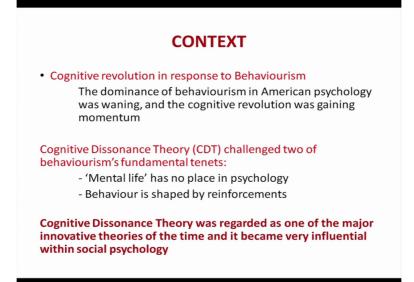
Great Experiments in Psychology Professor Rajlakshmi Guha Centre for Educational Technology Indian Institute of Technology Kharagpur Module 2 Lecture No 9 Festingers Cognitive Dissonance Theory

Hello and welcome to the 9th lecture of this series on Great experiment in psychology. In today's lecture we are going to discuss a little about cognitions and attitudes. I was to be honest when I started these lecture series it was very tough for me to decide which lecture I should be which topic is I should be selecting, I mean as great experiments and studies in psychology and specially for this cognitive and social psychology. There are so many lectures so many studies and experiments which are so important that it is very tough to select couple of them, but what I have done is to identity a topic and select one of the major studies that was done in these topics and that is why in today's we have covered memory, we have covered application of memory in law and that's why in today's lecture we are going to be we have also covered of perceptual defence when we were talking about social perceptions.

In today's lecture we are going to talk about the influence of cognition on our attitudes, so we are moving from the thought to the action and this is one of the major studies that was done one of the most famous studies done by Festinger and Carl smith where they discussed in 1959 where they were talking about cognitive consequences of forced compliance. So what happens when individuals are compelled to do something, so do they cognitions change? Do their opinions about it change or does it remain the same? And so basically they started with this question as to what happens to a person's private opinion if he is forced to do or say something contrary to that opinion? So Festinger came up with the theory of cognitive dissonance. So we will have to understand the time when this theory was being framed this is the year in this is during 1950.

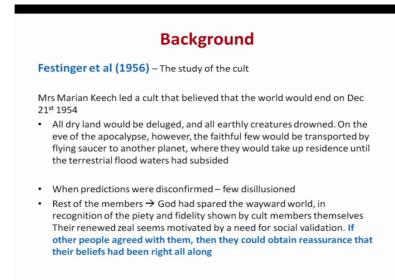
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So in between 1957 to 1959 this is the time when cognitive revolution was coming up as a response to behaviourism and the dominance of behaviourism in American psychology was gradually waning and the cognitive revolution was gaining momentum. So there were more studies on thoughts, believes, attitudes and values and this is where you know this is the time when Festinger came up with this theory of cognitive dissonance. And what cognitive dissonance theory states or what it initially challenges is 2 of behaviourism's fundamental tenets. So one is that mental like as in the thoughts that had no no place in psychology because behavioural psychology focused on actions and it said that it basically focused on the stimulus response paradigms and the behaviour is stated that behaviour is shaped by reinforcements.

So there is no component of thought in our action so this theory is a mark of the revolution cognitive revolution in place where this theory challenges the action paradigms on the base of reinforcement and says that any action is based on due to a thought behind it and the cognitive dissonance theory was regarded as one of the major innovative theories of the time and it became very influential within the realm of social psychology thus it finds it place here in this series of lectures and though there are several other lectures other studies that could have should have been included in our lecture series here, but I thought that Festinger and Carl smith theory should be introduced.

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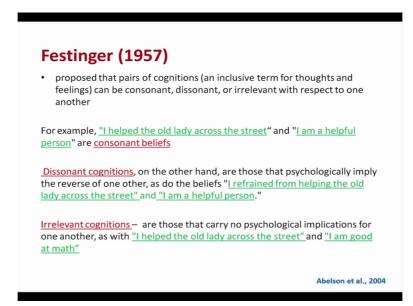


So now let us understand the background when this theory was made we spoke about the context and this is Festinger was already studying a cult, so this is a cult behaviour that happened during 1954. And he came up with this study of the cult in 1956 and this there was this lady in US where her name was Mrs Marian Keech and she believed that she led a cult that believe that the world was going to end somewhere around 21st of December 1954 and old dry land would be deluged and all earthly creatures drowned and on the eve of apocalypse the few Jews the faithful few who would be transported by a flying saucer to another planet.

And when they would take up residence over there unless everything was at peace in the Earth and then they would come back and restore their positions on Earth. So when these, so this cult had given up all the worldly possessions and they really believed in this they have faith in this idea that the world would be there would be apocalypse and everything would be destroyed, but when the predictions were disconfirmed, what would happen what do you think would happen? So it is obviously common sense says that everybody would be disillusioned and would fall away from the cult, but that did not happened. A few of them were disillusioned and they left the cult, but most of them were not and what happened was the rest of the members, they felt they came up with another idea and that was the God has spared the wayward world, in recognition of the piety and fidelity shown by the cult members themselves.

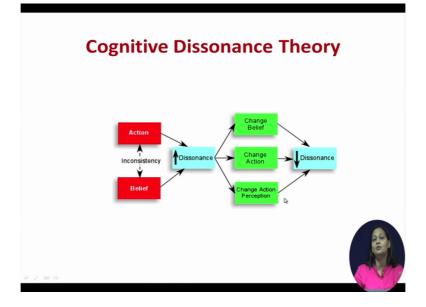
And this renewed zeal with this renewed zeal they started spreading the messages of the cult all the more and they were that was probably because they needed a social validation. So that is if other people agreed with them then their belief was that would be a reassurance that their belief was true, so instead of everybody losing faith in the ideology most of them actually fell in with the same ideology and fell in all the more, now why did that happen? So this basically lead Festinger to come up with the cognitive dissonance theory and Festinger in 1957 proposed that pairs of cognitions and that is what he means is that is inclusive of thoughts and feelings can the consonant and can be dissonant or irrelevant with respect to one another.

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So what are consonant believes, so I have helped the old lady across the street and I am a helpful person so these go together. So my belief that I am a helpful person is also consonant with the idea that I have helped somebody on the street. Dissonant idea would be where that would the two beliefs would be reversed. So I refrained from helping the old lady on the street and I am a helpful person. So I believe that I am a helpful person but I did not believe I did not help a person on the street, so this would be dissonant with each other and irrelevant could be something like I helped the old lady on the street and I am good at math or say I am a helpful person, I taught math in my class today, so these are irrelevant cognitions. Now, Festinger said that when does the cognitive dissonance theory basically says that when does a dissonance happen?

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The dissonance happen when there is an inconsistency between the action and the belief so if suppose I am helpful person and I have not helped somebody on the street that would cause dissonance. Now dissonance is a disturbance that is because of the mismatch of the thought and the belief or the thought and the action and this dissonance would disturb the emotional setup of the individual and that would bring about a change in either the belief, a change in the action.

So the change the belief would be, I am not a very helpful person, so that is consistent again with the idea that I have not helped somebody on the road. A change in action would be I have helped another person on the road, so that would be consistent with the belief or the change in action change changed action and perception. So that okay it could be like in this situation I did not help because there were other people who were actually gone ahead to help that individual or I give some other reasons to myself to explain that my to reduce the mismatch.

So what is happening is in either ways I am trying to reduce the dissonance and when either of these happens so there is a change in belief, there is a change in action or there is a change in the action perception then there is a reduction of dissonance. So the cognitive dissonance theory states that whenever there is a dissonance in our mind that is when there are two there are two existing beliefs or two beliefs and an actions, a thought and an action and when they are at clashed with each other the idea is to reduce the dissonance, we try to do something to bring down that disturbance or dissonance within us.

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So we can do it either by action or by changing the way we think. Okay so this has been actually supported by other studies during the time and Janis and King they reported that the private opinion changes so as to bring it into closer correspondence with the overt behaviour if the person was forced to perform. And Janis and King showed that when we are they basically did an experiment on improvising a speech supporting a point of view with which the individual disagrees and they showed that if the improvised speech that the person does not believe in it, if he is made to give reasons during his expression as to as in you know he finds out new ways to rationalize or say things to support his dictum, then there is a change of opinion.

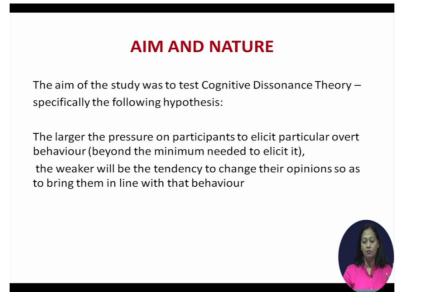
And there they start the individual actually starts advocating that point of view that he is that he was previously against. So the observed opinion change is greater in people who perform mental rehearsal and think up new arguments than for persons who only hear the speech of a person who read a prepared speech which emphasis solely on execution and manner of delivery.

So what Janis and King tried to show was that if you start when you are really improvising and thinking up reasons while expressing your opinion as in speaking for point of view then you start believing in it, but if you are trying to do it were a mechanically right just reading from a script or and you are more focused on the delivery and rather than the points, then you would be quite detached from the idea and in this way they proposed that the person who is forced to improvise a speech convinces himself. They present some evidence, which is not altogether conclusive but we will they say that there is several other things that can be discussed about the experiment. Actually you know if you come across the idea of role reversal this is exactly what is done in role reversals. Well if very simple thing that we generally practice is, make the student a teacher and the teacher play the enact the part of the student and you have to give logical and realistic argument so it is like a debate with the student plays the role of the teacher and the teacher plays a role of the student so there is a role reversal and you actually debate supporting your role.

Now, you will gradually see that the moment role reversal has shown to be a very-very active way of conflict resolutions; it is practised in several management researches also in fact, as a way of conflict resolution in the organisations. So basically you start taking the other you start seeing the other person's point of view and how? Because when you are putting in arguments which is at dissonance with your own idea, then you start trying to a adopt those ideas and the other dissonant ideas and you change your views towards the dissonant ideas.

When you are supporting that view you are changing you are to reduce the dissonant, there is some sort of harmony that is created between the views. So you might not change from your position completely from your belief system completely, but you would definitely be less intense about the point of view that you hold and the you would probably try and have more faith in the other's opinion also, so role reversal follows exactly this theory.

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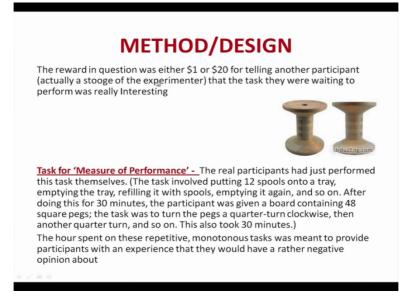
Now the cognitive dissonance theory it Festinger wish to actually test it in an experimental situation, so he created this hypothesis that the larger the pressure on the participant to elicit

particular overt behaviour that is beyond the minimum needed to elicit, the weaker will be the tendency to change their opinions so to bring them in line with that behaviour. Now I will repeat, please understand this very well this hypothesis was that "the larger the pressure on participants, so the more the pressure on the participant to elicit a particular overt behaviour" so overt behaviour means an outward expression of behaviour. So if there is a larger pressure if there is more pressure on the participant to elicit to express a particular outward behaviour, then the weaker will be the tendency to change their opinion.

So the probability of these people changing their opinion will be less, so as to bring them in line with that behaviour. Now this is very much in contrast with what we were saying so far, we said that if an individual has a different point of view and he is supposed to come in line, he is representing the other point of view then he will have some harmony so his opinion will gradually change.

Now this statement is saying something different, now this is because Festinger study in 1959 was a little different from the first study, so what was his word, he said that how much of actually pressure or is actually required to change the opinion. So if there is he wanted to test that, so he saw that if there is his hypothesis was that if there was too much pressure to change your opinion, they will not be a change in opinion. But if there is less pressure then perhaps there will be a change in opinion, so let us see what he did.

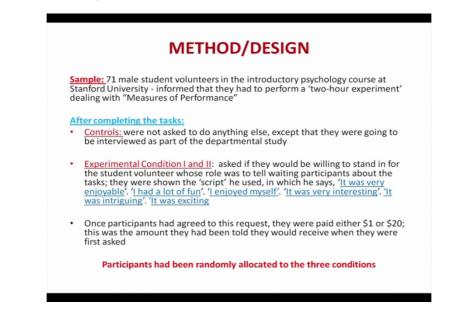
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So he he would he would present individuals with 1 dollar or 20 dollar for telling another participant was actually her stooge with the experimenter that the task they were waiting to

perform is really interesting. Now I hope you know what a stooge is, a stooge is an individual who is actually a confidant of the experimenter. So he the subject or the participant who is the real subject of study has no idea that these stoogs is known to the experimenter before he is actually working with the experimenter. The subject or the participant that is he sees the stooge as another participant just like himself. So the stooge actually helps to enhance the activity during an experimental situation, he helps with the conducting of the experiment and also act as a participant most of the times. So here what was the task in question that these participants had to do?

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So there were 71 male student volunteers from the introductory psychology course in Stanford. They were selected to perform participate in this experiment and they were informed they have to perform a 2 hour experiment dealing with "Measures of performance" and what was the task? The task of measure for of of performance was that they had to involve putting 12 spools, now these are spools I have put pictures of spools onto a tray, emptying the tray, refilling it with spools, emptying it again and so on.

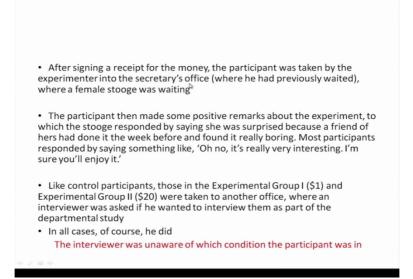
And after doing this for 30 minutes the participant was given a board containing 48 square pegs and the task was to turn the pegs a quarter turn clockwise then another quarter turn and so on and this also they did it for 30 minutes. So how do you think how interesting is the task? Actually the idea was to make it as boring as possible okay and this task was definitely boring, so it continued for one hour so half an hour of putting spools on a tray and removing it and then putting it back again and another half hour spent in turning the pegs, okay.

So the idea was to give them a very negative experience very boring experience of the whole situation, and then so that is what the thought is after that is what was trying to induced that this is pretty boring. Now, these individuals would have to say something different, so they would be required to say to another participant that this is a very interesting task, so what was done. Now the group was divided into 3 subgroups.

So the controls were not asked to do anything else, except that they were going to be interviewed as part of the department study, okay so that was one group the other was experimental one and two where the experimental one both were told that they would be will have to say it to the other participants that this was a very enjoyable task, they had a lot of fun, they enjoyed themselves, it was very interesting, it was intriguing and it was exciting.

So there was script, so this was absolutely tailor made and the experimenter told and the participant that there was another individual whose task was to go and say this to new participant, but unfortunately he had not come, so he was requesting this participant to go and say read out from the script and they would be paid, so the condition the 2 groups one group would get 1 dollar for saying all these and the other group would get 20 dollar and after this they would have to answer and complete an interview schedule that was a part of the departmental study just like the control group.

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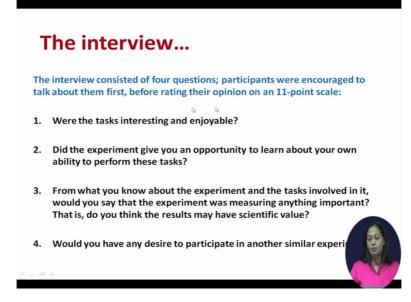
So once the participants have agreed to this request they were paid either 1 that is from dollar the condition experimental conditions group 1 and 2 dollar 0 for the experimental group 2 and participants had been randomly put through the 3 conditions. Out of the 71 students 60

were actually there for the final study the others had left for some reasons. So after signing the receipt for the money the participants were taken by the experimenter into the secretary's office and where a female stooge was waiting, so this was the experimenter's confidante, okay.

But the people the subjects or the participants actually do not know about it, so then the participants made some positive remarks about the experiment which the stooge responded by saying that she was surprised because a friend of hers had done it the week before so this task of picking up pegs and turning the pegs and picking up spools she said that she was surprised because a friend of her that it was a very boring task.

Now they were supposed to say from the script so that so most of the participant responded by saying something like, "Oh no, it is really very interesting. I am sure you will enjoy it." So like control participants, those in the experimental groups that is both the group who got 1 dollar and 20 dollar they were taken to another office wear an interviewer was asked if he wanted to interview them as a part of the department study and they were interviewed. And the interviewer was again blind so as in, that means that he was not aware in which group the participants belong so that is whether he whether the participant belongs to the control group, whether to experimental condition one or experimental condition 2.

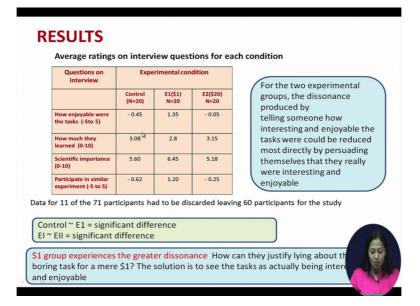
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So the interview consisted of a few questions and 4 questions primarily on an 11 point scale, so they were asked, were the task interesting and enjoyable? Did the experiment give you an opportunity to learn about you own ability to perform these tasks? From what you know

about the experiment and the task involved in it, would you say that the experiment was measuring anything important? That is, do you think the result may have scientific value? And would you have any desire to participate in another similar experiment? What do you think the results would be? So what the task interesting and enjoyable, just ask yourself, if you were asked to do one of these task of pickings spools and dropping then and then just turning the pegs and doing it for more than half an hour one task for half an hour and the other for another half an hour, so it is around an hour time.

Do you think you will find the task interesting and enjoyable? Would this experiment give you an opportunity to learn about your ability to perform such task and if you were in do you think this would be measuring anything scientifically important? And would it have any scientific value and would you actually wish to participate in a similar experiment later? Now let us see what happened to the results if you ask me I would have said no, now that is if I had belong to the control group, but if I had got either 1 dollar or 20 dollar for it what would happened? No let us see what happened to the group.



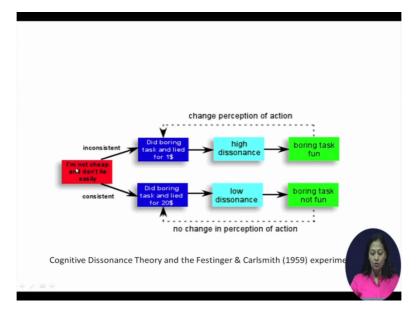
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So it was seen that most of the 1 dollar group experience greater dissonance, so most of the control group people, they were very clear that they did not like the task, okay. Now the what happened to the 1 dollar group, so the for the 2 experimental groups the dissonance was produced by telling someone, how interesting and enjoyable the task were and could be reduced most directly by persuading themselves that they really were interesting and enjoyable. So both the experimental one group that is the 1 dollar group and the 20 dollar group they try to convince themselves that this is an enjoyable task.

Now let us see how convinced were they, okay so only you will see that the 1 dollar group is pretty convinced while the controlled group and the 20 dollar group, they are absolutely not convinced that this was an interesting task, okay. So why do you think there was a difference, the difference was because it had to justify themselves and for the 1 dollar the experience greater dissonance, so if you have taken money and how can they justify lying about the boring task for just 1 dollar.

So the funny thing is that if this would the task so they try to make the task more interesting to themselves, so they try to convince their thought or convinced their belief that this task was actually not as boring as they had they thought initially, so it is pretty interesting. And if you see that for the scientific importance also this group the 1 dollar group gave a higher value and even into participating a similar experiment. Only for this how much did they learn? So this was probably the only place where they got lesser value. Now let us see what happened with the .1 group?

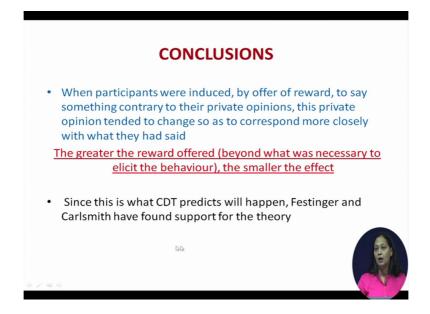
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For the now the idea is the first belief that the individual has is I am not cheap and do not lie easily, so now with this there is an inconsistency, when I do a boring task and I lie because I am not cheap and I do not lie easily, so then shall I only lie for 1 dollar so that is really cheap because I do not lie easily. So now there is a dissonance and the boring task becomes fun. On the other hand for 20 dollar what happened was, it is I do not I am not cheap and I do not lie easily, okay. So this is consistent with the idea that it is I am lying for 20 dollar now this created low dissonance because it is too far-fetched, okay. my idea and my already my idea about myself and the idea that the position that I have to take up a new, these are these are

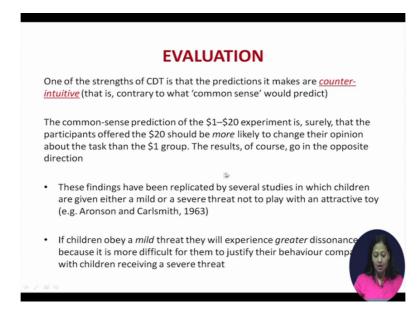
completely discreet now, so this not creating a dissonance, so I there is no change in perception.

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So it is okay I am this is a boring task though I take the money I say no it is a boring task, but for if it is for a lesser value say for the 1 dollar group they felt it would be cheap to take money and not lie because it is a very less amount of money. Now, so the conclusions that Festinger drew from this experiment was that when participants were induced, by offer or reward, to say something contrary to their private opinions, this private opinion tended to change so as to correspond more closely with what they had said.

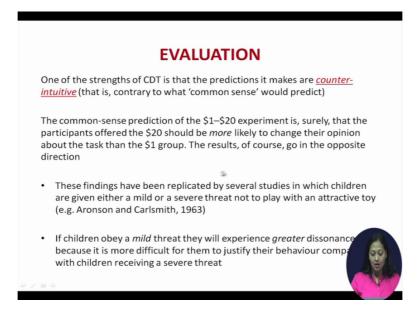
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So the greater the reward offered beyond what was necessary to elicit the behaviour the smaller the effect. So every time a large amount of reward need not bring about a large amount of change in behaviour. Now, this theory is very important because it is actually counter-intuitive so what is counter-intuitive? Counter-intuitive means that it goes against the common sense, so the common sense says that if you get a lot of money then you will change your opinion and say whatever is required.

But this theory goes against the common sense theory and the here so this finding was actually replicated by several other studies in children and where they were given either a mild or severe threat not to play with an attractive toy. Now it was seen, this was done by Aronson and Carlsmith in 1963 and it was seen that if children obey a mild threat they will experience greater dissonance, because it is more difficult for them to justify their behaviour compared with children receiving a severe threat.

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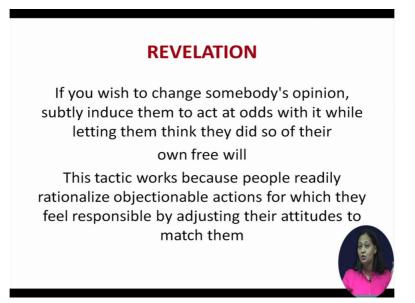
Now this was also done you know supported by other theories other research and Totman in 1976 did a wonderful experiment with patients where the illusion of choice over medication was given to them so the patients were asked whether they wish to take this or that and it was their decision and strangely when it went when the the when their decision was followed, it had beneficial effects, the medicines was more effective because the individual was more committed to it. And now this is also this has been you know in real life also you will get to see that if you this is one of the primary principle on which the faith healers work on, so they will tell you that if you have faith in it, it will work for you. So it is more like you know if

you have less dissonance with a new idea, so you just have to change a little bit to bring about harmony, then you will do it easily.

So it is you know this theory is very different from the common sense point of view and actually you know this is why the experiment in psychology are so important because they show you that not always it you know in an experimental situation you know when we actually do scientific experiments with you know scientific studies with it do, is our common sense view is supported.

In fact, that the common sense view for most of us would be that if you give somebody a greater reward he will work he will do better he will change his opinion but that is not always true and Festinger and Carlsmith in 1957–1959 showed this and this theory still holds importance today and lot of studies followed it and in fact, a lot of persuasive messages you know when specially through media or in through defence, in defence when we are trying to spread persuasive message, it is always done in little parts in bits and pieces not in a large context because then it will not change the opinion so easily.

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So one revelation before we end is if you wish to change somebody's opinion, subtly induced them to act at odds with it while letting them thing they did so of their own free will, so they are taking their own decisions. This tactic works because people readily rationalize objectionable actions for which they feel responsible by adjusting their attitudes to match them Thank you.