

## Chapter IV

### Discussion



The F value in Table II gives no evidence to support research hypothesis that learning under heterogenous characteristic of environment is better than under homogenous ones. Since the null hypothesis is retained, it might be concluded that heterogenous characteristic of environment is not different from homogenous characteristic of environment in influencing animals' learning.

Though, learning of these three groups are not significantly different, the performance shown in Figure VIII is quite interesting.

It shows clearly that WC group shows superior performance to other two groups. Table III indicates that the performance of WC group is significantly different from the other two.

Table III. Value of t for the performance of each pair of three groups of rats<sup>10</sup>

Groups	df	t value	p
a. WC and BWC	26	3.636	p < .05
b. BC and BWC	24	.41	p > .05
c. WC and BC	28	2.680	p < .05

High curve of BC group in Figure VIII might be related to the following findings. Kendler and Mencher<sup>11</sup> (1948) reported from the study of discriminating perception of the irrelevant incentive that their rats exhibited a definite preference for the side of the maze painted black. Meehl and MacCorquodall<sup>12</sup> (1948) found the same results as Kendler and Mencher (1948). Rollins<sup>13</sup> (1965) found that every one of his 36 rats exhibited a preference for the alley painted black.

High curve of BWC group in Figure VIII might be clearly explained by Tolman's<sup>14</sup> work. In testing discrimination of

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<sup>10</sup>Raw data for an analysis in Table III is each rat's average time of running eight trials from the entering door to the end of the alley.

<sup>11,12,13</sup>See review of literature.

<sup>14</sup>See review of literature.

visial patterns in which Lashley apparatus was used, Tolman observed that if the discrimination was done between the white and the black pattern, his rats showed much more hesitating, looking-back-and-forth sort of behavior. The heterogenous characteristic of environment might yield the same result.

Though this present study does not support any previous study, it does not show that learning under white condition, **black** condition and black-white condition are different. And it shows that performance under white condition is superior to those under black and black-white conditon.