

Awareness of product transformation increases recycling

July 10 2019



When consumers are reminded of the products that their recyclables can be turned into they are more likely to recycle. Credit: Karen Winterich, Penn State

A plastic bottle becomes a jacket, an aluminum can a bicycle. When consumers are reminded of the products that their recyclables can be turned into they are more likely to recycle, according to researchers at Penn State and Boston College.

"Recycling rates in the United States are too low," said Karen Winterich, professor of marketing and a Frank and Mary Smeal Research Fellow,

Smeal College of Business, Penn State. "For example, in 2015, only 25 percent of waste was recycled. Our research suggests that recycling rates can improve if consumers are exposed to signage and messaging that shows recyclables are transformed into [new products](#). We hope to change the conversation from 'Where does this go?' as consumers question whether an item is recyclable to "What can this make?" with consumers automatically thinking about [products](#) made from the material they recycle."

According to Winterich, the definition of a recyclable is an object with a future use, yet many of us still view [recyclable material](#) as trash.

"We may put it in the recycling bin, but in essence, we think of it as garbage," said Winterich. "We don't think about it as something of value that has a future use."

Winterich and her colleagues conducted a series of studies in which they examined how product [transformation](#) salience—thinking about recyclables turning into new products—influences recycling. The results of these studies appear in print on July 1 in the *Journal of Marketing*.

In one study, the team gave participants half sheets of scrap paper on which to doodle so they could "clear their minds." Next, the researchers showed the participants a series of advertisements. Some of the advertisements merely encouraged recycling. Others featured products being recycled into the same types of products—for example, a plastic bottle being transformed into a new plastic bottle. Still others featured products being recycled into entirely new products—for example, a plastic bottle being transformed into a jacket. At the end of the session, the researchers recorded whether or not the participants placed their scrap sheets of paper into the [recycling bin](#) or the trash can before leaving the room.

"We found that the people who were shown ads that detailed product transformation were significantly more likely to recycle their scrap sheets of paper than the people who were shown the control recycling message that did not make transformation salient," said Winterich.

"Interestingly, there was no difference in recycling rates between the groups who saw ads about products being turned into different products versus those showing products being turned into the same kinds of products."

In another study, the team placed signage above the recycling center in a university residence hall offering only information about what types of recyclables were accepted. On another floor of the same dormitory, they posted signage demonstrating not only what types of recyclables were accepted but also what products the recyclables could be made into. After a period of time, the researchers sorted and weighed all of the materials in the bins. They found that on the product transformation salience floor, more than 51 percent of the material headed to the landfill was recyclable, whereas nearly 63 percent of the material in the control floor's landfill bin could have been recycled.

"When the poster had information not just about what to put in the bins, but also about what can come out, we saw a decrease in the amounts of recyclables in the trash and an increase in recycling," said Winterich.

In a third study, the team examined the effects of different messaging on pre-football game tailgaters at a large U.S. university. Student liaisons walked around the tailgate area and shared one of two different messages with tailgaters. In both types of messages, the liaisons shared information about the proper disposal of waste at tailgates. For the control condition, the liaisons shared no other information, whereas in the transformation condition, liaisons informed tailgaters about the transformation of each type of recyclable into a new product. Once again, recycling rates were significantly higher for study participants

who were exposed to the transformation messaging.

Finally, the team conducted a study examining the effects of online advertisements that showed product transformation on website click-through rates. The researchers studied an initiative by the clothing company Madewell, which at the time was running a blue jeans recycling campaign encouraging customers to recycle their jeans so they could be transformed into housing insulation. Winterich and her colleagues published paid advertisements on Google's Ad platform to examine whether participants would be more likely to click on a paid recycling advertisement if it featured product transformation information than on an advertisement that did not include such information. The team's analysis revealed that click-through rates were higher for the product transformation advertisement compared to the control advertisement.

"Overall, our research suggests that one simple way to increase recycling is to expose consumers to information about the transformation of recyclables into new products, as doing so will inspire them to recycle," said Winterich. "Increasing transformation salience among consumers should be a priority for organizations and public policy officials seeking to encourage recycling among the public at large. In addition, our work provides insights into how companies can use product transformation messages to increase recycling. This is especially important for companies that aim to use recycled materials in their production, as these companies need to increase consumers' [recycling](#) rates to effectively develop a circular economy."

Provided by Pennsylvania State University

Citation: Awareness of product transformation increases recycling (2019, July 10) retrieved 26 April 2024 from <https://phys.org/news/2019-07-awareness-product-recycling.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.