

## MUSIC PREFERENCE AS A FACTOR OF MUSIC DISTRACTION

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*Summary.*—The present study is an experimental analysis of music preference as a factor of music distraction measured by the Stroop tests. Significant differences were found among groups given, most preferred music, least preferred music, and no music (quiet). Each group of 10 subjects were randomly chosen from 42 screened subjects. Performance was better without music and better with most preferred than with least preferred music. The results were not consistent with those previously found for the effects of noise upon Stroop test performance.

A study by Houston (1969) indicated that subjects took less time to complete the Stroop color-word task under the influence of noise rather than quiet. His results were discussed in terms of an interaction between the inhibitory process involved in ignoring continuous noise and the inhibitory process of ignoring the conflicting cues in the color-word task. In another study Houston and Jones (1967) determined that distraction from background noise, because of its inhibitory quality, does improve Stroop test performance. Also, music has been defined as a form of noise (Wolf & Weiner, 1972). The present study investigated the difference in performance on the Stroop tests under the influence of three music conditions; most preferred, least preferred, and no music. The purpose of the study was to investigate whether music causes distraction similar to that of noise and if so whether an individual subject's most preferred or least preferred music causes the greater distraction. Forty-two subjects were randomly chosen from freshman psychology and music theory classes at a southern university.

The subjects sat at a desk facing the experimenter and the musical selections were played on a stereo at a normal volume for listening. Each subject determined his own comfortable listening range. The musical selections used were from the following albums: Country Girls Sing Country Songs (RCA); Elvis—Almost In Love (RCA); André Cluton's—Beethoven Symphony No. 9 (Seraphim); Janus Joplin—Greatest Hits & Pearl (Columbia); Led Zeplin—II & Stairway To Heaven (Atlantic); Chicago—II (Columbia). A wristwatch with a second hand was used for measuring time. Subjects were first asked to list their most preferred and least preferred musical selections, on the basis of names. Three groups of 10 randomly chosen subjects were formed. Groups were not balanced for types of music preferred or sex. Subjects in Experimental Group I, were asked to perform the Stroop tasks under the influence of one of their specified most preferred musical selections, individually. Those in Experimental Group II were asked to perform the Stroop tasks under the influence of one of their specified least preferred musical selections. Those in the Control

TABLE 1  
STROOP SCORES (IN SECONDS)

Subject	Most Preferred Music	Least Preferred Music	Control
1	70	70	55
2	75	80	80
3	85	95	80
4	85	95	80
5	95	100	90
6	95	120	105
7	105	105	108
8	105	105	115
9	115	105	127
10	120	105	90
$\Sigma$	950	980	930
$M$	95	98	93

Group were asked to perform the Stroop tasks without music. Each subject was tested individually.

For each subject, the time span for performance on the color-naming task was subtracted from the time span for performance on the color-word task, and the difference was used as his or her "score." The Kruskal-Wallis one-way analysis of variance (Siegel, 1956), applied to the data, indicated that there was a significant difference among the three groups ( $p < .05$ ). Therefore, the Mann-Whitney  $U$  (Siegel, 1956) was applied to the data. The two experimental groups were significantly different from the Control Group but not from one another ( $p < .002$ ).

The results of the Houston studies (1967, 1969) suggest that the most distracting condition should be that wherein the subject does the best on the Stroop tasks. In the present study, the Control Group had the lowest mean, so that the results do not imply music is more distracting than quiet. Perhaps the problem lies in the definition of terms. Does music really behave as noise? It appears not to affect people in the same way as noise.

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