

People Who Are Angry Pay More Attention to Rewards Than Threats

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Anger is a negative emotion. But, like being happy or excited, feeling angry makes people want to seek rewards, according to a new study of emotion and visual attention. The researchers found that people who are angry pay more attention to rewards than to threats—the opposite of people feeling other negative emotions like fear.

Previous research has shown that emotion affects what someone pays attention to. If a fearful or anxious person is given a choice of a rewarding picture, like a sexy couple, or a threatening picture, like a person waving a knife threateningly, they'll spend more time looking at the threat than at the rewarding picture. People feeling excitement, however, are the other way—they'll go for the reward.

But nobody knows whether those reactions occur because the emotions are positive or negative, or because of something else, says Brett Q. Ford of Boston College, who wrote the study with Maya Tamir, also of Boston College, and four other authors. For example, she says, "emotions can vary in what they make you want to do. Fear is associated with a motivation to avoid, whereas excitement is associated with a motivation to approach. It can make you want to seek out certain things, like rewards." The research is published in *Psychological Science*, a journal of the Association for Psychological Science.

For her study, Ford focused on anger. Like fear, anger is a negative emotion. But, like excitement, anger motivates someone to go out and get rewards. First, participants in the study were assigned to write for 15 minutes about one of four memories in their past: a time when they were angry, afraid, excited and happy, or felt little or no emotion. A five-minute piece of music reinforced whichever emotion the participant had been assigned. Then they completed a task in which they had to examine two side-by-side pictures. An eye-tracking device monitored how much time they spent looking at each picture.

Angry people spent more time looking at the rewarding pictures—which suggests that this kind of visual attention bias is related more to how an emotion motivates someone than whether it's positive or negative. Looking at something is the first step before the thoughts and actions that follow, says Ford. "Attention kicks off an entire string of events that can end up influencing behavior." The people who felt happy and excited also looked more at the rewarding photos, but the two groups might act differently—an angry person might be motivated approach something in a confrontational or aggressive way, while a happy person might go for something they want in a nicer way—by collaborating, being sociable and friendly.