Attribution Theory


Attribution Theory
Why? I'll Tell You Why

One of the most amazing features of human beings is this: They can explain anything. Maybe it comes from the fact that we are parents and our children keep asking us, “Why?” And as older, superior beings, we just naturally have the proper explanation to our kid’s request. (“Why did I drop that sofa on my foot? I did it to show you what a severe bruise looks like, that’s why.”)

No matter the cause, we have a strong need to understand and explain what is going on in our world. Because people must explain, it opens up some unusual and unexpected persuasion possibilities. Think about it for a minute. If you can affect how people understand and explain what is going on, you might be able to change them, too.

First, let’s understand the basic principles of how people explain things. Then we will look at applications.

Attribution Theory

There is a theory about how people explain things. It is called Attribution Theory. The theory is quite simple despite its rather strange sounding name. (When you see the term, “attribution,” you should think of the term, “explanation,” as a synonym. I explain, therefore I am. I attribute, therefore I am.)

When we offer explanations about why things happened, we can give one of two types. One, we can make an external attribution. Two, we can make internal attribution. An external attribution (get ready for this) assigns causality to an outside agent or force. Or as kids would say, “The devil made me do it.” An external attribution claims that some outside thing motivated the event. By contrast, an internal attribution assigns causality to factors within the person. Or as the sinner would say, “I’m guilty, grant me forgiveness.” An internal attribution claims that the person was directly responsible for the event.

Here are some common examples. You are taking a class and you get test results back. You take a peek and see, ahhh, a 65%. You think about these disappointing results for a minute and realize what a lousy teacher you’ve got and how badly written the textbook is and how unfair the test was and . . . you make a lot of external attributions. What caused the 65%? Events outside of you. External things. And afterwards, you are acutely aware of your lousy teacher, the lousy textbook, and those lousy tests. Lousy.

Now, on the next test you take a peek and see, ahhh, a 95%. Well, what can I say? When you’re hot, you’re hot. If you’ve got it, flaunt it. Some people are born great. Where’s the causality? Inside of you, right? You assign causality to factors within the person and make internal
attributions. And afterwards, you are so pleased with your great teacher, this fabulous textbook, and love breezing through the tests.

Okay, this is real simple. When the world asks us, “Why?” we provide either an internal attribution or an external attribution. Pretty obvious, but what has this got to do persuasion?

Consider this chain of events.

1. The world asks me, “Why?”
2. I provide an attribution.
3. My future behavior depends on the type of attribution.

Now, if we can control the attributions people make, then we can influence their future behavior, right? Let’s check out this reasoning with a couple of examples.

**Attribution In Action**

I want to share two illustrations from the classroom. Both examples are published research studies that were conducted with elementary school children in their classrooms with their teachers. Thus, these examples are not laboratory studies of influence, but rather are real-world events. This makes their outcomes useful and practical for us. The first study concerns getting kids to clean up the classroom. The second involves improving math performance and self-esteem.

**Littering**. A constant battle with younger children is to get them to clean up after themselves. Especially in the classroom where there are twenty or thirty kids, neatness really makes a difference. How can you get kids to be neater?

Our first example made kids neater with Attribution Theory. They set the kids up such that the kids performed a desired behavior, then were provoked to think about why they did that behavior. And, of course, the situation was set up so that the children would make an internal attribution (“I did it because I’m that kind of kid”). Here’s what happened.

First, the researchers established a baseline for littering. They visited the 5th grade class just before recess and handed out little candies wrapped in plastic. After the kids went to the playground, the researchers counted the number of candy wrappers that were on the floor or in the waste can. And there were many more wrappers on the floor than in the can, of course.
Now, the study. Its simplicity is going to surprise you. Over the next two weeks people visited this classroom. For example, the principal stopped in for a little chat and on her way out she said, “My, this is a neat classroom. You must be very neat students who care about how their room looks.”

And one morning the class arrived to find a note on the blackboard from the custodian which said, “This is the neatest class in school. You must be very neat and clean students.”

Finally, the teacher would make similar kinds of comments throughout the two week training period (“Neat room, neat kids”). That’s all the researchers did.

Then they came back for a second visit again just before recess. And again they handed out little wrapped candies. This time when they counted whether the wrappers went on the floor or in the waste can, they found a lot more wrappers where they belonged: In the garbage. There was a very large change in the littering and cleaning up behavior of the kids.

Let’s review this simple study and make sure we understand what happened. First, we use candy wrappers before and after as an objective measure of littering. Second, we have a variety of sources observing the classroom and offering explanations (“neat room, neat kids”).

Also realize the things that were not going on. None of the sources modeled the correct behavior, so the kids were not copying a source with observational learning. None of the sources provided consequences of reinforcement, nor were rewards or punishments given for specific acts of behavior. None of the sources provided “arguments” about why kids should be clean and not litter. All the sources did was provide attributions.

(A little side note: The researchers also tried another treatment along with the attribution training. They called it the “Persuasion Treatment.” With a different classroom, all the various sources essentially gave the typical adult lectures about cleanliness and neatness. They said all the things good teachers say about littering. It had no effect on the candy wrapper test. Kids, huh?)

The analysis the researchers made is this. When the kids heard, “neat room, neat kids,” they had to think about what had happened. In essence, they had to answer the question, “Explain why the room is neat?” And their answer was simple.

“The room is neat because we don’t litter. We’re the kind of people who pick up after ourselves.”

In other words the children made internal attributions. And if you believe that you are the kind of person who is neat and does not litter, what happens when you have a candy wrapper? That’s right, you throw it away in the waste can.

**Math Achievement and Self-Esteem.** Our second study goes much deeper, I think, in illustrating the impact of attribution. Littering behavior is an obvious thing. It is also a fairly simple behavior that does not depend on a lot of other factors. So, it should be easier to change.
But what about something like math achievement or enhancing a child’s self-esteem? These things are complex. They are related to other factors (ability, persistence, training with math and family, life experience, peer support with esteem). Can we change a child’s math performance or self-esteem with attribution?

Here are the details on the second study. First, the researchers used before and after measures of math achievement and self-esteem with 2nd grade students. Second, the researchers developed simple, little scripts for each student. All the teacher had to do was read the folders provided for each student, then say or write the appropriate statement. Thus, this study was highly automated. Each teacher simply followed the instructions in a preplanned, scripted way. Third, the researchers had three different kinds of treatment. Kids either got the attribution training or they got the “persuasion” training or they got “reinforcement” training. The study lasted eight days.

Here’s the attribution training. The teachers would say or write to the student:

“You seem to know your arithmetic assignments very well.”

“You really work hard in math.”

“You’re trying more, keep at it!”

Here’s the persuasion training. The teachers would say or write to the student:

“You should be good at math.”

“You should be getting better grades in math.”

“You should be doing well in math.”

Here’s the reinforcement training. The teachers would say or write to the student:

“I’m proud of your work.”

“I’m pleased with your progress.”

“Excellent progress.”

Before we look at the results, again let’s analyze what is happening here. In the attribution training, the children are given explanations for their behavior. They are told that their math performance is due to internal factors (“You are a good math student, you try hard in math”). Thus, we would assume that these kids will make internal attributions. Now, even if this is true and the children do explain their behavior with internal attributions, will it translate into higher math scores? It is one thing to believe that you are good at something. It is another thing to be good.
First, consider the self-esteem results. After all the training was over, all the kids had higher self-esteem (on a self report scale). But, children in the attribution groups had the greatest increases in self-esteem.

Next, what about those math scores? That’s the main point. The children took two tests after training. One occurred immediately after the eight training days. The second was given two weeks later. Each test was composed of twenty math problems.

Kids with attribution training averaged 17.5 on the first test and 17.8 on the second test. (The baseline for everyone was 15). Kids with persuasion training averaged 15.5 and 15.0. The kids with reinforcement training averaged 16 and 16. Thus, the students with attribution training scored one to two points higher than other groups and maintained that advantage during the two weeks following the training. The standard deviation was approximately 1.0 so these mean differences are quite large, generated effect sizes in that 25-75 Windowpane range.

Time for reflection . . . the training was simple. Each teacher followed a script of written or verbal statements. Each teacher provided the statement to each kid. So, the teacher would mosey over during seatwork and say to a child, “You really work hard at math.” Or the teacher would write on a homework assignment, “You are good at math.” That’s it. That’s all that was done.

From a dual process, ELM perspective, it’s interesting to ask why these effects occur. Obviously, no one ran a Full Monte ELM design with two WATTage types of High versus Low, then two Argument types with strong and weak, so we have to speculate here. However, the researchers did track prediction of future behaviors and the persistence of changes over time. Thus, we don’t have a “process” ELM test, but we do have an “outcomes” ELM test.

At first blush these attribution plays are pretty simple and look rather like Cues. Somebody looks around the room, asks a question, then supplies an easy answer, “Neat room, neat kids.” Or “Good homework, good math student.” Doesn’t that sound like a Cue?

But, then, the play also could operate as a WATTage switch. The question turns the kids into High WATT processors and they engage in a (directed) search for answers. As they look around the room or scan over the feedback on their math quizzes, they produce that long conversation in the head and work the Central Route.

So, which is it?

For me the decisive consideration flows from the behavior data. Those cognitive attributions lead to strong behavior change and those behavior changes persisted over time. That looks like the Central Route to me. Thus, given the limitations in the design (and that’s not criticizing the researchers – they were interested in something else and besides the ELM had not been published when this research was completed) this use of attribution is a Central Route play. The attribution is a WATTage dimmer switch and the persuasion source (the teacher) directs focus over the behavioral Arguments (neat clean room; all that positive homework) which the kids process with the long conversation of elaboration activity.
 Attribution, Adults, And Health

The preceding examples demonstrate what attribution is and how simple it is to implement. Simply ask, “Why?” then try to elicit an internal attribution. We’ve seen it work with children, but what about adults and their health? I’ve got a great research illustration. And it involves just two words, “you” and “your doctor.”

Alex Rothman and colleagues did a simple attribution manipulation. They presented an information session about breast cancer and mammography to working women over 40 at their job site. The 250 women who participated were randomly assigned to one of three information conditions. In the control condition, some women got the bare bones information with no attribution manipulation. In the “External Attribution” group, women got the bare bones presentation, but the words “Your Doctor” were added to the information. For example, the information might have a line like:

“A mammogram can reveal very small masses that aren’t detectable by a self exam.”

In the external attribution condition this line would be changed to:

“You will ask if the mammogram revealed very small masses that aren’t detectable by self exam.”

Now, if you’re playing along at home here, it should be easy for you to fill in the blank for the “Internal Attribution” condition. Women here got the same information, but the line dropped the “Your Doctor” and inserted “You” as in:

“You will ask if the mammogram revealed very small masses that aren’t detectable by self exam.”

You see the basic drift of the three conditions? Everyone gets the “same” fundamental facts about breast cancer and mammograms. What’s varied here is the type of attribution that is forced in the description. The “Your Doctor” phrase puts the responsibility for action with an external agent, the physician. The “You” line puts the responsibility for action with the internal agent, the woman.

The outcome variable in this study was the percentage of women from each group who got a mammogram in the following 12 months. Consider the percentages:

66% Internal Attribution Group (“You”)
57% External Attribution Group (“Your Doctor”)
55% Information Only Group
48% rate for all women in 1992 in Connecticut (location of study)

The Information Only and External Attribution groups had meaningfully higher rates of exams compared to the basic state rate of 48%, but note that they were not statistically different from each other. The big news is that the Internal Attribution group had an even stronger effect.
compared to everything else. The effect size is not huge, but consider how easy it was to get this extra impact: Just create an internal attribution.

Once again, an ELM analysis would suggest that attributions here function as dimmer switches that make women think more about mammogram Arguments. The key here is making those thoughts focus upon their personal responsibility for the test rather than giving responsibility to an outside source.

**Music Man, Love, and Money**

By now you see how to play the game and understand how simple it is. You can change the way people see themselves in the world and in so doing, change the way they behave. Now, let’s play the game for a different goal. Instead of getting them to explain themselves a new way, let’s get them to explain us in a new way.

In this example, we’re going to manipulate a classic contrast: Love or Money. We want to influence our receivers as seeing our behavior as coming from either an internal attribution (Do It for Love) or external attribution (Do It for Money).

Imagine now that we’re piano teachers. We’re going to give an introductory lesson to novice adults who want to learn. We’ll teach the same lesson each time. And then we’ll ask the adults to rate our teaching skill and we’ll also observe them to see if they continue playing after we leave the room.

Now, here’s the New Thing in this setup. Before the lesson starts, I will tell the students one of two different stories about you (and you won’t know which one I told). For half of the students, I’ll tell them you are a Hired Gun doing this to make money. For the other half, I’ll tell them you are a Volunteer doing this because you love teaching music.

The only thing that’s moving here is the attribution – Love or Money. Now, here’s the $64,000 question – what difference does that attribution make?

When students thought you were a Volunteer, they rated you as a better teacher, liked you more, had higher motivation to learn, and, when left alone, the students tried more new music compared to the Hired Gun. Furthermore, students rated the Volunteer as more enthusiastic, as enjoying the lesson more, and as more innovative and creative than the Hired Gun.
Chew on this. You are doing the “same thing” with everyone. You’re doing your job as consistently as you can. As far as you’re concerned, this is just routine, habit, it’s what you do. Yet, others will react to you very differently, not based on what you’re doing, but based on why they think you are doing it. And, I can persuade them to have this different perception of you with just a message about Love or Money.

**The Problem With External Attributions**

As we have seen, when people make an internal attribution for their actions, it appears that they also change their attitudes and beliefs about themselves. Hence, they become “that kind” of person and the desired behavior follows naturally. The key for change is an internal attribution.

Now, what happens when people use external attributions?

Let’s analyze this situation before we look at a research example. If children are made to question their behavior (“Why is this classroom so neat and clean?”) and they produce an external attribution (“Because the teacher is watching”), what kind of behavior would we expect?

Well, as long as the teacher is watching, then the kids will be neat, but as soon as the teacher turns her back . . . a big mess. The kids believe that their behavior is under the control of an external force and not from themselves.

This illustrates the problems that can arise when people use external things (like rewards and punishments) to influence behaviors. In essence, the reward or punishment prevents people from making an internal attribution and thus bringing the desired behavior under their control. People may not “generalize” from the reward and acquire the internally motivated habit to produce the desired behavior. Instead, they will expect some external agent (namely you) to cause their actions.

There is another curious problem with external attributions. They can undermine an existing habit. That is, people who perform a behavior because “that’s the kind of people they are” (internal attribution), can lose the control if they change their pattern of attribution. Look at this research study.

A group of researchers observed young kids (3 to 5 years old) at play. They noted that most of the kids loved playing with magic marker type crayons. When these crayons were available, the kids made a beeline for them and would use them with great concentration and apparent pleasure. According to Attribution Theory, we would claim that these kids used these crayons for internal reasons. There was no external force causing them to play with them. Instead, the kids freely chose the crayons and enjoyed them for intrinsic reasons.

Next, the researchers promised and then gave one randomly selected group of children “Good Player Awards” as a reward for their drawing efforts with the crayons. For one week, these children knew that they would get a “prize” at the end of the week for their drawing behavior. For the remaining children, no such promises were made.

Kids who got the promised external rewards changed their play behavior. These kids reduced how often they played with the crayons and how much time they spent with the crayons. By
contrast, the children who were not promised external rewards maintained their normal frequency and duration of use.

Attribution theory provides the explanation. We know that the kids already wanted the crayons for internal reasons with intrinsic motivation. However, the introduction of an external attribution changed the children and their behavior. When asked, “Why do you play with those crayons?” the kids answered “Because of the award.”

I want to quickly point out here that external attributions are not a uniformly bad thing. Our preceding discussion makes it seem that things like rewards and punishments and other external forces are undesirable tactics that never work or only work when you are around to guard your clients and deal out the carrots and the sticks.

External forces can be effective if the receivers believe that they “earned” the external factor for internal reasons. Thus, rewards work well when the receiver thinks, “I got the gold sticker because I am a good student who did a good job on this assignment.” Or punishments work well when the child thinks, “I got punished because I did a bad thing.” If children (and other kinds of people) believe that they essentially did nothing on their own to earn the external agent, then that external agent is unlikely to cause any long term, internal change.

**From the Classroom to the Showroom Floor**

You remember the Cash for Clunkers program aimed at saving the Detroit auto industry from extinction in 2009. They inveigled us to surrender our beloved ‘99 Ford Explorers and other gas guzzling “clunkers.” And, as you already know, enlightened citizens flocked to CfC driving up depressed auto sales. Hurray Detroit! Hurray Federal Government Intervention!

Now, persuasion theory enters the picture and rains on the parade.

We **learn** that in the sales period following CfC, sales are worse than ever. Here’s the lead:

“NEW YORK — GM, Ford (F) and Chrysler reported September sales declines on Thursday, revealing a tough hangover from this summer’s cash for clunkers buying spree.”

If you know anything about persuasion theory or have worked in sales, you know that incentive programs like CfC have an unfortunate effect. As Reinforcement Theory (For Me?) predicts and explains, consequences drive behavior. Wow! A big rebate on a new car sale. I’ll take one! But, when the incentive goes away so does the demand.

Attribution Theory explains this. People engage in a search for causality – why did that happen? With the incentive, when asked to explain why you wanted the car, the answer is easy – The incentive made me do it. It’s a classic example of an external attribution (explanation) for behavior. I did it for something outside of me.

While incentives provide motivation, that motivation has the perverse effect of making the behavior come under external control rather than internal motivation. Instead of wanting and
buying a car (or anything else) for internal factors (I want it; I need it; I’ll be better, faster, sexier, smarter if I get it), we show the behavior only when an External Source provides a Desirable Consequence.

This attribution trap is always lurking when incentives are present. If you are a parent or a teacher, you’ve probably gotten caught in this trap with your children when you think you’ve provided motivation with incentives like rewards, smiley face stickers, or other treats hoping to generate a positive attitude or habit. If you do it wrong, you turn yourself into a Reinforcement Machine spending all your time monitoring rather than having independent kids doing the Right Thing.

The trick is to also control the attribution people make when receiving the incentive (or punishment). They have to perceive it as something under their direct control and motivation. If they think they are doing it simply for an External Cause (the Devil made me do it!), Reinforcement Theory will lead you into the Valley of the Shadow of Failure.

This is what Detroit needs!

How about a little Red with your Green? (Although the Romantic Red here is a little purple dress and the Green Efficiency is a little blue car, but you get the metaphor, right? This is an ad for a Japanese audience that apparently prefers Kim Cattrell in something other than red and efficient cars in something other than green.)

Or, if you’re of an age, perhaps this.

**Massive Subtle Point**

If you’re thinking very carefully about all of this you have realized that things can be more complicated than I’m describing here. It sounds like the smart persuasion play is to get receivers
to generate the desired INTERNAL attribution, but not EXTERNAL attribution, and you’re a persuasion pro. Aren’t there some situations where you might want to persuade external attributions rather than internal ones? Huh, Steve?

You’re right. Here’s a gold star and a coupon for an Al’s Beef Sandwich. Enjoy yourself!

It is simple minded on my part to make it seem that you always and only ever want to persuade internal attributions and never external attributions. Consider this.

What if you’ve got a situation where you want receivers to never do something unless you are there to observe, supervise, or evaluate it? Under that condition, you want to persuade an external attribution (Why do I press the button? Because the boss tells me to.) Under these circumstances, you do not want receivers making internal attributions or developing an intrinsic motivation.

Thus, the attribution play is not aimed only and ever at just internal attributions. You can choose the attribution type depending upon the kind of ultimate behavior change you seek. If you want your receivers to produce a behavior under their internal control and motivation, then the basic Why? Because play aims at creating internal attributions. By contrast, if you want your receivers to produce a behavior under your control, you play Why? Because to generate external attributions.

**Attribution Ripped from the Headlines**

Attribution is a great concept for blogging and I’ve got numerous examples to demonstrate. Here’s how to play Why? Because! with physicians of all people. Want to understand what the pharma guys are up to with their latest pill boxes? And, Melanie contributes a personal story about the perils of awards for quilting. Finally, here’s a sweet example of using attribution and reinforcement with children and video games.

**Outro**

Let’s consider the persuasion WAC here. Attributions in most of the examples in this page have functioned as WATTage dimmer switches delivering that long conversation in the head. The “Why?” provokes a search for information which the receiver then elaborates upon. The trick here is that the persuasion source deliberately makes it easy for the receiver to find the “right” Arguments. “Gee, you must be neat, clean kids. The janitor said so and so did a bunch of other people. Think about that.”

We can also see Attribution as a Cue. The Music Man study seems to be a great illustration of this. The same “attitude object” – the music teacher’s performance – gets rated very differently depending upon Volunteer vs. Hired Gun attribution. That requires very little thinking, just quick inferences. “If he’s paid, he’s just doing a job.” But, “If he’s a volunteer, he is really involved.”
I have trouble seeing Attribution as Argument quality. Whether you make an internal or external attribution about something shouldn’t automatically contain either strong or weak information. Maybe you’ve got an application to change my mind?

Simplicity drives practical application of Attribution Theory. You might have been struck by that fact as you read about the experiments. To achieve obvious and enduring effects, all the sources had to do was make a few well-timed and appropriate statements. There was no great deception or cunning machinations.

There are two key steps to effective use of Attribution. First, you must provide (or observe) a situation that contains the TACT you want to achieve (e.g. the janitor writing on the blackboard, “Neat room, neat kids.”). Second, you must then ask people why they were performing the TACT in those prior situations (e.g. teacher asking, “Why is this room so neat?”). In essence, you first provide the strong Arguments (the janitor’s testimonial, the principal’s observation) then later turn the WATTage dimmer switch with that “Why?” question.

If you think about it, Attribution Theory gives credence to the Rule, “Less is more.” The less you push, and the more you let the receiver think, then the more change you can get. You just have to make sure that the little things you do lead to internal attributions.

References and Recommended Readings


