

Pressure of Conformity and Its Effect on Cognitive Dissonance

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Abstract

In this experiment, the theories of conformity and cognitive dissonance were measured. This experiment examined how the pressure of conformity affect cognitive dissonance within a group context. The researcher hypothesized that conformity would occur within a group as decisions are made and feelings of cognitive dissonance would occur once decisions have been influenced by the pressure of the group. This study was a staged experiment including a total of ten undergraduate and graduate students. There were seven confederates and three true participants. The participants were given ten moral dilemmas; in which they were to give a “permissible or impermissible” answer. After the answers were recorded, the participants were then given the cognitive dissonance questionnaire to measure their feelings of regret. The results were significant and concluded that conformity does exist in a social group context and that group members do exhibit cognitive dissonance after the decision making process has concluded.

Keywords: Pressure; Conformity; Cognitive Dissonance

Introduction

Conformity, a word that seems scary to people, is defined as simply a change in behavior as a result of pressure. Group conformity, on the other hand, is a change in behavior or belief to accord with others. Conformity is not just acting as other people act; it is also being affected by how they act. It is acting or thinking differently from the way one would act or think if he or she was alone. When part of a crowd, one rises to cheer for a game, is that conforming? When, along with millions of others, one drinks milk or coffee, is that conforming? When one agrees with others that women look better with long hair rather than short hair, is that conforming? Maybe, maybe not. The key to these questions lie with whether one’s behavior or belief would be the same apart from the group. Would one rise to cheer for a point scored if he or she was the only one in the stands?

Research on conformity started in 1956 when Solomon Asch conducted a simple visual discrimination experiment [1]. Asch required participants to choose which three lines of different length presented matched the length of the standard line. Participants made decisions in a group context, which included six to eight people, and all but one person was a confederate. Eighteen trials were conducted and the confederates gave the correct answers on only six trials. One of Asch’s findings was that while participants made errors on fewer than 1% of the trials when alone, they made errors on 37% of the trials within the group context.

Numerous research has been conducted since Asch’s 1956 experiment and most research has catered to finding the motivations that underlie conforming behavior [2]. When researching the body of literature, studies have proven time and time again that conformity does exist with group settings, but there are often many reasons as to why this is the case. Three most commonly identified reasons are: a desire

for accuracy, a desire for affiliation, and the maintenance of a positive self-concept. These three main reasons prove to researchers who study this topic that people feel the need to go along with the majority. This sense of need raises many questions as to why one cannot make the same decisions in a group setting that he or she would make when alone. Kundu and Cummins [3] stated that, "Our behavior is frequently judged on the basis of whether we acted in accordance with our moral principles or whether we simply chose to 'go along to get along' as would be the case if we allowed social conformity to override moral principles. Taking this course of action typically makes one the target of criticism and social censure." This is very interesting to note because of how individuals feel like they would be criticized if they don't go along with what others do or embrace others' beliefs as their own. Crutchfield [4] conducted a study to test the impact of majority opinion on a variety of judgments in different domains. One statement he used was, "Free speech being a privilege rather than a right; it is proper for a society to suspend free speech whenever itself is threatened." He found only 19% of the participants agreed with the statement when alone, but 58% agreed when in a group that was unanimous believed the statement. This was very surprising when people have been found to reject and distance themselves in a social context from morally dissimilar others [5]. However, testing under what conditions a group conforms, is vital for an intervention to help individuals make their own decision even when the group goes against it.

Many studies have been conducted to test conformity in group settings in relation to culture, morality, and decision making, but there have not been any studies that have shown the relationship between conformity and cognitive dissonance. Cognitive dissonance, a term coined by Leon Festinger, is defined as a form of regret or worry that perhaps one did not make the right decision. There have not been many research articles that have examined cognitive dissonance in context. When cognitive dissonance has been measured, it usually is done in small settings when one wants to examine how a person has felt after buying one particular item over another that he or she may have wanted more. One research article was found that examined cognitive dissonance and its effect on choice shift [6]. The author was proposing that knowledge of other's choices is assumed to lead a person to think of arguments others might have had for their choices. This study's main goal was to measure how people feel when there is a choice shift when it was different from the original choice. The study was divided into three conditions: the participants had an opportunity to think about the latter choice (condition I), an opportunity to think of other's choices was denied (condition II), and if knowledge of other choices was withheld (condition III). When examining this study against other small experiments that have not clearly been researched on, one can see that they have in common the fact that final choices impacted the individual after the decision was made. The difference between this actual research experiment and other small tests is that this has been an actual study that was conducted to test cognitive dissonance. Another study was conducted that found cognitive dissonance in groups and the consequences of disagreement. This study included three studies within it and demonstrated how cognitive dissonance can be inflicted in a group setting. The researchers found that when participants were not given time to make the correct choice, they tend to have higher feelings of regret, while those who were given time to make choices, had lower feelings of regret [7]. Few studies have been conducted on cognitive dissonance within a group setting, and therefore this present study will allow for the body of literature to become expanded surrounding this topic.

In this present study, the researcher will focus on the pressure of group conformity and its affect on cognitive dissonance. This study will consist of an experimental group. The experimental group will be presented with a total of ten dilemmas to examine how being in a group affects their decision and their feelings to conform. The feelings that the participants have after the experiment has been conducted will test the theory of cognitive dissonance. The impact that cognitive dissonance has on individuals in society has mostly been associated with guilty feelings afterwards because of the group pressure that was upon them [8]. This study will seek to explain this phenomenon of group conformity and cognitive dissonance in relation to the group.

Method Section

Research question: How does the pressure of conformity affect cognitive dissonance in relation to a group?

Hypothesis: The pressure of conformity will occur within a group as decisions are made and feelings of cognitive dissonance will occur once decisions have been influenced by the pressure of the group.

Participants

The general population of participants were from Alabama A&M University undergraduate and graduate students who aged from 18 to 29. A total of 10 Alabama students was recruited to participate in this experiment. The students were chosen by a convenient sample based on who was able to participate at the time of the experiment. There were 5 females and 5 males. There were 7 confederates and 3 true participants in the group. The participants’ demographic data is shown below in Table 1.

| Demographic Data | | |
|-----------------------|--------|------------|
| | Number | Percentage |
| Gender | | |
| Males | 5 | 50% |
| Females | 5 | 50% |
| Race | | |
| Black | 9 | 90% |
| Mixed | 1 | 10% |
| Classification | 1 | |
| Graduate | 8 | 80% |
| Undergraduate | 2 | 20% |
| Major | | |
| Clinical Psychology | 2 | 20% |
| Counseling Psychology | 2 | 20% |
| Other | 6 | 60% |
| Total Participants | 10 | 100% |

Table 1: Demographic Data.

Materials

A total of 10 dilemmas were selected from materials used by Greene, Morelli, Lowenberg, Nystrom, and Cohen [9]. They differed along three categories: High Conflict Personal Dilemmas, Low-Conflict Personal Dilemmas, and Impersonal Moral Dilemmas. 4 of the dilemmas were high conflict, 3 of them were low-conflict, and 3 were impersonal moral. These 10 dilemmas were used to see how the group conforms on different topics. A cognitive dissonance questionnaire was administered after the 10 dilemmas answers had been recorded to examine feelings of regret. The questionnaire consisted of 7 questions that were scaled from strongly disagree to strongly agree.

Procedure

In the group, the participants were seated in a room with a large rectangular table in a way that all seven confederates were in consecutive order and the three true participants were seated consecutively at the end. Participants were instructed that they will be asked to make decisions about different dilemmas in which there was no right or wrong answer. They were told their answers will help guide future research. They were given folders with the dilemmas printed in a way that the participants could only see one dilemma at a time and could read along as the researcher read aloud. In the confederates’ folders, the answers for each dilemma was written so that they gave the same unanimous answer each time. They were not blind to the study. The confederates were specifically told what to say and how to act prior to the experiment. All participants were given 5seconds to respond out loud after each dilemma was read. They were to respond once their number had been called to answer. Once all dilemmas had been read and all answers had been recorded for each participant, they were given the cognitive dissonance questionnaire to measure their feelings of regret towards the decision making process. Once all questionnaires were completed and taken up, the participants were debriefed about the real purpose of this experiment and its goals.

Results

This experiment involved the use of quantitative and qualitative data. Quantitative data was used when the recordings of the answers to each of the 10 dilemmas were written down and qualitative data was used in the ranking of feelings on the cognitive dissonance questionnaire. Since the main goal of this study was to see how the pressure of conformity affects cognitive dissonance in relation to a group, a correlational test was conducted to analyze the results.

The alpha level for the SPSS analysis was set at 0.5 because of the small sample size. The results from this experiment concluded that conformity does exist among a group and that feelings of regret are brought on in the decision making process when one is under pressure. The correlation was significant at the 0.05 level (2-tailed), which meant that when individuals are under the pressure to conform, they also experience higher feelings of regret after the decision making process. The null hypothesis was rejected because the hypothesis was supported by evidence in this experiment. This data can be shown in Table 2.

| Correlation of Conformity and Cognitive Dissonance using Pearson r | | | |
|--|---------------------|----------------------|------------|
| | | Cognitive Dissonance | Conformity |
| Cognitive Dissonance | Pearson Correlation | 1 | -.635* |
| | Sig. (2-tailed) | | .049 |
| | N | 10 | 10 |
| Conformity | Pearson Correlation | -.635* | 1 |
| | Sig. (2-tailed) | .049 | |
| | N | 10 | 10 |

Table 2: Pearson r Correlation.
*Correlation is significant at the 0.05 level (2-tailed).

The cognitive dissonance questionnaire contained scaled questions ranging from 1: strongly disagree to 5: strongly agree. It consisted of 7 questions that participants answered after the group discussion was concluded. The questionnaire is shown below.

Cognitive Dissonance Questionnaire

Please answer the following questions based on the group discussions.

- 1: Strongly Disagree
- 2: Disagree
- 3: Neutral
- 4: Agree
- 5: Strongly Agree

1. Sometimes I was uncomfortable answering these dilemmas.
2. At times, I worried that some of my answers were inconsistent with my other answers.
3. If I were allowed to, I would go back and change some of my responses.
4. Some of the answers I gave in this experiment were inconsistent with my previous beliefs about the subject.
5. Do you feel a member (or members) of your group strongly influenced your final decision?
If so, name that person(s) _____
6. I was always certain about my responses.
7. I never had difficulty putting together all of the facts in this experiment.

From the analysis, it can be shown that 60% of the participants said they were uncomfortable answering the dilemmas, their answers were inconsistent with prior beliefs, and if they were allowed to go back and change their answers they would. 3 males and 3 females agreed that they were uncomfortable answering the dilemmas. 4 males and 2 females agreed that some of their answers were inconsistent with their other answers. 2 males and 4 females agreed that if they were allowed to go back and change their answers, they would. The analysis of this data showed that majority of the participants in this study, including the true participants and the confederates, experienced feelings of cognitive dissonance. This data can be shown in Table 3.

| Cognitive Dissonance Questionnaire Data | | |
|---|--------|------------|
| | Number | Percentage |
| Uncomfortable answering dilemmas | | |
| Males | 3 | 30% |
| Females | 3 | 30% |
| Some answers were inconsistent with other answers | | |
| Males | 4 | 40% |
| Females | 2 | 20% |
| Change some answers if were allowed to go back | 1 | |
| Males | 2 | 20% |
| Females | 4 | 40% |
| Total Participants | 6 | 60% |

Table 3: Cognitive Dissonance Questionnaire Data.

The results for the qualitative data measuring the pressure of conformity were found by asking 10 dilemmas that reflected moral decision making. From the analysis, it was concluded that the true participants gave the same unanimous answers as the confederates on 7 of the 10 trials. One true participant, who was a male, chose different on dilemma 6 with giving the correct answer. All three true participants (one male, two female) chose differently on dilemma 7 with the correct answer and one true participant (one female) chose differently on dilemma 9 with the right answer. This data can be seen in Table 4.

| Moral Dilemmas | | | | | |
|----------------|---------------|--|-------------------------------------|-------------------------------------|-----------------------------------|
| | True Answers | Confederate Answers (3 females, 4 males) | True Participant 1 Answers (Female) | True Participant 2 Answers (Female) | True Participant 3 Answers (Male) |
| Crying Baby | Permissible | Permissible | Permissible | Permissible | Permissible |
| Euthanasia | Permissible | Permissible | Permissible | Permissible | Permissible |
| Footbridge | Permissible | Impermissible | Impermissible | Impermissible | Impermissible |
| Modified Bomb | Permissible | Permissible | Permissible | Permissible | Permissible |
| Country Road | Impermissible | Impermissible | Impermissible | Impermissible | Impermissible |
| Grandson | Impermissible | Permissible | Permissible | Permissible | Impermissible |
| Hired Rapist | Impermissible | Permissible | Impermissible | Impermissible | Impermissible |
| Illegal Lunch | Impermissible | Permissible | Permissible | Permissible | Permissible |
| Lost Wallet | Impermissible | Permissible | Impermissible | Permissible | Permissible |
| Resume | Impermissible | Impermissible | Impermissible | Impermissible | Impermissible |

Table 4: Moral Dilemmas.

Discussion

In this staged experiment, the hypothesis that pressure of conformity affects cognitive dissonance in relation to a group was rejected. The results showed that the pressure of conformity does yield feelings of regret in the decision making process. The findings were significant at the 0.05 level in the SPSS analysis. When conducting this experiment, the confederates were told prior to the experiment about how the study would be conducted and what things were to be said and done. The confederates acted accordingly so that they would not give themselves away. They gave the wrong answers on 5 dilemmas and the correct answer on 5 dilemmas. As shown in the results, the true participants gave the same unanimous answer on 7 of the dilemmas. When the researcher was conducting this experiment, it was evident that the true participants were saying some of the answers only because of the unanimous answers before them. There was hesitation in the room when the 3 true participants gave their answers as well as there was regretful decision making after the answer was given aloud for the true participants. In addition, when analyzing the cognitive dissonance questionnaires, there were some significant conclusions drawn. Not only did the true participants experience feelings of regret about making the wrong decision, but also the confederates. The confederates were not told they had to answer the questionnaire in any specific way because the researcher also wanted to see how they felt about being told what specific answers to say. It was shown that the confederates experienced cognitive dissonance more than the true participants. This was because the confederates were given specific instructions on what to say and how to act so they were just acting in accordance to the instructions. However, they experienced regretful feelings more because some of the answers they had to say went against their prior beliefs about the moral dilemmas. As shown in the results, 60% of the participants showed signs of cognitive dissonance, which proves that the confederates had the most feelings of regret because it was only 3 true participants in the study.

When studying conformity, it is clearly shown that individuals submit to pressure when in a group context. There is a clear conformity effect when moral decision making is influenced by a social consensus. Even when individuals have the opportunity to state their own opinion or give their own answer, they still side with the majority. This is usually because individuals seek the need for affiliation, accuracy, and a positive self concept [3]. Individuals see the need to not stand alone or stand up for what they believe in because they feel as if they will be looked down upon for choosing differently. The question then becomes: why would people choose to go along with the lie rather than tell the truth? An explanation that can be offered is that social consensus in a decision making process creates a social norm; that is, an explicit or implicit rule pertaining to what one is permitted, obligated or forbidden to do in the current context [10-13]. In essence, it has been shown that conformity affects brain regions. When conforming to a norm, brain regions associated with anxiety or disgust are active, indicating that conforming comes at an emotional cost [14]. Even though one may not feel like conformity is affecting the brain, it really is. It is allowing for stress to become evident, which illicit those regretful feelings after the decision making process.

When studying cognitive dissonance, it can be clearly shown that when one makes an evident decision that goes against their moral beliefs or values, they display signs of regret or worry for making the wrong decision. Even when something is so small as a yes or no answer, the feelings of regret plays a major impact on the person. Observing the signs of hesitation or thoughtfulness in a group context can display when one is really thinking about the answer they are about to give. If it is going against the odds, it can clearly show that an individual doesn't want to receive the criticism for choosing differently. However, when one goes along with the crowd, it is evident that those feelings of regret are prone to be at front and center.

These analyses indicate that conformity and cognitive dissonance are correlated in a significant manner. Even in a social context, moral decision making is powerfully influenced by the consensus of the group and impacts the group's feelings of regret afterwards.

Limitations

In this experiment, there were few limitations. One of the limitations was that there was only one trial completed. The researcher only completed one trial consisting of 10 dilemmas. There should have been at least multiple trials ran to compare the results and increase reliability and validity. In previous conformity experiences, there has always been a higher ratio of females to males because females tend to conform twice as much as males. In this case, there were 5 males and 5 females, making the group size be a total of 10. This was actually

a big group compared to previous conformity experiments where the group size remained between 5 - 7.

From this experiment, it can be seen that individuals conform because they are socialized to go along to get along, as stated earlier in the literature review. Since this is the case, this experiment proved that the true participants went along with the majority so that he or she could feel a sense of affiliation and would not be deemed as an outcast for choosing to side differently.

Future Research

In the future, researchers should aim to create an intervention to stop conformity from occurring in a group context. It is evident that conformity exists, so now how do researchers go about creating the next step to prevent this from occurring? For some reason, individuals do not see the need to differ when in a group context. Individuals feel as if it's a must that he or she go along with the majority and not voice their opinions or side differently. In essence, researchers should also look at ways to stop one from experiencing feelings of regret when placed in situations. It is okay for one to choose opposite from others and not feel as if they have done wrong or chosen incorrectly, but yet they chose what they felt was right. Creating an intervention for these two phenomenon's would greatly enhance the field of psychology and provide a great resource for those social psychologists who focus on group dynamics.

Implications

Race and culture do have an impact on conformity. Different cultures and races are socialized differently. For different races and cultures, individuals may grow to learn that in some cases conformity is acceptable, whereas another race or culture may not see this in the same way. It is important that mental health professionals consider race and culture and their impact on conformity when working with individuals in this field. Conformity has its advantages and disadvantages, but race and culture may alter the perspective for the client or the mental health professional. In some cases, conforming in some races and cultures may cause health-related issues such as stress because of the demands to meet certain expectations are unreachable. In another case, individuals may feel like they have to conform in order to feel like others have a positive viewpoint towards him or her. It is important for mental health professionals to consider all of these aspects because they play a vital role in examining the impact of conformity as it relates to individuals in different cultures and races.

Appendix

The moral dilemmas used in the study are presented below.

High-Conflict Personal Dilemmas

1. Crying Baby

Percent utilitarian judgments: 60%

Enemy soldiers have taken over your village. They have orders to kill all remaining civilians. You and some of your townspeople have sought refuge in the cellar of a large house. Outside you hear the voices of soldiers who have come to search the house for valuables.

Your baby begins to cry loudly. You cover his mouth to block the sound. If you remove your hand from his mouth his crying will summon the attention of the soldiers who will kill you, your child, and the others hiding out in the cellar. To save yourself and the others you must smother your child to death.

Is it appropriate for you to smother your child in order to save yourself and the other townspeople?

2. Euthanasia

Percent utilitarian judgments: 63%

You are the leader of a small group of soldiers. You are on your way back from a completed mission deep in enemy territory when one of your men has stepped in trap that has been set by the enemy and is badly injured. The trap is connected to a radio device that by now has alerted the enemy to your presence. They will soon be on their way.

If the enemy finds your injured man they will torture him and kill him. He begs you not to leave him behind, but if you try to take him with you your entire group will be captured. The only way to prevent this injured soldier from being tortured is to shoot him yourself.

Is it appropriate for you to shoot this soldier in order to prevent him from being tortured by the enemy?

3. Footbridge (Adapted from Thomson, 1985)

Percent utilitarian judgments: 21%

A runaway trolley is heading down the tracks toward five workmen who will be killed if the trolley proceeds on its present course. You are on a footbridge over the tracks, in between the approaching trolley and the five workmen. Next to you on this footbridge is a stranger who happens to be very large.

The only way to save the lives of the five workmen is to push this stranger off the bridge and onto the tracks below where his large body will stop the trolley. The stranger will die if you do this, but the five workmen will be saved.

Is it appropriate for you to push the stranger on to the tracks in order to save the five workmen?

4. Modified Bomb

Percent utilitarian judgments: 90%

You are negotiating with a powerful and determined terrorist who is about to set off a bomb in a crowded area. Your one advantage is that you have his teenage son in your custody.

There is only one thing that you can do to stop him from detonating his bomb, which will kill thousands of people if detonated. To stop him, you must contact him over the satellite hook-up that he has established and, in front of the camera, break one of his son's arms and then threaten to break the other one if he does not give himself up.

Is it appropriate for you to break the terrorist's son's arm in order to prevent the terrorist from killing thousands of people with his bomb?

Low-Conflict Personal Dilemmas

5. Country Road (Adapted from Unger, 1996)

Percent affirmative judgments: 3%

You are driving along a country road when you hear a plea for help coming from some roadside bushes. You pull over and encounter a man whose legs are covered with blood. The man explains that he has had an accident while hiking and asks you to take him to a nearby hospital.

Your initial inclination is to help this man, who will probably lose his leg if he does not get to the hospital soon. However, if you give this man a lift, his blood will ruin the leather upholstery of your car.

Is it appropriate for you to leave this man by the side of the road in order to preserve your leather upholstery?

6. Grandson

Percent affirmative judgments: 1%

A young boy is visiting his grandmother for the weekend. Usually she gives him a gift of a few dollars when he arrives, but this time she doesn't. He asks her why not and she says something about how he doesn't write her as many letters as he used to. Angered by this, the boy decides to play a trick on her.

While his grandmother is busy cooking he removes a handful of pills from the medicine cabinet and puts them in his grandmother's teapot. Later that night, she makes her tea, and the dissolved pills make her sick. In the morning she is dead.

Was it appropriate for this boy to put pills in his grandmother's teapot in order to play a trick on her?

7. Hired Rapist

Percent affirmative judgments: 4%

You have been dissatisfied with your marriage for several years. It is your distinct impression that your wife no longer appreciates you. You remember how she appreciated you years ago when you took care of her after she was mugged. You devise the following plan to regain your wife's affection.

You will hire a man to break into your house while you are away. This man will tie up your wife and rape her. You, upon hearing the horrible news, will return swiftly to her side, to take care of her and comfort her, and she will once again appreciate you.

Is it appropriate for you to hire a man to rape your wife so that she will appreciate you as you comfort her?

Impersonal Moral Dilemmas

8. Illegal Lunch

Percent affirmative judgments: 9%

You are a lawyer working on a big case. The judge presiding over the trial happens to be someone you knew from law school. The two of you were rather friendly back then, but now, decades later, it seems that your old friend barely remembers you.

You're quite sure that if you were to talk to him over lunch, you could jog his memory and he would begin to see you as an old buddy, which would be very good for your work on this case. It's illegal for judges and lawyers working on the same case to meet socially.

Is it appropriate for you to meet with this judge socially in order to help you win your case?

9. Lost Wallet

Percent affirmative judgments: 16%

You are walking down the street when you come across a wallet lying on the ground. You open the wallet and find that it contains several hundred dollars in cash as well the owner's driver's license.

From the credit cards and other items in the wallet it's very clear that the wallet's owner is wealthy. You, on the other hand, have been hit by hard times recently and could really use some extra money. You consider sending the wallet back to the owner without the cash, keeping the cash for yourself.

Is it appropriate for you to keep the money you found in the wallet in order to have more money for yourself?

10. Resume

Percent affirmative judgments: 9%

You have a friend who has been trying to find a job lately without much success. He figured that he would be more likely to get hired if he had a more impressive resume.

He decided to put some false information on his resume in order to make it more impressive. By doing this he ultimately managed to get hired, beating out several candidates who were actually more qualified than he.

Was it appropriate for your friend to put false information on his resume in order to help him find employment?

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