Simplification: A Catalyst for Employee Engagement and Operational Excellence

David Eskew, MBA Candidate, Lauren Moser, MBA/MDiv Candidate, Josh Arnold, JD/MBA Candidate, Troy Baker, MBA Candidate, and Russell Webb, MBA Candidate

Value-Developing Skills

Charles Fifield, MBA

Can Acetaminophen Reduce the Pain of Decision-Making?

C. Nathan DeWall, PhD, David S. Chester, PhD Candidate, and Dylan S. White, BA

Value Creation in Real Estate

Caroline Tynan, PhD, Sally McKechnie, PhD, and Stephanie Hartley, MSc

Creating High-Performance Sales Organizations through Sales Control Systems

Paolo Guenzi, PhD, Artur Baldauf, PhD, and Nikolaos G. Panagopoulos, PhD

INSIDER: Thinking, Fast and Slow in Real Estate Sales

Mark McMullen, JD/MBA Candidate

INSIDER: Agile Selling

Luke Smith, MBA Candidate
Can Acetaminophen Reduce the Pain of Decision-Making?

C. Nathan DeWall, PhD, David S. Chester, PhD Candidate, and Dylan S. White, BA

Decision-making and loss as a result of decision-making may afflict every individual, industry, and profession. However, decision-making and loss are not the most pleasurable experiences. In fact, decisions are often described as painful. Selling something treasured like a home can hurt. Wouldn’t it be helpful if you could take a pain killer for this kind of pain like you would a headache? Our research demonstrates that you can do just that.

Our research analyzes the impact of acetaminophen on cognitive dissonance, which is the psychological discomfort experienced when deciding between similar alternatives. We also examine the impact of acetaminophen on loss aversion, which is the psychological discomfort associated with irrationally weighing potential losses more than potential gains.

Being successful within the real estate industry involves numerous decisions every day. Clients face important decisions as well as “loss” associated with selling their homes or spending their money. Recognizing the potential benefits of acetaminophen can help real estate professionals and their clients ease discomfort when facing these more life experiences.

Testing Acetaminophen and Cognitive Dissonance

We tested the impact of acetaminophen on cognitive dissonance using a sample of 112 undergraduate students, where each participant was randomly assigned to take 1000 mg of acetaminophen or a placebo. Participants completed questionnaires while the acetaminophen was given time to reach peak plasma concentration. Each subject then rated the desirability of seven cognitive tasks. Participants were told that they would eventually be performing one of these tasks and their preferences would be considered. After selecting two tasks that the subject rated positively, the experimenter asked the participant to choose one to perform. The participant then completed more questionnaires. The experimenter returned and asked the subject to rate the seven cognitive tasks again, explaining that preferences can change dramatically over time without regard for previous preferences.
In the second preference exercise, our results show that subjects rated the task rejected in first exercise lower in the second evaluation. Called the spreading-of-alternatives, this lower second rating results because rejecting a task suggests that there is something negative about the task. People deal with the discomfort of decision-making by changing their attitude toward the rejected task. However, this occurrence was significantly weaker among the acetaminophen-taking participants, suggesting that the pain of decision-making was mitigated by the presence of acetaminophen. The result: there was less need to create a spreading-of-alternatives.

Testing Acetaminophen and Loss Aversion

To test the impact of acetaminophen on loss aversion, 95 students were randomly assigned to take either 1000 mg of acetaminophen or a placebo. They completed questionnaires, allowing time for peak plasma concentration. Every student received a mug and told that the mug was theirs to keep (“endowed subjects”) or that the mug was property of the laboratory. Per request of the investigator, subjects then stared at the mug for 30 seconds to be prepared for later questioning. This exercise allowed the “endowed subjects” to develop an attachment to their new possession. The investigator then explained a selling activity and asked subjects to write down the price they would list for the mug.

The endowed subjects who had taken acetaminophen wrote lower selling prices than their placebo counterparts. This result suggests that the loss aversion (the discomfort associated with selling a possession) is somewhat mitigated by the presence of acetaminophen. Additionally, the endowed, acetaminophen-taking subjects gave the lowest price than the other three groups (placebo-endowed, acetaminophen-non-endowed, placebo-non-endowed) combined. In fact, both acetaminophen groups set lower prices than their placebo counterparts.

This experiment was replicated again yielding similar results. Therefore, our research shows that reducing physical pain through the use of acetaminophen reduces the pain or discomfort associated with loss aversion.

Conclusion

Our research implicates the potential benefits acetaminophen can have in scenarios of psychological discomfort, specifically cognitive dissonance and loss aversion. When faced with
competing alternatives in the real estate market, both real estate professionals and clients could potentially lessen the discomfort of choosing through the use of acetaminophen. Additionally, the pain of losing a treasured home, which drives clients to set unrealistically sale prices, may be lessened through the use of acetaminophen. Daily decisions, life events, and comparable alternatives are sources of pain and pervasive in the real estate industry. Our research shows that when facing a “headache” in the real estate industry, professionals and clients may wish to consider dealing with the psychological pain with a physical painkiller.

Recommended Reading


About the Authors

**C. Nathan DeWall, PhD**
Professor of Psychology, Department of Psychology, University of Kentucky
C. Nathan DeWall (PhD in psychology from Florida State) is a Professor of Psychology and Head of the Social Psychology Area at the University of Kentucky. His research interests include human relationships, self-regulation, social neuroscience, and aggression.

**David S. Chester, PhD Candidate**
Department of Psychology, University of Kentucky
David S. Chester (MS in psychology from University of Kentucky) is a doctoral candidate at the University of Kentucky. His research has been published in the *Journal of Experimental Social Psychology, Social Cognitive and Affective Neuroscience*, and *NeuroImage*.

**Dylan S. White, BA**
Department of Psychology, University of Kentucky
Dylan S. White (BA in psychology from University of Kentucky) is an honors student at the University of Kentucky. His research has been published in the *Journal of Experimental Social Psychology*. 