

Beliefs about Emotional Residue:

The Idea That Emotions Leave a Trace in the Physical Environment

Orlando Zuniga

National University

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Hypothesis Review

The hypothesis of the referenced journal article is clear and detailed. The researchers conducted nine different studies within the experiment; therefore, there is more than one hypothesis. The first study tested whether people believe in the concept of emotional residue between two cultures. The researchers hypothesized that the Indian culture would be more likely than American culture to believe in emotional residue. Studies 2 and 3 tested the two cultures' beliefs about sensing emotional residue. Study 4 was designed to confirm the participants' responses were not entirely driven by experimenter demand. Study 5 used an implicit measure to test if people believed emotional residue influences moods long-term. The hypothesis for study 5 is both Indians and Americans would provide similar judgments. Study 6 confirmed that the findings of Study 5 were not due to valence priming. The hypothesis for study 7 is that both Indians and Americans would find the behaviors less surprising when they were congruent rather than incongruent with the valence of the previously experienced emotions. The hypothesis for study 8 is that Indians and Americans would be similar to believe that the emotional residue from close others and groups of people would be more detectable than the residue from distant others and solitary individuals. Study 9 hypothesized that participants would choose the room that had the positive emotion.

Literature Review

The literature within the experiment was well written and clear. The researchers began the research study with a good introduction to the idea of emotional residue, which asks the reader: "imagine your partner spending the day at home on the couch, feeling gloomy after receiving bad news (which we are not aware of yet). When getting home, you open the door and enter the living room. Even though your partner has left the room, would you sense the

emotion?" The journal article also includes information about differences in cultures beliefs on the study, consequences of emotional residue, sources of variation, behavioral consequences and a complete overview of the study. Finally the literature review goes into future directions for other researchers.

Data Collected

With 9 studies in this experiment, there was sufficient data collected to build a solid case for emotional residue. Study 1 asks participants to use questionnaires. Study 2 uses scenarios to ask participants emotionally charged questions. Study 3 tries to replicate findings of study 2 using a different manipulation. Study 4 used 2 scenarios like study 3 that assessed if people believe that emotional residue can influence others' feelings and behaviors. Study 5 asked participants to enter a space that was inhabited by someone experiences chronic negative or positive emotions. Study 6 asked subjects to judge a person's mood after the person had moved into a new space, this study was used as valance priming. Study 7 employed a mixed-factorial design. Study 8 used four scenarios (two scenarios testing each proposed source of variation). Studies 1-8 provide evidence for belief in emotional residue, but all of these studies used explicit or implicit self-report measure to assess the belief. Study 9 was completely different from the rest of the studies; a questionnaire was required and the subjects had to choose between two rooms that were labeled positive and negative. Participants were than moved from their original choice to the opposite room. Each room was to influence the outcome of the study.

Method of Statistical Analysis

Study 1 had a mixed gender and ethnic group of 43 students from New York and 59 Indian students from India. Both had a mean age of 20.4 years, with both studies conducted in English. The participants were given a questionnaire and they were rated on a 6-point scale. In

study 2, the experiment had a mixed gender and ethnic group of 89 students from California and 99 Indian students from India with a mix of religious beliefs. Study 2 put the students in 4 scenarios and questioned their emotional experience on a 9-point scale. Study 3 had 95 students from California and 100 students from India as participants, demographics were not collected for this study due to copy-editing error. Study 3 put students in 6 emotional scenarios and used a 9-point scale to measure their positivity or negativity. Study 4 included only participants from India and they were put into 2 emotional scenarios similar to study 3, researchers used a 7-point scale to measure negative/positive emotions. Study 5 had 106 students from California and 122 students from India that participated in the study. One emotional scenario was given and rated on a 9-point scale of emotional in two different locations. Study 6 had 182 students from California with mixed gender and ethnic backgrounds. The subjects in study 6 were randomly assigned to 4 conditions each condition in a new location. Emotions were measured on a 7-point scale. Study 7 had 140 mixed gender/ethnic students from California and 96 students from India with different religious beliefs; the study employed a mixed-factorial design. Four surprising scenarios were given scored on a 7-point scale of surprised. Study 8 had 81 students from California and 82 participants from India. 4 scenarios were presented to the subjects in 2 different locations, rating them on a 9-point scale of sensing emotions. Finally, study 9 had 50 European American students and 32 international South Asian students all from California. A desk was put in between two rooms; the rooms were labeled “Happy Events” and “Unhappy Events.” Students had to choose which room to enter to complete a questionnaire about their belief of emotional residue. The students in study 9 were scored on a 9-point scale of agreeableness.

Outcomes

Nine studies within the experiment allowed for the conclusion that “emotions that people experience emanate from their body and leave a trace or residue in the physical environment; when other people enter that physical space, they can sense the emotional residue contained in the space and are influenced by it.” Study 1 indicates that two different cultures (American & Indian) equally believe that emotions flow between the brain and other parts of the body. Indians had a stronger belief the emotions leave the body in a physical form like sweat. Studies 2 and 3 found that the two cultures endorsed emotional residue, indicating that they sensed the residue of a previous emotional experience in the space in which it took place, although the Indian culture had a stronger belief. Study 4 replicated studies 2 and 3 even with the absence of perceived demand effects and social desirability. Studies 5 and 7 found no cultural difference in the amount of participants that believe emotional residue would influence people’s moods and behaviors. Study 6 ruled out valence priming. Study 8 found that both cultures believed that emotions experienced by close others and by groups of people are more detectable than emotions experienced by strangers and single individuals. Finally, study 9 provides evidence that the belief in emotional residue not only influences people’s judgments but also influences behaviors for both cultures tested.

Limitations

There were a few limitations in the study, one being the allowance for only two cultures. I would suggest more cultures to allow for a greater sample. Doing a study on emotional residue over time would greatly support this study and reinforce the findings as to whether emotional residue decays over time. Measuring the type of emotion would be another study that would support the research. I recommend measuring the intensity of the emotion and correlate that with the participant’s ability to sense the emotional residue. There was only one error in the study and

that was a copy-editing error in study 3.

Review Summary

The study on emotional residue was well designed and structured by the research scientists. Having performed nine studies within the experiment gives the study added support to its findings. I enjoyed the topic and I believe there were no biases in this study. My hope for this topic is future research with the recommendations indicated in the limitations section in this review. In conclusion, emotional residue can be sensed by others in the physical environment.

References

Savani, K., Kumar, S., Naidu, N., & Dweck, C. (2011). Beliefs about emotional residue: The idea that emotions leave a trace in the physical environment. *Journal of Personality and Social Psychology, 101*(4), 684-701. doi: 10.1037/a0024102