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Increasing Hotel Loyalty Through Psychological Ownership

JOANN PECK*
RIN YOON
SUZANNE B. SHU

* Joann Peck (jpeck@bus.wisc.edu) is a Professor of Marketing at the Wisconsin School of Business, University of Wisconsin – Madison, 975 University Avenue, Madison, WI. Rin Yoon (yy878@cornell.edu) is a doctoral student at the Johnson Graduate School of Management, Cornell University, Sage Hall, Ithaca NY. Suzanne B. Shu (suzanne.shu@cornell.edu) is John S. Dyson Professor of Marketing at the Charles H. Dyson School of Applied Economics and Management, Cornell University, Warren Hall, Ithaca NY. All authors contributed equally.

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Abstract

Recent research on psychological ownership has shown that peoples' perceptions of ownership can be altered even for items not legally owned, which then influences subsequent behavior. In the context of hotel guest experiences, we test whether increasing psychological ownership toward a hotel room at the point of check-in can lead to significantly greater loyalty towards the hotel. Two controlled lab studies ($N = 1,002$) and a naturalistic field experiment at a hotel ($N = 82$), indicate that enhancing psychological ownership of a hotel room increases customer loyalty by increasing brand stewardship. Notably, the mechanism by which psychological ownership influences loyalty is independent of customer satisfaction. These findings advance our current understanding of customer loyalty, demonstrating how simple, low-cost manipulations to increase psychological ownership of a product can motivate loyalty toward the product's brand, independent of product satisfaction.

Keywords: guest experience, psychological ownership, customer loyalty

Increasing Hotel Loyalty Through Psychological Ownership

Over its lengthy history, the hospitality industry has grown into a market that is service-oriented, customer-focused, and importantly, hyper-competitive. Many hospitality firms are having difficulty increasing their market share because of rising competition, slower growth rates, and oversupplied and mature markets (Dogru et al., 2020; Tepeci, 1999; Zervas et al., 2017). Such a competitive environment makes loyal customers an especially important asset to any hospitality firm. Loyal customers exhibit attachment and commitment toward the company (Lee et al., 2007; So et al., 2013), which increases revisit intention (Mattila, 2006a), positive word-of-mouth (Han & Ryu, 2012), share of visits (Tanford, 2013), and brand referrals (Liat et al., 2014).

A problem for all firms striving to increase customer loyalty is that there are a limited set of cost-effective interventions to employ. One reliable way to increase customer loyalty is through satisfaction; more satisfied guests are more affectively involved with the product and brand and have greater loyalty (Mattila, 2006a; So et al., 2016). Hospitality companies thus acknowledge that their existence and growth depend on their ability to create unique, memorable and satisfying experiences for customers (Walls et al., 2011). Given the hyper-competitive nature of the industry, however, providing guests with experiences that are so unique, memorable and satisfying that they are set apart from experiences offered by competitors has become an increasingly difficult task. Adding further to the challenge, customer loyalty plateaus after a certain level of satisfaction has been reached (Finn, 2012; Ngobo, 1999). This ceiling effect of satisfaction is due to the decreasing marginal utility of satisfaction and a competitive intensity effect of customers' escalating expectations (Ngobo, 1999).

With many hotel brands having reached very high levels of customer satisfaction, it may be more effective to find a different route by which loyalty can increase. Firms in an intensely competitive industry like hospitality need to undertake proactive activities, such as looking for new ways to compete and exploring differentiation to escape from price or promotion wars (Auh & Menguc, 2005, Li et al., 2008). In an industry where everyone has ostensibly achieved high levels of customer satisfaction, an important question that arises is whether there is another cost-effective element hospitality firms can improve upon. Our work provides an answer to that question: psychological ownership.

We propose that incorporating an antecedent of psychological ownership to the guest experience can further advance customer hotel loyalty, independent of satisfaction. Two laboratory studies and a field study at a hotel demonstrate how psychological ownership of a hotel room increase customer loyalty even if it only negligibly influences satisfaction.

The Impact of Psychological Ownership

What is psychological ownership? Distinct from legal ownership, psychological ownership is a perceptual state and is best captured as the feeling that something is “mine!” (Pierce et al., 2001). Psychological ownership was first explored in organizational settings where it has been found that employees who feel psychological ownership toward their employer’s firm are more engaged and productive (Pierce et al., 2001; Van Dyne & Pierce, 2004). From those organizational findings, the concept of psychological ownership has been transferred to consumer behaviors, where it has been found to increase consumers’ value of products (Morewedge et al., 2021; Peck & Shu, 2009; Shu & Peck, 2011). Research on psychological ownership that has shown that peoples’ perceptions of ownership can be increased even for objects not legally owned such as public lakes and parks (Peck et al., 2021). In essence,

psychological ownership can develop for objects that are both material (e.g., a consumer product) and immaterial (e.g., one's company), and is a concept distinct from legal ownership.

Research on psychological ownership has identified three antecedents: control, investment of self, and intimate knowledge (Pierce et al., 2001; 2003). If any of these antecedents is increased, the overall feeling of ownership towards the target is increased. The first antecedent, controlling the target, includes the ability to use an object and to decide who else uses an object (Rudmin & Berry, 1987). Children as young as three years old infer that an object belongs to the person who decides whether others may use it (Neary et al., 2009). Even physical control such as merely touching an object (Peck & Shu, 2009) or imagining touching an object (Peck et al., 2013) leads to an increase in psychological ownership. It is also true that controlling aspects of a service or process leads to a greater feeling of ownership (Asatryan & Oh, 2008). Controlling the design process in a virtual application has also been found to lead to greater psychological ownership (Lee & Chen, 2011); Kirk, Swain, and Gaskin (2015) found that control over a digital object increased feelings of ownership. Belk (1988, 2013) and Weiss and Johar (2013) examine possessions as extensions of the self as they reflect our identities. When something is part of the self, it is controllable.

The second antecedent, investing the self into the target, refers to the investment of an individual's time, effort, attention and energy into the target (Pierce et al., 2001). As discussed in Pierce et al. (2001), Locke (1690) felt that we own what we produce since we invest our labor in the process. Four-year-old children are more likely to infer ownership if someone made a picture (Nancekivell & Friedman, 2014), or if someone creatively modified it (Kanngiesser et al., 2010), both investments of labor. It has also been found that naming an object, an investment of the self, results in greater psychological ownership of that object (Kirk et al., 2018; Stoner et al., 2018).

The final antecedent of psychological ownership is coming to intimately know the target. This is often discussed as being associated and familiar with the target (Beggan & Brown, 1994; Pierce et al., 2001; Rudmin & Berry, 1987). If a person has more information and knowledge about an object, they feel more ownership towards it. For example, a person may feel a local restaurant is “their” restaurant because they frequently eat there. The more unique the knowledge held by the customer, the higher the feeling of ownership.

Turning to consequences of psychological ownership, the extant psychological ownership literature has shown that psychological ownership of a target translates to stewardship toward the target because individuals feeling stronger individual ownership toward a target become more likely to take on responsibilities to take care of it (Peck et al., 2021; Shu & Peck, 2018). When the owned target is a consumer good or brand, resulting stewardship is manifested in loyalty behaviors (see Peck & Luangrath, forthcoming for review on brand stewardship). Greater psychological ownership of a firm increases positive word of mouth about the firm and reduces intention to switch to competitors (Asatryan & Oh, 2008). Similarly, greater psychological ownership of a product is associated with greater likelihood of posting about the product on social media (Kirk et al., 2018) and referring the product to others (Fuchs et al., 2010), all of which are well-founded indicators of customer loyalty.

Can a feeling of ownership over a target (a hotel room), motivate loyalty for the target’s category (the hotel brand) at large? Psychological ownership may have far-reaching effects beyond the owned object (see Peck & Luangrath, 2023). Effects of ownership have been found to be contagious, such that psychological ownership for a target can readily develop into psychological ownership for more abstract categories to which the target belongs (Pyo et al., 2021). For instance, psychological ownership of an online brand community increases the

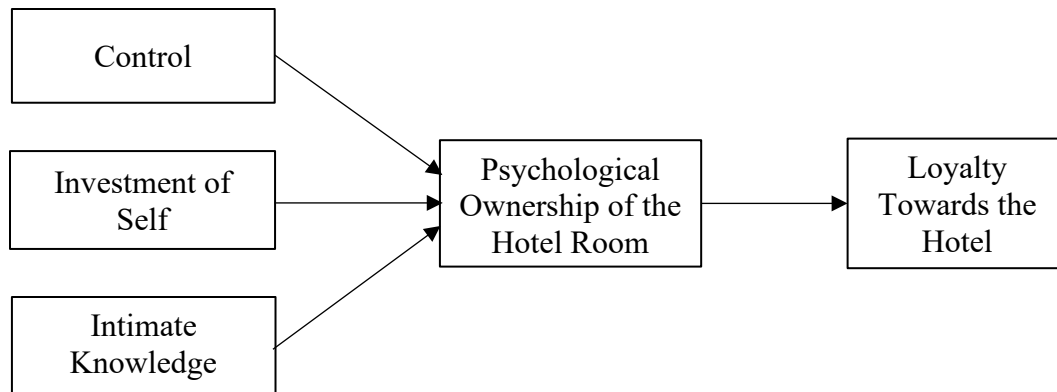
willingness to maintain the brand reputation (Zhang et al., 2014). In another study, psychological ownership of the physical location of a peer-to-peer meal sharing service experience increased the willingness to use the online service platform again in the future (Pino et al., 2022).

Psychological ownership of a hotel room during one's stay could thus similarly influence attitude toward the hotel brand. Drawing on these findings, we predict that a guest's psychological ownership toward a hotel room will generate greater loyalty for the hotel brand.

Overall, we propose that increasing guests' psychological ownership of a hotel room can lead to increased customer loyalty for the hotel. We predict that psychological ownership of a hotel room will increase willingness to steward for the owned entity as well as the broader category the entity belongs to, and motivate loyalty behaviors towards the hotel. Figure 1 provides a summary of our predictions.

Of note, because psychological ownership increases the personal relevance and valuation of the owned object, higher levels of psychological ownership may engender greater satisfaction, which is another factor of customer loyalty (Kwortnick & Han, 2011). We suggest however that the effect of customers' psychological ownership of the room on their loyalty to the hotel will hold even when increased psychological ownership does not significantly increase satisfaction with the hotel, as we expect the effect will be driven by feelings of ownership rather than feelings of satisfaction.

FIGURE 1. THEORETICAL MODEL



We tested how the three known antecedents of psychological ownership – control, investment of self, and intimate knowledge – can be deployed in a hospitality context to lead to changes in psychological ownership of a hotel room that then increases loyalty toward the hotel. Our first study, which is a field study run at a hotel, shows that a simple manipulation of psychological ownership can affect stewardship for the room as well as the hotel from actual guests. Specifically, we find evidence that when guests have more control (choosing their room), an antecedent of psychological ownership, they take better care of the resource by leaving the room cleaner, and they report higher loyalty toward the hotel. Study 2 takes our theoretical model into the lab where we use hypothetical hotel scenarios to show our proposed process with all three antecedents of ownership. Finally, in Study 3, we run another lab study that mimics customer interfaces currently deployed in the hotel industry and show that similar customization programs that differ in level of active control can result in different levels of psychological ownership and loyalty.

Our data, data-analysis scripts, and survey materials are accessible at <https://osf.io/xxxxx>.

Study 1: Hotel Field Experiment–Control and Its Consequences

We conducted a field study at a hotel in a midwestern university town. In this field experiment, we directly manipulated one of the antecedents of psychological ownership, control,

by having a guest either choose their room between two options or having a room assigned, and then measured customer loyalty. We also assessed psychological ownership of a room as well as whether guests put in effort to keep an assigned hotel room clean to confirm that our intervention indeed triggered feelings of ownership of a room and motive to upkeep and steward for the room.

Method

There were two conditions: guests were either assigned a room as usual ($N = 42$) or they had a choice between 2 different rooms ($N = 39$). As part of the hotel's desire to assess customer opinions, a survey was left in the room for the guests to fill out and return. Included in the survey was a measure of satisfaction with the hotel ("How satisfied were you with your hotel stay?" 1=not at all satisfied, 7=very satisfied), the likelihood of engaging in loyalty behaviors such as returning to the hotel and telling others about the hotel (1=extremely unlikely, 7=extremely likely), and the sense of psychological ownership that they felt toward their hotel room, using three items derived from Peck and Shu (2009) (e.g., "I felt like the room I stayed in was mine," 1 = Strongly disagree; 7 = Strongly agree; $\alpha = .84$). Finally, as a measure of stewardship toward the room, we asked the cleaning staff to track how clean the room was after the guest checked out on a 5-point scale with 1 = very messy, 2 = messy, 3 = average, 4 = clean, and 5 = very clean. The cleaning staff was blind to both the hypothesis of the study and the assignment of guests to condition.

Results and Discussion

Interestingly, in the choice condition, many guests seemed unsure of which room to choose and asked the hotel staff what room they would choose. Given that the guests were seemingly unappreciative of having a choice, it is not surprising that there was only a small and

marginally significant impact on guests' satisfaction ($M_{\text{choice}} = 6.13$, $M_{\text{no choice}} = 5.76$, $t(79) = 1.96$, $p = .054$). It should be noted that the overall means for satisfaction are very high regardless of room choice; people are generally extremely satisfied with their experience at the hotel.

To check whether our manipulation of psychological ownership was successful, we use both the survey measure and the behavioral measure. Guests who chose their own room reported a greater sense of ownership toward their room compared to those who did not ($M_{\text{choice}} = 5.40$, $SE = .18$, $M_{\text{no choice}} = 4.74$, $SE = .16$; $t(79) = 2.74$, $p = .008$, $d = .61$, 95% CI = [.16, 1.05]). We also confirmed our manipulation of psychological ownership using our behavioral proxy, as we found that guests who were allowed to choose their own room left the room cleaner as judged by the staff ($M_{\text{choice}} = 4.00$, $SE = .16$, $M_{\text{no choice}} = 3.57$, $SE = .14$; $t(79) = 2.04$, $p = .044$, $d = .45$, 95% CI = [.01, .89]), suggesting they had greater motivation to steward for their room, consistent to prior findings (Peck et al., 2021; Shu & Peck, 2018).

Finally, and most relevant to our hypothesis, we test whether psychological ownership of a room can increase loyalty to the hotel. Despite satisfaction being unaffected, guests who could choose their own room indicated that they were more likely to stay at the hotel in the future ($M_{\text{choice}} = 6.15$, $SE = .15$, $M_{\text{no choice}} = 5.57$, $SE = .19$; $t(79) = 2.38$, $p = .020$, $d = .53$, 95% CI = [.08, .97]), as well as tell others about the hotel in the future ($M_{\text{choice}} = 6.28$, $SE = .11$, $M_{\text{no choice}} = 5.64$, $SE = .16$; $t(79) = 3.26$, $p = .002$, $d = .72$, 95% CI = [.27, 1.17]). The results remain unchanged when controlling for each guest's length of stay and whether each guest has visited the hotel in the past. In sum, Study 1's results indicate that a subtle manipulation such as having guests choose their own hotel rooms increases both psychological ownership of a room as well as customer loyalty in an actual hotel environment.

Study 2: Manipulating the Three Antecedents of Psychological Ownership

In Study 2, we directly manipulated each of the three antecedents of psychological ownership using hotel scenarios in an online experiment. We predicted that either having greater control over, investing one's mental and physical effort in, or gaining intimate knowledge of a hotel room would increase psychological ownership of the room, and in turn increase guests' loyalty to the hotel.

Method

Eight hundred two participants ($M_{\text{age}} = 38.86$, range: 19-80; 338 males, 12 non-binary) on the online data survey platform Prolific participated in an online experiment in exchange for monetary payment. Study 2 had a one-factor between-subjects design with four conditions; the first condition was a neutral baseline, and conditions two through four were based on the antecedents of psychological ownership: control over the object, investment of self, and intimate knowledge. Participants were randomly assigned to read one of four guided simulation scenarios according to their randomly assigned condition. In all scenarios, participants were told to imagine that they are traveling by themselves and will be staying at a hotel for few days. In the neutral baseline condition, the hotel was described as very similar to other hotels they have stayed at before, lacking in any distinguishing features. In the first manipulation of psychological ownership condition (control), the hotel was described as one where participants could control and choose the softness of pillows, the type of music that plays when entering the room, the light settings, and the time for when housekeeping will come to clean the room. The second manipulation of psychological ownership condition (investment of self) described a hotel where guests had freedom to invest time and effort in rearranging the modular furniture to suit their preferences. Lastly, the third manipulation of psychological ownership condition (intimate knowledge) described a scenario where the guest noticed a unique fact about the hotel room that

was unlikely to be recognized by other guests to that hotel - specifically the history of where the materials of the room's floors came from. Specific language for all four conditions is provided in Table 1.

After reading the assigned scenario, participants imagined staying in this hotel room and wrote about how their predicted experience. We measured customer loyalty by asking participants to indicate how likely they were to engage in three customer loyalty behaviors ("After your hotel stay, how likely would you be to do the following?: write a positive review of the hotel; stay at this hotel again; tell other people about this hotel"; 1 = extremely unlikely, 7 = extremely likely). Finally, to assess whether the antecedents indeed increased the psychological ownership of the hotel room, we asked participants to indicate how they felt about the hotel room on a scale 1 (disagree strongly) to 7 (agree strongly): "I feel personal ownership toward this hotel room."

Results

The Antecedents of Psychological Ownership. A one-way ANOVA revealed a significant main effect of the antecedents of psychological ownership ($F(3, 798) = 7.80, p < .001$). Confirming our manipulations of psychological ownership, post-hoc tests revealed that participants in all three psychological ownership conditions, including the control ($M_{\text{control}} = 3.58, SE = .13, p < .001$), investment of self ($M_{\text{investment}} = 3.56, SE = .13, p < .001$), and intimate knowledge ($M_{\text{knowledge}} = 3.29, SE = .12, p = .046$) conditions, felt significantly greater psychological ownership of the hotel room than those in the baseline condition ($M_{\text{baseline}} = 2.84, SE = .12$). There were no significant differences between any of the three psychological ownership conditions (all $p > .32$)

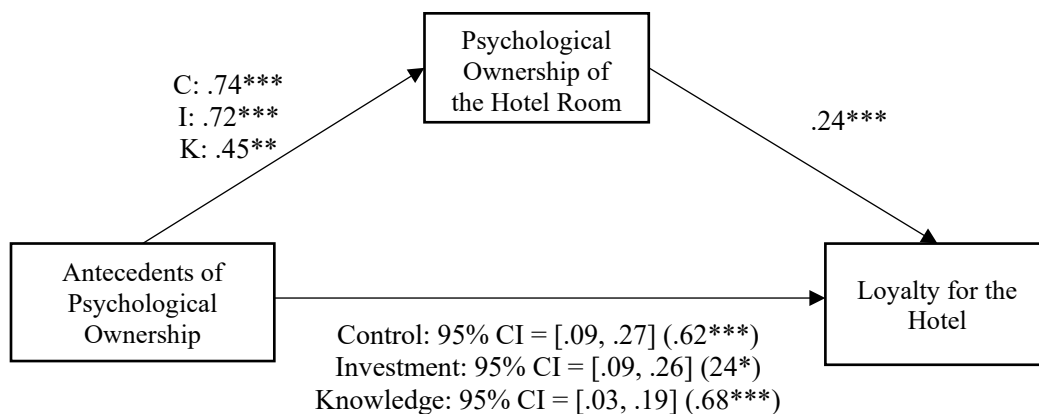
Dependent variables. The three loyalty items were averaged to form a loyalty index ($\alpha = .80$). A one-way ANOVA revealed a significant effect of the antecedents of psychological ownership ($F(3, 798) = 23.63, p < .001$) on loyalty. Supporting our theorizing, post-hoc tests using Tukey's HSD revealed that participants in the three ownership conditions ($M_{\text{control}} = 5.65, SE = .08, p < .001$; $M_{\text{investment}} = 5.26, SE = .08, p = .002$; $M_{\text{knowledge}} = 5.64, SE = .07, p < .001$) had significantly greater intention to engage in loyalty behaviors than those in the baseline condition ($M_{\text{baseline}} = 4.85, SE = .09$).

Table 1. Language for all four conditions

Condition	Scenario	Writing prompt	Psychological Ownership		Loyalty	
			<i>M</i>	<i>SE</i>	<i>M</i>	<i>SE</i>
Baseline	The front desk clerk welcomes you to the hotel and gives you the keys to room 437. On your way to the room, you realize that this hotel is very similar to many other hotels you have stayed at in the past. The lobby and main areas are arranged in a standard manner. When you reach your room, it has the typical furniture you would see in most hotels, and is lacking in any distinguishing features from the last hotel you stayed at.	This hotel room is very similar to other hotel rooms you have stayed in. Please describe, in a few sentences, the last hotel room you remember staying in. What was the furniture like? How many beds were in the room? How large was the bathroom?	2.84	0.12	4.85	0.09
Intimate knowledge	The front desk clerk welcomes you to the hotel and gives you the keys to room 437. You get up to the room and notice one unique fact about your room. Other guests would not notice this, and you may be the only one who notices. The wood floors in room 437 are made with reclaimed wood from a beautiful old mansion that used to be up the street. You happen to have this unique inside knowledge about your hotel room because you have previously come across and read the history of both the old mansion and the construction of the hotel.	You have unique inside knowledge about your hotel room that its floors are reclaimed wood from an old mansion in the area. How might having this inside knowledge of your hotel room change how you feel in the room? Would this hotel room feel any different to you than a more standard hotel room?	3.29	0.12	5.64	0.07
Control	The front desk clerk welcomes you to the hotel and gives you the keys to room 437. As she does so, she shows you a menu of options for how you would like your room setup. You are able to pick the softness of your pillow, the type of music that plays when entering the room, the settings for the lights, and the time for when housekeeping will come every day to freshen the room. You select each option that fits you best so that the room will feel exactly the way you want it.	The menu of options for how you would like your room setup includes the softness of your pillow, the type of music that plays when entering the room, and the settings for the lights. What types of customization would you ask for in each of these categories? How would you want your room set up?	3.58	0.13	5.65	0.08
Investment of self	The front desk clerk welcomes you to the hotel and gives you the keys to room 437. As she does so, she lets you know that the furniture in all the rooms at this hotel is designed to be easily moved around and that you are free to arrange the room in any way you prefer. You get up to the room and spend about 20 minutes of your time pushing, pulling, and adjusting the bed and desk to rearrange as you prefer. You put some mental and physical effort into the room, and now the room feels exactly the way you like it.	When you arrived in the room, you spent about 20 minutes pushing, pulling, and adjusting the bed and desk to the ways you wanted. In a few sentences, please describe how you best like your hotel room to be arranged - for example, what kind of effort would you make to rearrange your room to your taste?	3.56	0.13	5.26	0.08

We accordingly tested our theory using a mediation model with the conditions as the independent variable, customer loyalty as the dependent variable, and psychological ownership of the room as the mediator (Hayes, 2022; PROCESS model 4; 10,000 bootstrap samples). The conditions were indicator coded with the baseline condition as the reference. This analysis revealed that all three intervention conditions increased customer loyalty via increased psychological ownership of the hotel room, ($B_{\text{control}} = .18$, $SE = .04$, 95% CI = [.09, .27]; $B_{\text{investment}} = .17$, $SE = .04$, 95% CI = [.09, .26]; $B_{\text{knowledge}} = .11$, $SE = .04$, 95% CI = [.03, .19]; Figure 2).

FIGURE 2. MEDIATION OF CONDITIONS ON LOYALTY INTENTION



Notes. The path coefficients are unstandardized betas. The values in parentheses indicate the effect of each condition on loyalty after controlling for the mediators. * $p < .05$, ** $p < .01$, *** $p < .001$.

Lastly, we examined the effect of the three antecedents of psychological ownership on customer satisfaction. Possibly, the added guest experiences in our treatment scenarios increased willingness to engage in customer loyalty behaviors simply by making the stay more satisfying. Contrary to this account, we found evidence that psychological ownership of a room drives customer loyalty with minimal impact on satisfaction. A one-way ANOVA revealed a significant overall main effect on satisfaction ($F(3, 798) = 14.20$, $p < .001$), but investigation of the individual manipulations tells a more mixed story. The ownership conditions of control and

intimate knowledge did increase satisfaction in comparison to the baseline condition ($M_{\text{control}} = 6.28$, $SE = .06$, $p < .001$; $M_{\text{knowledge}} = 6.11$, $SE = .06$, $p = .003$; $M_{\text{baseline}} = 5.81$, $SE = .06$), but investment of self had no effect on satisfaction ($M_{\text{investment}} = 5.80$, $SE = .07$, $p = .999$). That investment of self increased customer loyalty while not affecting satisfaction suggests that psychological ownership of a room motivates customer loyalty through a psychological mechanism independent of changes in satisfaction..

STUDY 3: A HYPER-PERSONALIZED HOTEL ROOM

Overview

In this study, we explore implications of our findings in context of hyper-personalization in hospitality. Hotels can enhance guest experience via personalizing how the room is set up to each guest's preferences. Such personalization can be done by asking guests to indicate their preferences each time they book a stay (as done by Virgin Hotels, 2022), or track guest profiles to automatically personalize the room based on each guest's preference history (as done by Marriott, 2017). While both methods successfully deliver the goal of providing a more customized guest experience, we propose that personalization done in a way that heightens guests' psychological ownership of the hotel room can yield a greater impact on overall loyalty.

Studies 1 and 2 demonstrated that having greater control over a hotel room (e.g., choosing which room to stay in or how the room will be set up) increases psychological ownership of the room and loyalty to the hotel, independent of satisfaction. Using scenarios that closely mirror actual practices in hospitality, Study 3 provides a more conservative test of our effect by keeping the outcome guest experience constant. To manipulate control, we compared a scenario in which participants actively choose their room settings to a scenario where the hotel personalizes the room for participants based on their guest data. We predicted that the level of

satisfaction from the personalized room outcome should be constant since both rooms reflect their custom preferences. Regardless, we expected having greater active control over how the room is set up will increase participants' psychological ownership of the room, which will further increase loyalty.

Methods

Two hundred participants ($M_{\text{age}} = 36.40$, range: 19-78; 79 males, 6 non-binary) on Prolific participated in an online experiment in exchange for monetary payment. Participants were randomly assigned to one of two between-subjects conditions: Psychological Ownership high vs. low. We asked all participants to imagine that they had been planning to stay at a hotel by themselves for few days and were now booking a room using the hotel's mobile application. In the high ownership condition, participants read that they could personalize their hotel room to their taste on the application. They then went through the experience of selecting a floor, a room on a floor plan for that floor, what they would like in their mini bar, the type of music that will play when they enter the room, the softness of the pillows, a time for when housekeeping will come to freshen the room, and preferences for the room temperature and light settings (Figure 3). After making a series of choices, participants were led to a confirmation page where they were told they have successfully booked the room of their choice. In the low ownership condition, participants were told that the hotel browses and uses their guest information and previous hotel usage history data to personalize the room on their behalf. Participants were shown the same list of personalization items as in the high ownership condition, but they were told the hotel would automatically set these items to match their preferences before their arrival. They were then led to a confirmation page, indicating which room they were assigned to.

After the booking confirmation page, all participants imagined arriving to their hotel room after a long trip to see that everything, from the location of the room to the temperature, was set to their taste, as either they or the hotel's data-driven personalization system had specified. We then asked participants to write about how they would feel about the modifications made to their room during their stay to help them visualize their stay at the hotel. We next assessed participants' satisfaction with their room, loyalty to the hotel, and psychological ownership of their room using the same measures used in Study 2. As a manipulation check, participants indicated the extent to which they felt they had a control over how their hotel room was set-up on a scale of 1 (disagree strongly) to 7 (agree strongly).

Results

Manipulation check. Confirming our manipulation of psychological ownership via control, participants in the high (vs. low) ownership condition indeed felt they had greater control over how their hotel room was prepared ($M_{\text{high}} = 6.38$, $SE = .09$; $M_{\text{low}} = 4.96$, $SE = .16$; $t(198) = 7.78$, $p < .001$, $d = 1.10$, 95% CI = [.80, 1.40]) and perceived greater psychological ownership of the room ($M_{\text{high}} = 5.00$, $SE = .17$; $M_{\text{low}} = 4.51$, $SE = .16$; $t(198) = 2.08$, $p = .038$, $d = .29$, 95% CI = [.02, .57]).

Of note, participants in the high ownership condition also spent longer time to complete the study ($M_{\text{high}} = 325.34$ seconds, $SE =$; $M_{\text{low}} = 268.71$ seconds, $SE =$; $t(198) = 2.36$, $p = .019$) as they had an extra task of making a series of choices about the room and therefore may have felt more invested in their room. Although both raw and log-transformed time duration did not predict psychological ownership of the room ($ps > .45$), we still note that any effect of greater investment of self would not alter our prediction that the high ownership condition will elicit greater psychological ownership of the room.

Dependent variables. The average of the three items assessing loyalty ($\alpha = .82$) showed that participants in the high ownership condition indicated significantly greater intention to engage in loyalty behaviors than the ones in the low ownership condition ($M_{\text{high}} = 6.36$, $SE = .07$; $M_{\text{low}} = 6.03$, $SE = 1.17$; $t(198) = 2.38$, $p = .018$, $d = .34$, 95% $CI = [.06, .62]$). Further, consistent with our prediction, the level of satisfaction with the hotel stay was high in both conditions and did not meaningfully differ ($M_{\text{high}} = 6.57$, $SE = .09$; $M_{\text{low}} = 6.29$, $SE = .11$; $t(198) = 1.94$, $p = .054$).

Figure 3. Depiction of high control manipulation in Study 3 (an online demonstration of this manipulation can be found at: <https://tinyurl.com/hctr1>).

Panel A. Choice of a floor, room, and music

Let's pick a room first.

Please choose a floor of your preference.

Choose a floor

4th Floor

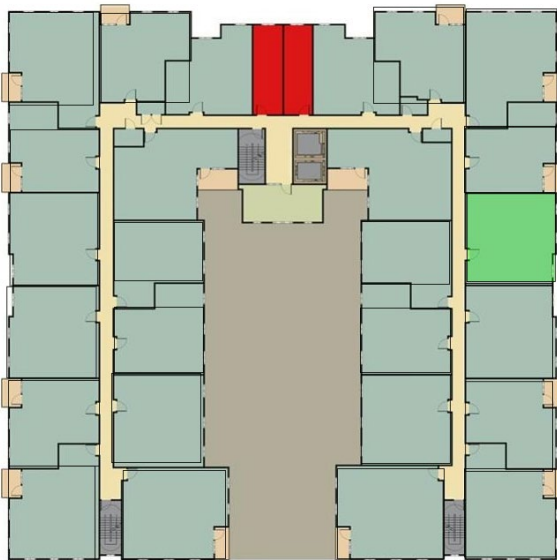
9th Floor

16th Floor

Please choose a room you prefer the most.

Choose your room

9th Floor | Standard King Bed



Choose the type of music that plays when you enter the room.

Classic

New Age

Jazz

Pop

Other
(please
indicate)

Panel B. Choice of mini bar selection, pillows, housekeeping time, temperature and lighting

Now, please indicate your room preference.

Choose what you would like in your mini bar

Sparkling water

Champaign

San Pellegrino

Belgian beers

Mexican Coke

Two bags of macadamia

Diet Coke

Chocolate chip cookies

Sprite

Shortbread cookies

Sparkling rosé

Choose the softness of your pillows.

soft

soft-medium

medium

medium-firm

firm

Choose a time for when housekeeping will come every day to freshen the room.

early morning

late morning

early afternoon

late afternoon

Set your room temperature.

50

60

70

80

Set to

Choose your light settings.

dim

☐ ☐ ☐

bright

cool color

☐ ☐ ☐

warm color

General Discussion

Hospitality firms generally strive to increase and maintain customer satisfaction. Compared to common practices that are geared toward increasing customer satisfaction, such as providing luxurious treatments, activity programs, and fine amenities, making customers feel a greater ownership toward their hotel room may not seem the most obvious way to increase customer loyalty. However, simple, cost-effective manipulations to increase psychological ownership can have important implications. Across two controlled lab experiments and a field experiment at a hotel, we found that enhancing guests' psychological ownership toward a hotel room led to increased customer loyalty for the hotel.

Consistent with prior research (Peck et al., 2021; Shu & Peck, 2018), psychological ownership of a room increased stewardship toward *the room*, as measured by how guests kept their rooms clean (Study 1). Our research takes a step further and finds this effect of psychological ownership of a room extends beyond stewardship for the room to motivate stewardship for *the hotel*. Not only guests were more willing to return to the hotel, they were more likely to write a positive review of the hotel and start a positive word-of-mouth about the hotel. The effect of psychological ownership of a room on customer loyalty was not dependent on customer satisfaction, as the effect persisted even when the manipulation of psychological ownership had only marginal (Studies 1 and 3) or no (Study 2; investment of self) impact on customer satisfaction. Given that the positive effect of customer satisfaction on loyalty levels off after a certain level of satisfaction (Finn, 2012; Ngobo, 1999), additional innovations to improve customer satisfaction may not meaningfully move the needle on loyalty for hotels that have already achieved high level of customer satisfaction. Our findings suggest an alternative approach: low cost interventions that increase customers' psychological ownership toward a

hotel room can offer an extra kick to motivate customer loyalty, independent of satisfaction.

While upholding high levels of customer satisfaction in all conditions across all of our studies, increasing psychological ownership of the room significantly increased customer loyalty.

Beyond the practical implications of our findings, this research advances theory by identifying a novel driver of customer loyalty. Customer satisfaction is among the most widely discussed predictors of customer loyalty in the literature (e.g., Coelho & Henseler, 2012; Han & Ryu, 2009; Kandampully & Hu, 2007; Kworntnik & Han, 2011; Um et al., 2006). Satisfied and committed customers are more likely to repurchase and spread positive word-of-mouth about their experiences (Garbarino & Johnson, 1999). Our research finds that customers who feel a greater sense of psychological ownership of a hotel room are similarly more likely to revisit, spread positive word-of-mouth, and refer the hotel to other people. Importantly, the effect of psychological ownership on customer loyalty did not require an increase in customer satisfaction, suggesting that the mechanism by which psychological ownership influences loyalty is independent of satisfaction.

To demonstrate the generalizability of our findings, we tested the effect using scenarios and a simulation of hotel application check-in, as well as in the field. We note, however, that we focused on U.S. samples, including online participants and hotel guests. Future research could examine whether this effect applies more broadly, including testing the effect outside the U.S. context and with other populations. For example, research suggests that customer engagement in word-of-mouth varies across cultures (Chung & Darke, 2006; Lam et al., 2009); our effects may thus be moderated by cultural differences. In sum, our research offers easily implementable, low cost recommendations for hospitality firms. Hotels that already provide high customer

satisfaction can expect to see an additional increase in customer loyalty simply by adding elements of psychological ownership to guests' hotel room experience.

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