Recycling or Trash Bin? Modeling Consumers’ Recycling Behavior in a Field Study

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Abstract: What affects people’s behavior when they dispose items? The distance hypothesis predicts that the number of misplaced items is a function of the distance of an appropriate bin. We categorized and mapped bins at 140 locations on the campus of a major research university in the Midwest and calculated the distances between adjacent bins. The distance hypothesis predicts that users dispose more recyclables in single, isolated trash bins than in trash bins that are paired with recycling bins. Likewise, it is expected that more trash items can be found in isolated compared to paired recycling bins. We conducted a field study that involved systematic comparisons of matched locations and focused on behavioral data that were obtained through systematic audits of trash and recycling bins. The study provided partial support for the distance hypothesis, which was supported for certain items. The role of item difficulty and weather conditions will be discussed.