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February 13, 2006

## Belief Perseverance

### **Definition**

People tend to hold on to their beliefs even when it appears that they shouldn't. Belief perseverance is the tendency to cling to one's initial belief even after receiving new information which contradicts or disconfirms the basis of that belief. Everyone has tried to change someone's belief, only to have them stubbornly remain unchanged. For example, you may have had such debates concerning the death penalty, or abortion, or evolution.

In many cases, resistance to challenges to beliefs is logical and defensible. For example, if you've always done well in math classes, getting a "C" on a math test should not lead you to abandon your belief that you are usually good at math. However, in some cases people cling to beliefs that logically should be abandoned, or at least modified. There is overwhelming evidence that smoking increases the likelihood of contracting cancer, and that exposure to media violence increases the likelihood of aggressive behavior. Yet, some people strongly deny these scientific truths. Scientists studying belief perseverance have been most interested in cases in which people appear to cling too strongly to prior beliefs.

### **Types**

Three different types of belief perseverance have been extensively studied. One involves *self-impressions*, beliefs about oneself. Examples include beliefs about your athletic skills, musical talents, ability to get along with others, or even body image. Perhaps you know someone who is extremely thin but who persists in believing that she is too fat. Such a mistaken and perseverant belief can lead to a serious consequences.

Another involves *social impressions*, beliefs about specific other people. Examples include beliefs about your best friend, mother, or least favorite teacher. The third type involves *naive theories*, beliefs about how the world works. Most perseverance research on naive theories has focused on *social theories*, beliefs about people and how they think, feel, behave, and interact. Examples include stereotypes about teenagers, Asian-Americans, Muslims; beliefs about lawyers, artists, firefighters; even beliefs about the causes of war, poverty, or violence.

### **Studies**

Early belief perseverance studies tested whether people sometimes truly cling to unfounded beliefs more so than is logically defensible. But, it is difficult to specify just how much a given belief "should" change in response to new evidence. One "C" on a math test should not totally overwhelm several years of "As" in other math classes, but how much change (if any) is warranted?

There is one clear case in which we can specify how much belief change should occur. That case is when the basis of a specific belief is totally discredited. For example, assume that Mary tells José that the new student Sam is not very smart. José may even meet and interact with Sam for several days before learning that Mary was actually talking about a different new student. Because José knows that his initial belief about Sam's intelligence was based on totally irrelevant information, José's social impression about Sam should now be totally uninfluenced by Mary's initial statement. This essentially describes the *debriefing paradigm*, the primary method used to study unwarranted belief perseverance.

In the first belief perseverance study using this method, half of the research participants were led to believe that they had performed well on a social perceptiveness task; the other half were led to believe that they had performed poorly. Later, all were told that their performance had been manipulated by the researcher to see how participants responded to success or failure. Participants were even shown the sheet of paper which listed their name and whether they were supposed to be given success or failure feedback. Later, participants had to estimate how well they really did, and to predict how well they would do in the future on this task. Logically, those in the initial success and failure conditions should not differ in their self-beliefs about their actual or future performance on this social perceptiveness task, because initial beliefs based on the fake feedback should revert to their normal level once it was revealed that the feedback was faked. Nonetheless, participants who received fake success feedback continued to believe that they were pretty good at this task, whereas those who received fake failure feedback continued to believe that they were pretty bad at it. Other studies of self and social impressions have found similar effects very different beliefs.

The first study of social theory perseverance used a similar debriefing paradigm to see whether fictitious information about the relation between the personality trait "riskiness" and firefighter ability could produce a perseverant social theory. In fact, after debriefing about the fictitious nature of the initial information, participants initially led to believe that risky people make better firefighters and those initially led to believe that risky people make poorer firefighters persevered in their initial beliefs.

At least three psychological processes underlie belief perseverance. One involves use of the "availability heuristic" to decide what is most likely to happen. When judging

one's ability at a particular task, you are likely to try to recall how well you've done on similar tasks in the past, that is, how available (in memory) are past successes versus failures. But whether you recall more successes or failures depends on many factors such as how memorable the various occasions were and how often you've thought about them, but not necessarily on how frequently you've actually succeeded or failed. A second process concerns "illusory correlation" in which one sees or remembers more confirming cases and fewer disconfirming cases than really exists. A third process involves "data distortions" in which confirming cases are inadvertently created and disconfirming cases are ignored. For example, if you are told that a new student is rude, you are more likely to treat that person in a way that invites rudeness, and to forget instances of politeness.

Research also has investigated ways to reduce belief perseverance. The most obvious solution, asking people to be unbiased, doesn't work. However, several techniques do reduce the problem. The most successful is to get the person to imagine or explain how the opposite belief might be true. This debiasing technique is known as counter-explanation.

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