

AI Acknowledgement

I confirm that I have not used any AI tools in the research and creation of this assignment. I confirm that I have not presented any AI generated materials as my own work. I confirm I have copies of my drafts, notes, and other resources I used, which I may be asked to provide in evidence.

Early studies conducted where emotions were manipulated repeatedly found that there is a strong relationship between the mind and body in emotional formation. Yet in the early 20th century the physiological changes always appeared to show no distinction in difference. Later studies did find differentiators for example Schachter (1957) did find in studying emotions fear and anger. While both were triggered by activation of the autonomic nervous system their seemed to have different levels in activation

Nonetheless, for the variance of emotions that us humans experience in comparison to the physical response, this left gaps in psychological understanding of what our emotions really are and how they come to life. This raises the question of what other determinants may be significant in the arousal. This leads many to believe that cognitive, and social factors play a much bigger role than we believe in forming our emotional status. Maranon's study (1924) gave 210 patients a shot of adrenaline and then asked patients to reflect. The findings revealed 71% of patients experienced no emotional affect. Despite the adrenaline coursing

through their veins, raising their physiological activation their emotional self remained in limbo. Schachter (1959) proposed that this was due to a lack of 'evaluative need': that because the patients were able to place evaluative reasoning to their adverse physiological functioning. That their heart racing, excessive sweating had a perfectly reasonable explanation eg the adrenaline shot. Therefore their cognition did not interpret a level of danger due to the circumstances and therefore placed no label on one's feelings. Stanley Schachter and Jerome E. Singer (1962) built upon previous studies to further our understanding. A study that opposed to prior experiments, Schachter and Singer manipulated to be devoid of awareness for the participants whilst injecting participants with samples that would cause physiological changes. In modern day this would never happen due to the grey area this has in its ethical and moral stance. To explore this more we must unveil the true specifics of what went on within this study to explore critically how righteous this study was and at what cost.

The hypothesis is that those who were informed of the side effects that the injection would cause would not experience an emotional reaction and remain neutral as they have a reasonable explanation for their cognition to interpret

In their methodology, Schachter and Singer formed four experimental conditions.

Epinephrine informed, Epinephrine ignorant, epinephrine misinformed and a placebo group

1. Epi inf -They are made fully aware of the physical symptoms they may experience ,
the cause and the lasting affect of this shot of epinephrine
2. Epi ign- The individuals were simply told that the shot would be mild and harmless
and gave no information as to side effects
3. Epi mis -The participants were misinformed of the side effects they would experience
feet numbing, itching, slight headache

3 Placebo This group was injected with a neutral saline solution was a control condition to provide evidence on the affect of the adrenaline shots. This group was treated the same as the epinephrine ignorant

To test the social affect on emotions how others can influence ones personal experience of emotion , participants were met with confederates .The confederates job were to act in one of two ways , in anger or in a euphoric state . Both opened with generic conversation to break the ice between participants and then would begin to attempt to manipulate one's experience of the epinephrine shot with words about their own experience

The anger variable was given to Epi ign Epi inf and placebo

For the anger variable confederates would say how they personally don't think it was fair for them to give them these shots at such late notice and that already being here when asked makes them feel obliged to submit to taking the shot. This was said directly before participants were asked to take a questionnaire within the 20 minute period for the epinephrine to take full affect

As the question progress from rather innocent to more implicit and vulgar questions so does the stooges remarks progress in his commentary showing levels of anger

At question 28 whereby participants are obliged to answer questions regarding their intimacy life the con participant express his rage through an outburst. He rips up the paper and storms out of the room. After this there are still another total of 8 further questions which exponentially increase in their personal, quite uncomfortable questions.

For measures, two types were introduced

1. Standard observations – Researchers were able to observe the behaviour expressed by participants through a one-sided mirror – The idea is that this gives participants partial privacy so that their behaviour may not be skewed by a mean of social influence aka a need to perform in a certain way as their awareness to being being observed
2. Self – report – Participants themselves were asked to report how they felt in detail . Unlike the first measurement, this was done directly between the participant and researcher, therefore their answers may be influenced by being in the eye of ithers

The stooges were asked to observe subjects and code their behaviour into 3 categories

Firstly by mimicking the stooges behaviour . For example, joining in throwing paper airplanes. Second of all, creating new activities that progress from the stooges own behaviour . This indicated the participant was entering a creative euphoria stage .Lastly, participants did not join in on the confederates activities and instead paid no such attention to their behaviour

Participants were all male college students who were taking classes in introductory psychology. All of whom came from the university of minnesota. 90% gained credit from participating in such experiments towards examinations

For the results, comparing those who were and were not injected with epinephrine showed that those who did had a significant increase in excitation of their sympathetic nervous system than those who did not, as well as their pulse rate.

Few injected with epinephrine did not experience any side effects and were therefore excluded from the final data sets

Many professionals have heavily critiqued the efficacy of the methodology in this study both in its methodology and results . Robert Plutchik and Albert F. Ax have stated their heavy criticisms around the validity and effect that the suffoxin injections had on the patients .

When comparing Table 1 which presents the physical differences in individuals before and after the experiment they commentate that the difference in anger and euphoria can reveal the lack of effect the drug had. The increase goes to show a larger average increase in anger when compared with the euphoria group . As this would likely not be due to more movement as the euphoria group reported more movement this can highlight the argument that the drug was not as effective in some compared to others which may affect overall results.

When discussing what may cause the methodology to lack validity, one factor which has been criticized is that a double-blind procedure has not been stated within the report . Although the report does mention the use of a one sided mirror this does not give full privacy which can risk participants acting in a less authentic manner, and can also skew the results.

Lastly, when looking at the participants here, we can argue that the true representation of results will not be highlighted as the majority were male. This does not account for women who make up the other half of the population

As discussed previously, in today's day and age, this experiment would not be allowed in legal practice to be conducted. Certain amendments and acts put in place by associations and legislations prohibit this and this is primarily due to the conflict in ethical considerations this experiment raises. We can see this by comparing individual components of this. For example, in the BPS code of ethics and conduct, all legal practices and members under the British Psychological Society must maintain four main principles. These are respect, competency, responsibility and integrity. When participants are injected with a drug unknown to them this violates such principles. Respect for an individual would mean both respect for their bodily autonomy and their right to make such choice. They cannot make an informed choice about themselves when they are not aware of what is going on. Furthermore, competency is not

maintained here with confederate participants within the study used to attempt to manipulate their emotional state. This crosses professional boundaries and therefore in current time would morally problematic.

In conclusion, the study conducted by Schachter and Singer in 1962, has many clear ethical concerns especially from a contemporary viewpoint. It is also abundantly clear why many argue its lack of efficacy and validity of supporting the two-factor theory and the determinants of emotions. Although it can be said that this study did attempt to remove factors such as the individual's awareness to the procedure that may alter results, its lack of validity in other factors such as privacy and the effect of epinephrine on the participant does can support that the cost does not outweigh the benefit here.

References

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