

Behavioral spillover from a sustainability perspective and its relevance for service innovations

Extended Abstract

Service companies are increasingly confronted with rising customer and stakeholder expectations, as well as stricter legal requirements regarding their contribution to sustainability. To improve their competitive position, service providers are therefore striving to produce their services in a climate-neutral manner or to reduce waste in their business processes. However, it is idiosyncratic for services that customers are involved in the value-creation process and influence the sustainability of a service through their actions. As a result, service companies try to foster their customers' pro-environmental behavior (PEB) by using different nudges (feedback, commitment, reminders, etc.) when designing sustainable innovations. For example, hotels reward the reuse of towels, airlines remind customers about their emission savings when using a fuel-efficient flight, or restaurants provide feedback about the environmental impact of their dishes. While such interventions can raise awareness and encourage an initial PEB, they may also lead to unintended effects on future PEB since it can evoke a phenomenon called moral licensing. Moral licensing refers to a state in which people who have engaged in an initial moral behavior feel free from moral constraints and are less motivated to act when they are given the opportunity to perform a subsequent moral act. Such ecologically harmful behavior following a PEB is called a negative spillover. On the other hand, there are also positive spillover effects. A positive spillover occurs when performing an initial behavior increases the probability of performing a subsequent PEB. Thus, it seems promising for service providers to design sustainable innovations which promote positive behavioral spillovers and avoid negative ones among their customers.

In order to create such service innovations, a better understanding of how and when these effects occur is needed. However, a comprehensive overview of the antecedents leading to PEB spillovers is missing so far. To fill this gap, we pose two research questions: First, at the theoretical level, what factors influence the emergence of environmental behavior spillovers? Second, at the applied level of services, what are the implications for the design of sustainable service innovations? By conducting a scoping review, we provide an overview of the factors that influence the emergence of environmental behavior spillovers. At the same time, we show how the findings can be relevant for the implementation of service innovations.

Our results indicate that, on the one hand, behavioral spillovers are strongly motivated by social and moral reasons. When individuals feel a strong social norm or moral obligation, this can trigger positive spillover effects. At the same time, the practice of environmentally friendly behavior can reduce the sense of responsibility towards the environment and the social environment, which in turn favors environmentally harmful behavior in the future. Many studies also attempted to explain positive spillovers by looking at the individual. Here, the concepts of environmental self-identity and self-efficacy play an essential role. If people see themselves as environmentalist or feel that their behavior can make a difference, this sometimes increases the likelihood that after practicing environmentally friendly behavior, it will be maintained in the future. In addition, the current state of research shows that additional information about one's resource consumption can cause both positive and negative spillover effects. This kind of nudge can lead to higher perceptions of self-efficacy and environmental identity, but it can also promote moral licensing processes. This illustrates the complexity and challenges of generating positive spillover effects.

In terms of practical implications, we recommend that service providers address the moral norms and environmental identity of their customers. Secondly, we recommend that service providers carefully use feedback information to customers about their past environmental behavior. Thirdly, we recommend service providers to concentrate on interventions that increase their customers' commitment to sustainable actions.

From a theoretical perspective, our scoping review identified several limitations in the current literature on behavioral spillover. One limitation is the somewhat inconsistent way in which "spillover" and PEB have been measured across different studies. In particular, many studies did not observe actual PEB but rather hypothetical behavior, intentions and self-reported behavior. Moreover, the majority of studies focus only on the few same psychological constructs and underlying theories.