



# Development of an In-Group/Out-Group Manipulation for Experimental Studies



**Keila Estrada, Department of Psychology**  
*Mentor: Dr. Sara Langford*  
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## Abstract

The fundamental attribution error (FAE) and the Ultimate Attribution Error (UAE) are two psychological behaviors that have been widely studied. The FAE refers to the tendency of individuals to attribute their own behavior to situational causes, while attributing other people's behavior to their character. On the other hand, the UAE refers to the error in which individuals attribute their own good behavior to their good character, but attribute others' good behavior to situational causes. The main difference between the two errors is that the UAE explicitly considers the valence of the observed behavior, while the FAE does not. Another difference is that the UAE explicitly predicts outcomes based on group membership, while the FAE does not. When it comes to "good" behavior, the theories conflict, with the FAE attributing one's own good behavior to the situation and others' good behavior to their character, while the UAE attributes one's own good behavior to their good character and others' good behavior to their situation. To effectively compare these theories, it will be necessary to use consistent study conditions and participants. This study aims to examine the methodologies used in the study of FAE and UAE and propose an optimal method for comparing the two.

## Introduction

The fundamental attribution error is a behavior in psychology that has been studied through various studies. The fundamental attribution error (FAE) is the error in which individuals tend to attribute their own behavior to their situation, however, when it comes to other people, they attribute their behavior to their character. This error explains how most individuals perceive the world and is caused by the tendency to attribute others' behavior to characters rather than situational causes that are external to the individual (Hooper, Erdogan, Keen, Lawton, McHugh, 2015). In contrast, psychologists also have done various studies on the Ultimate Attribution Error. The Ultimate Attribution Error (UAE) is the error in which individuals identify that the good actions they participate in are because they are a good person and are of good character. However, when it comes to other people's good behavior, their actions are due to their situation rather than their good character. (Hewstone & Ward, 1985)

The FAE doesn't explicitly discuss the valence (goodness-badness) of the behavior being observed. While the FAE is typically used in the context of "bad" or at least neutral behavior, there is nothing that explicitly limits it to that context. In contrast, the UAE does explicitly discuss the valence of the observed behavior and alters its prediction accordingly.

Another difference between the FAE and the UAE is that the UAE explicitly predicts outcomes based on group membership while the FAE does not. The FAE simply says we will make attributions for "others" based on their character and attributions for our own behavior in our situations. However, a person's group membership is often salient, even if not explicitly stated, and so really, the lack of specification about groups in the FAE doesn't necessarily mean they aren't considered in the attribution process.

Looking at these two hypotheses, we can see that their theories and errors are competing in several ways. For example, in the Fundamental Attribution Error, if we perform a good action, we assume that it is due to our situation. In contrast, the Ultimate Attribution Error would say that our good actions are due to our good character. When looking at the actions of others, in the fundamental attribution error, their good actions are attributed to their character, whereas in the ultimate attribution error, their actions are due to their situation; and not that they are a "good" person. These two hypotheses help researchers identify how society perceives the world, and themselves. Typically, they have been used to understand behaviors considered to be negative, and in those cases, they do not contradict. Both attribute one's own bad behavior to the situation and another person's behavior to their character. It is only considering "good" behaviors that the theories conflict.

To optimally compare the theories, it will be essential to use the same conditions and participants. Thus, we propose to create study materials that will enable researchers to do just this. This project will look in-depth at how both the UAE and FAE are studied, compare the methodologies, and propose an optimal method for comparing the two.

|                    | <b>Fundamental Attribution Error (FAE)</b>   | <b>Ultimate Attribution Error (UAE)</b>  |
|--------------------|--|--|
| <b>Definition</b>  | Tendency to overemphasize dispositional (internal) factors in explaining others' behavior, and underemphasize situational (external) factors               | Tendency to attribute group characteristics to internal dispositions of individuals, even when the behavior is clearly a result of situational factors or circumstances                            |
| <b>Example</b>     | Blaming a person's personality for being late to work when they were stuck in traffic. In contrast, if you are late to work, you would blame the situation | Assuming all members of a certain group are lazy without considering external factors such as historical, social, or economic factors.   |
| <b>Explanation</b> | Occurs due to cognitive bias and the tendency to make quick judgements based on limited information  | Occurs due to social and cultural stereotypes and the failure to consider situational factors that may influence group behavior and actions  |
| <b>Impact</b>      | Can lead to unfair judgements and stereotypes and undermine the importance of situational factors.   | Can perpetuate negative stereotypes and discrimination against certain groups or individuals, and prevent people from understanding the impact of systemic issues and external factors on behavior |

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## Materials and Methods

In the present study, a systematic review of existing literature was conducted to identify the most effective method for testing the Fundamental Attribution Error (FAE) and the Ultimate Attribution Error (UAE). A total of seven articles were reviewed, with four studies focusing primarily on the FAE and three studies focusing on the UAE. To determine the best method, various factors were compared across the articles, including the situational context measured, the personal characteristics manipulated, the controls in place, potential problems, operational definitions, and the hypotheses tested. A spreadsheet was created to facilitate the comparison and analysis of these factors. The goal of this review was to identify the most effective method for testing the FAE and UAE in future studies.

| Ross  | Hooper  | Flick  | Ajzen  | Hewstone   | Coleman   | Chen  |
|---|---|--|--|--|---|---|
| manipulated - resulting in half participants having good "performance" and half having bad "performance"  | manipulated: everyone was told this was an assignment, so everyone has knowledge of the situation, and it is the same for everyone. If a participant is personally against, they would perceive others "for" stance as bad and "against" stance as good. The opposite would be true for people who are "for". | manipulated situation is described and behavior is universally "bad". Driver gets in accident. Participants are either given situational info that might explain or not explain. | students were told that experiment was regarding their interpretation of social events. Students had to read a paper about the issue of abortion. Student that wrote paper was either prompted to write about a stand or got to choose their own.  | subjects were given different scenarios in which they had to imagine that the actor was directing the action towards them. Each of the stories involved a Malay individual or a Chinese character acting in either a positive or a negative way    | participants (democrats or republicans) were randomly assigned to different conditions in which they had to answer questions to induce a specific emotion, then answer questions on a likert scale about a specific politician and their actions. | participants were asked to read about two shooters that represented a Korean group and a White group. participants were then asked to answer several questions regarding the shooter's causal attributions, negative beliefs, social distance, and prior knowledge to the event |
| not manipulated - just measured as judgments of self and others - measured perceived intelligence in essence.   | manipulated: they asked them to judge the person's actual attitude about CP.  | characteristic is measured by asking them to attribute blame to the person or situation  | characteristic is measured by asking them their opinion about if the student that wrote the paper opposed or favored abortion  | questionnaires were provided to subjects with a list of 17 traits. subjects were asked for each trait to indicate if it applied to one group or the other or neither.  | manipulated: subjects were asked their opinion on a democratic or republican politician after inducing their emotion to either anger, fear, or neutral  |   |
| random assignment to Q or C should eliminate actual intelligence as confound.   | Checked participant attitudes, but they were unrelated to outcomes  |  | random assignment to pro choice and pro-life essays, eliminating stance as a confound  | the combinations of the three stories given to participants were randomly assigned, eliminating in-group or out-group bias   | random assignment. participants that identified as independent or other were excluded   | random assignment. assigned to one of the three conditions: korean exemplar, white exemplar and korean exemplar plus subtyping prompt   |
| measurement of situation or character is sort of binary. Inferiority / superiority = personality impact. Didn't seem to really provide opportunity for "equal" ratings. Any difference is seen as inferiority / superiority. I'm not sure how they determined if a participant did take into account the situation. | Unlike Ross, this procedure doesn't have the participant doing anything themselves, so it doesn't allow to reflect the part of the error where they attribute their own behavior to situation, rather than personality.   | Other studies allowed for good or bad behaviors. Also, other studies presented the situation to everyone. Other studies didn't allow judgment of self, but this one does         | this procedure doesn't have the participant doing anything other than reading an essay that was written pro choice or pro life. An evaluation on their stand wasn't considered and only a few participants were given a description of the author which could have changed their opinion. Other than that, their opinion was mostly based on the essay | this procedure does not have any sort of self-evaluating regarding their viewpoint on Malays or Chinese. You are able to see some of their stance with the results of the experiment, but the participant is not doing any sort of self reflecting | there is only one statement that they have to agree is a good behavior, there are no other prompts that suggest bad behaviors.  | subjects were not given any sort of self reflection as part of the study, rather, they were randomly assigned and could be determined their thoughts about in group and outgroup during the study   |
| no difference in ratings despite differences in performance - this recognizes the impact of the situation.  | If they attribute the situation, they would not be able to judge the person's actual attitude. So, their ratings would be middling  | they give stronger ratings of blame for situation than person  | with no personality description, judgements were strongly influenced by the presence or absence of situational constraints   | participants gave higher proportion of internal attribution to their ingroup performing a positive action than a negative action. this was more accurately seen in Malay participants  | more circumstantial attributions were made for bad in group behavior than bad out group behavior  | people's attribution of the shooting to race influenced their judgement about the shooters racial group was dependent on whether the shooter was an ingroup or outgroup member  |
| differences in ratings that reflect differences in performance - not recognizing the impact of the situation.   | If they attribute to the personality, the perception of the person's actual stance would match what the person argued in the essay  | they give stronger ratings of blame for person than situation  | with a personality description, it increased dispositional attributions in the no choice conditions  | participants gave fewer internal attributions for the negative behavior, again, this was mostly seen in Malay participants, in which Chinese participants had opposite results   | more personal attributions were made for good ingroup behavior than good outgroup behavior  | causal attributions of the shooter's behavior had significant impact on people's evaluations of the shooters racial group   |

## Testing Both Errors – Positive Behaviors (Proposed Study Method)

**Experiment:** Participants will be presented with a written scenario that describes an actor's behavior in a workplace situation. The scenario will be designed to elicit a positive response in the positive behavior conditions (e.g., the actor completes a project ahead of schedule) and a neutral response in the neutral behavior condition (e.g., the actor completes a project on time). The high control condition will include additional details about the actor having control over the situation (e.g., having the necessary resources and support) while the low control condition will not.

### Procedure:

- Participants will be randomly assigned to one of the four conditions (Positive-high control, Positive-low control, Neutral-high control, Neutral-low control).
- Participants will read the scenario and answer a series of questions about the actor's behavior, including a rating of the actor's level of praise for the outcome.
- Participants will rate the actor's behavior on a scale of 1 to 7, where 1 indicates that the actor's behavior was caused by dispositional factors and 7 indicates that the actor's behavior was caused by situational factors.
- Participants will be asked to explain their ratings and their reasoning behind them.

**Data Analysis:** The ratings of the actor's behavior, attributions of praise, and explanations will be compared between the three conditions using a two-way ANOVA. The study will also investigate the impact of participant demographics such as age, gender, and prior experience with workplace situations.

## Discussion

The study conducted by Flick and Schweitzer in 2021, titled "Influence of the fundamental attribution error on perceptions of blame and negligence," is an excellent example of research designed to test both the fundamental attribution error (FAE) and ultimate attribution error (UAE). In this study, the researchers presented participants with a series of scenarios in which a driver was involved in a car accident, and then measured the extent to which participants attributed blame to the driver's character (i.e., dispositional factors) or the situational factors that may have contributed to the accident.

The study is an excellent example of how the FAE and UAE can be tested because it explicitly manipulates the level of control that the driver had over the accident. By changing this factor, the researchers were able to test the extent to which participants were influenced by situational factors when assigning blame. They found that participants in the low control condition were more likely to attribute blame to the driver's character, while those in the high control condition were more likely to attribute blame to situational factors.

Using this study as inspiration, the manipulation described above is designed to test the FAE in the context of positive behaviors. By presenting participants with a scenario in which an actor performs a positive action, the study aims to investigate whether participants will be more likely to attribute the actor's success to dispositional or situational factors. The study also manipulates the level of control that the actor has over the situation, allowing for a comparison of how participants assign attribution in different levels of control.

The manipulation described above will be effective in testing the FAE because it is designed to elicit a positive response from participants, which may increase the likelihood that they will attribute success to dispositional factors. However, by manipulating the level of control, the study can determine the extent to which situational factors influence participants' attributions of success.

In conclusion, the study conducted by Flick and Schweitzer provides an excellent example of how the FAE and UAE can be tested, and the manipulation described above is a useful adaptation of the study to investigate the FAE in the context of positive behaviors. By explicitly manipulating the level of control, the study will be effective in determining the extent to which participants attribute success to dispositional or situational factors, providing valuable insight into the role of attribution biases in judgments of behavior.