

# DISSERTATION DEFENSE

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## “ESSAYS ON CONSERVATION AND WASTE IN CONSUMPTION”

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Managing how resources can be conserved by reducing waste and making consumption more efficient has become an essential issue in maintaining the sustainability of our economy and society. A wealth of consumer research has explored the factors that determine how much of a resource people consume, with important implications for how to reduce resource consumption. In many consumption contexts, however, waste arises primarily from consumer's overestimation of the amount of resources they will need—resource acquisition. I conceptualize waste in consumption as the difference between the amount of resources taken and the amount of resources required. For example, if a consumer takes four napkins in a fast-food restaurant but only uses three, she has wasted one napkin. This denotes a pure loss of resources, as the amount of resources taken is greater than the amount of resources consumed. Another form of waste in consumption consists of inefficient usage, which occurs when the amount of resources consumed is greater than the amount of resources required. For example, if other consumers on average use only two napkins, those who consistently use much more waste resources through inefficient usage. Conservation can be achieved by both reducing pure loss in resources and reducing inefficiency in usage. My dissertation provides a systematic investigation of the behavioral determinants of waste as well as contextual cues that trigger conservation behavior.

First, I examine the interplay between resource abundance and conservation in consumption. Consumers tend to seek convenience, which typically leads to greater acquisition of resources than is necessary (e.g., it's more convenient to take a lot of napkins at a restaurant rather than take one and then walk back for more). Importantly, consumers can afford to do so only when resources are abundant. When resources are not abundant (non-abundance differs from scarcity in that it denotes the sufficient but non-excessive supply of resources), consumers need to carefully monitor their consumption to not deplete the resource. Therefore, I posit that cues indicating non-abundance of a resource can temporally prompt conservation behaviors. Importantly, the tendency to conserve can persist into subsequent consumption of unrelated resources. I demonstrate this carryover effect in four studies. For example, in one study participants are asked to evaluate the quality of a brand of cooking oil. They perceive the resource as less/more abundant when the same amount of the resource (1/3 cup of cooking oil) is provided in a large vs. small container. This perception of non-abundance/abundance subsequently increases/decreases participants' tendency to turn off the lights when leaving an empty room. In another study, I show that giving participants a chance to conserve before consumption (e.g., choosing which of two conservation charities to donate to) attenuates the

impact of non-abundance cues on conservation, but similar actions unrelated to conservation do not attenuate the effect (e.g., choosing which of two education charities to donate to). These results demonstrate that the underlying mechanism is motivational rather than priming of conservation-related concepts.

Second, I examine how marketing cues (e.g., pictures and brand names) available in consumption contexts can curb consumption and help achieve conservation. Contrary to the common belief that marketing cues that highlight product effectiveness will generate positive influences on consumer demand, I argue that these cues can decrease usage amount per consumption occasion, thus leading to an increase in inter-purchase time and potentially hurting long-term product sales (i.e., signaling effectiveness is a “double-edged” sword). Building upon literature showing that consumption behaviors are largely constructive and guided by simple inferential rules and schemata, I hypothesize that consumers often infer product effectiveness from marketing cues that are salient in the consumption context and then use perceived product effectiveness as an indicator for deciding how much they should consume. I predict that adding marketing cues that highlight the effectiveness of a product will lead consumers to perceive the product as more effective, and consequently reduce consumption volume, even when the actual product effectiveness remains unchanged. For example, I show that participants consume less insect repellent and toilet bowl cleaner when marketing cues indicate it is more effective. In support of the proposed inference-making account, I show that this negative impact of “effectiveness” marketing cues on consumption is attenuated when cue salience is low and when individual’ need for cognition is high.