

Lang's alcohol study: an analysis

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The study conducted by researcher Alan Lang on the effects of alcohol represented one of the first approaches to using the double-blind form of study. A double-blind study is a type of study in which neither the participants nor the experimenters themselves know who has received the treatment.

In Lang's (1975) study, he and his colleagues pre-tested amounts of vodka and tonic water, and plain tonic water, to determine whether or not the two can be significantly differentiated from one another. After learning that the two were virtually the same in taste, they recruited college men who described themselves as social drinkers to become participants in the study.

Some of the participants drank vodka and tonic water while others drank tonic water alone. It was then revealed in the study that practically half of the men who drank vodka and tonic water thought they were drinking tonic water only, while those who did drink tonic water alone thought their drink was mixed with vodka. The last part of the experiment entailed provoking the participants, and the result was that those who believed that they had drunk vodka displayed more anger than those who thought they had drunk tonic water only.

It can be said then that the primary purpose of Lang's entire study was to discover the effects of alcohol on human behavior. However, his study deviated from the normal process of using alcohol as a means of studying behavior because of the incorporated element of a double-blind. Also, his study could be defined as a correlational one, as it basically sought to find a

relationship between the alcohol and the provoked aggressiveness among the participants.

Only a primary source was used, and the subjects in this case were college students of the male gender. As for the selection of the participants for the study however, random selection was not utilized as only men who specifically described themselves as social drinkers were chosen to take part. The reason for this was probably because it was imperative for the results of the study that the participants be drinkers by nature, as only they could effectively have the best chance of differentiating vodka and tonic from tonic water alone. To do random selection would have been difficult as the researchers would have no guarantee as to the drinking preferences of the participants.

The sampling method used was also not stratified, as in stratification, the sample population is first divided into a number of parts or “strata,” in order to relate it to the major variables being studied. The independent variable (IV) in this case is the alcohol given to the participants, whether it was vodka and tonic or plain tonic water alone. The dependent variable (DV) was the response of the participants, specifically the level of aggression displayed in response to the provocation done by the researchers.

The theory for this study is that it was done in order to determine the effects alcohol could have on behavior, regardless of whether it (alcohol) was actually given or if it was merely perceived. A probable hypothesis would be that the mere perception that alcohol was a part of one's drink could effectively lead to a change in behavior on the part of the participants,

without the need for the actual consumption of the alcohol. As evidenced by the documented results, this is exactly what happened.

While the research is for the most part valid, especially with the use of the double-blind approach, there are nevertheless certain flaws in the procedure and methodology that could be improved upon by those who would later conduct related studies. First of all, the length of time with which the experiment was done could have been lengthened so that there would be more time to test the reactions of the participants. The use of other forms of alcohol other than vodka and tonic water would have also been a welcome addition to the process of the research, as it would lend even more credibility to the results of the study.

The provocation itself could be placed under question; the researchers should have first taken steps to make sure that the provocation would not unknowingly trigger any previously stored extreme emotions. As an example, if one of the participants were black and the provocation was racially charged, this could serve to heighten the aggravated response of the participant as opposed to what would have been only a normal reaction. Perhaps the largest extraneous variable of all was the non-random selection of participants for the study.

While it is noted that the researchers needed participants to be social drinkers to validate the differentiation process, there could have been other ways to better improve selection and reduce bias and other threats to validity. What could have been done was to select a large population of college students randomly and then determine who among those selected

were drinkers. From that sample, the researchers could have then applied another randomization process to come up with the final list of participants.

Nevertheless, in summary the Lang study has proven to contribute much to the body of knowledge in psychology, and for all its faults, still remains to be one of the classic psychological experiments worthy of emulation.

Works Cited

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