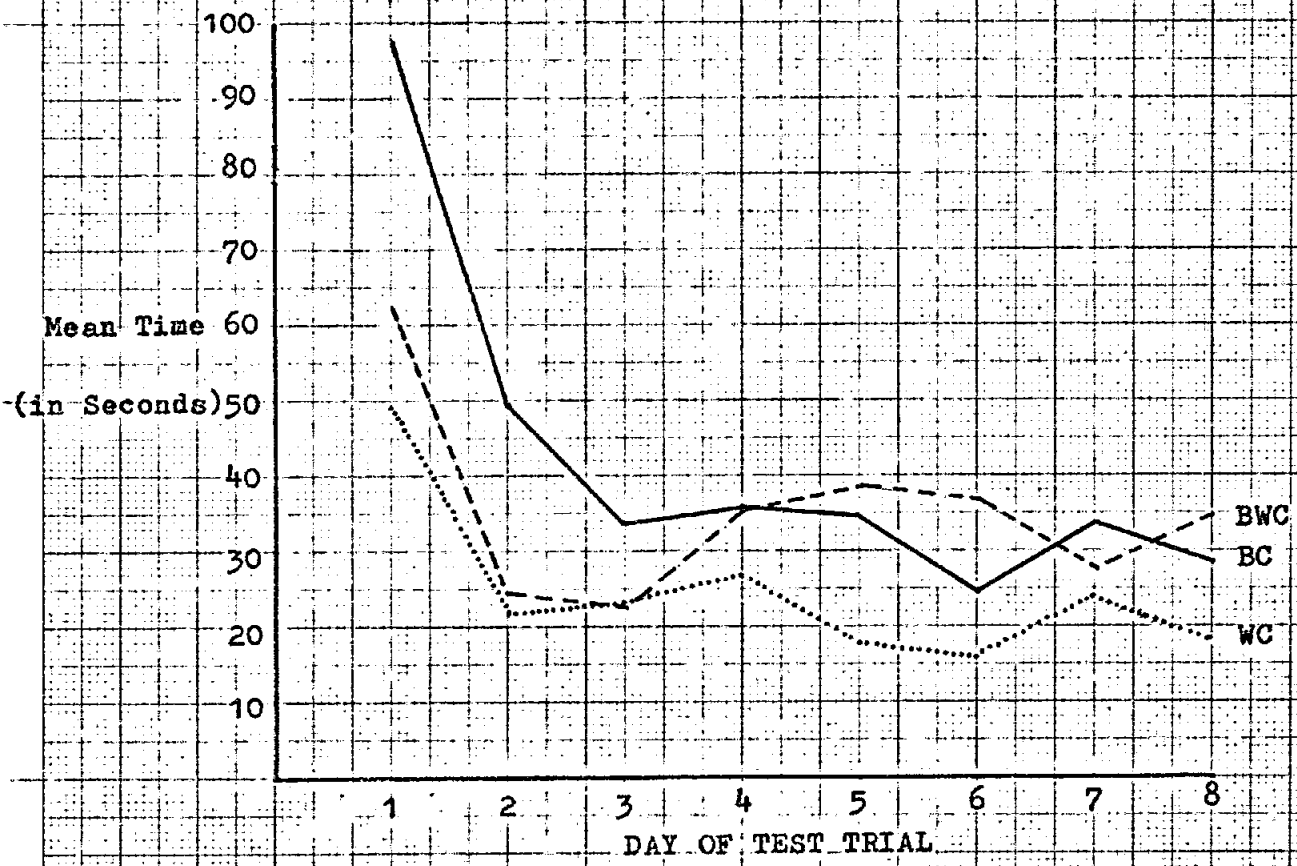


Figure VIII The performance of each group of rats

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Table I The difference of the mean time of the first three running trials and the last three running trials of each rat.

No	WC	BC	BWC
1	.66	-22.00	-16.00
2	-2.67	4.00	3.67
3	5.33	15.00	5.00
4	5.00	-2.00	35.34
5	15.66	24.34	2.00
6	31.34	11.66	24.00
7	30.00	7.34	-10.34
8	14.67	24.67	45.33
9	14.34	88.67	21.00
10	31.67	30.66	17.34
11	8.67	45.67	7.33
12	-18.33	7.33	
13	9.00	-1.67	
14	24.66	33.66	
15	8.00		
16	21.33		
\bar{X}	12.46	19.10	12.24

Each index in the above table is based on the difference of the mean time of the first and the last three running trials. These indices define learning in this study.

A comparison of means of each group indicates that BC group has more learning than the other two groups. Those of WC and B/C group are almost the same.

Table II Analysis of variance for the learning index of each rat among the three groups.

Source of Variation	df	SS	MS	F
"Between" Groups	2	417.22	208.61	.52
"Within" Groups	38	15272.85	401.92	
Total	40	15690.07		

*p > .05

To verify whether there was statistically significant difference in learning among the three groups, analysis of variance was used. As seen in the right column of Table II, the F value is .52 with 2 and 38 degrees of freedom. The F value ($p > .05$) indicated that there was no significant difference in learning among those three groups.

The statistical hypothesis is retained.