

Time Flies When You're Having Goal-Motivated Fun

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Though the seconds may tick by on the clock at a regular pace, our experience of the 'fourth dimension' is anything but uniform. When we're waiting in line or sitting in a boring meeting, time seems to slow down to a trickle. And when we get caught up in something completely engrossing – a gripping thriller, for example – we may lose sense of time altogether.

But what about the idea that time flies when we're having fun? New research from psychological science suggests that the familiar adage may really be true, with a caveat: time flies when we're having *goal-motivated* fun.

Existing research demonstrates that experiencing positive feelings or states makes us feel like time is passing faster than negative feelings and states do. But, as some researchers observe, not all positive states are created equal. Sometimes we experience feelings of contentment or serenity. These feelings are certainly positive ones, but they aren't very high in what researchers call 'approach motivation' – they don't make us want to go out and pursue or achieve something. Feelings of desire or excitement, on the other hand, are very high in approach motivation – desire and excitement motivate us to go forth and conquer.

Psychological scientists Philip Gable and Bryan Poole of the University of Alabama hypothesized that it's specifically those states that are high in approach motivation that make us feel like time is passing quickly. They decided to test this hypothesis in a series of three experiments and their results are published in the August 2012 issue of [Psychological Science](#), a journal of the [Association for Psychological Science](#).

In one of the experiments, participants were trained to tell the difference between pictures shown for a 'short' (400 ms) or a 'long' (1600 ms) period of time. The participants then viewed pictures that were neutral (geometric shapes), that were positive but low in approach motivation (e.g., flowers), or that were positive and high in approach motivation (delicious desserts). For each picture, they had to indicate whether the picture had been displayed for a short or long period of time.

Just as the researchers hypothesized, the participants perceived the enticing pictures of desserts as having been displayed for a shorter amount of time than either the neutral geometric shapes or the pleasing pictures of flowers.

The researchers also found that the perceived amount of time for the enticing pictures was related to when participants had eaten that day. Those participants who had eaten recently (lowering their approach motivation for food) judged the dessert pictures as having been displayed for longer periods of time than their hungrier peers.

These findings were confirmed in a second study, in which participants reported time as passing faster

when they looked at the dessert pictures with the expectation that they would be able to eat those desserts later, suggesting that our desire to approach something really does make time fly by.

Importantly, this feeling that time is somehow shorter seems to be the specific result of our desire to approach or pursue something, not a more general effect of heightened attention or physiological arousal. In a third study, the researchers found that looking at pictures that evoked highly unpleasant feelings, which can also make us more alert and attentive, did not shorten people's perception of time.

Gable and Poole propose that states high in approach motivation make us feel like time is passing quickly because they narrow our memory and attention processes, helping us to shut out irrelevant thoughts and feelings. This perceived shortening of time may help us to persist for longer periods of time in pursuing important adaptive goals, including food, water, and companionship.

“Although we tend to believe that time flies when we're having a good time, these studies indicate what it is about the enjoyable time that causes it to go by more quickly,” says Gable. “It seems to be the goal pursuit or achievement-directed action we're engaged in that matters. Just being content or satisfied may not make time fly, but being excited or actively pursuing a desired object can.”