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RESEARCH ARTICLE



The sharing economy at the base of the economic pyramid: How access-based services can help overcome ownership risks

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Abstract

The sharing economy provides short-term access to products without the risks associated with ownership. While extant research primarily examined it in the context of affluent consumer segments, the sharing economy may offer opportunities for consumers at the base of the economic pyramid, where ownership risks prevent access to products that could create societal benefits. Drawing from risk perception theory, we examine how access-based services, as an alternative to ownership, can mitigate perceived risk dimensions. An experimental study reveals that, in contrast to consumers with higher income, low-income consumers perceive access-based services to entail less financial risk, resulting in a greater inclination to access a good than to own it. In a second study, we explore these differences by comparing access with a risk mitigation strategy. We find that at the base of the pyramid, access is perceived to entail less financial risk than both ownership and ownership with a warranty. The results indicate the importance of the sharing economy for addressing the limited availability of resources for alleviating poverty. Based on our findings, we derive implications for consumers and service providers at the base of the pyramid, and discuss how the COVID-19 pandemic may be detrimental to the identified opportunities.

KEYWORDS

access-based services, base of the pyramid, risk perception theory, sharing economy

1 | INTRODUCTION

The sharing economy has gained increasing attention as an alternative to ownership-centric modes of consumption. Defined as “a scalable socioeconomic system that employs technology-enabled platforms to provide users with temporary access to tangible and intangible resources” (Eckhardt et al., 2019, p. 7), it comprises a variety of business models, such as peer-to-peer sharing platforms (e.g., Benoit et al., 2017;

Stofberg & Bridoux, 2019), access-based services from professional service providers, such as car sharing or fashion rentals (e.g., Lehr et al., 2020), or business-to-business services that replace ownership of industrial machinery (e.g., Schaefers et al., 2021). Although the COVID-19 pandemic has severely affected some sharing economy business models, such as accommodation and transportation, the ongoing digital transformation appears to continue to drive the adoption of access-as-a-service in a post-pandemic world (Batool et al., 2020; Hossain, 2021;

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Meenakshi, 2021). At the same time, however, the pandemic has also highlighted how consumers' perceived risks influence their willingness to engage with sharing economy services (Akhmedova et al., 2021).

Extant research primarily examined access-based business models in the context of developed economies and affluent consumer segments (e.g., Bardhi & Eckhardt, 2012; Hazée et al., 2017; Hellwig et al., 2015; Lehr et al., 2020; Pantano & Stylos, 2020; Schaefers et al., 2016). The applicability in lower levels of the economic pyramid, however, has received little attention. This is surprising, considering Lovelock and Gummesson's (2004, p. 36) assessment that "in developing economies, prospects for improved quality of life may revolve around finding creative ways of sharing access to goods. Such an orientation would also relate back to the initial idea of the sharing economy alleviating societal problems (Hamari et al., 2016; Murillo et al., 2017).

At the base of the economic pyramid, which describes the billions of people in the lowest income group (Karnani, 2007), the sharing economy may offer an opportunity for the often described goal of combining profitability with poverty alleviation (Prahalad, 2010). These consumers face a multitude of restrictions (Banerjee & Duflo, 2007; Hill, 2002), making ownership of many products that could improve living conditions unaffordable. Owning products such as power generators (reliable power source), water filters (prevention of diseases), or scooters (mobility) requires high investments or long-term financing, which commonly exceeds the financial capabilities at the base of the pyramid. These resource restrictions fuel a key psychological difference between low-income consumers and those in higher income cohorts, namely risk aversion (Haushofer & Fehr, 2014). Ownership, however, comes with several risks, also themed as "burdens of ownership" (Schaefers et al., 2016), creating further barriers. For instance, owners are responsible for maintaining the goods they own, creating costs beyond the initial purchase. This leads to nonconsumption being a dominant pattern at the base of the pyramid (Christensen et al., 2019).

In a recent study, Schaefers et al. (2018) examined access-based services as an option for reducing nonconsumption at the base of the pyramid. Using expected utility theory, the authors found that the availability of access-based services can reduce nonconsumption. Moreover, they provide a rationale for low-income consumers' access preference by comparing utility assessments of ownership and access. However, in light of the importance of ownership risks, their study lacks a detailed examination of the extent to which access-based services are able to reduce ownership risks at the base of the pyramid. Although perceived financial risk was considered as one underlying determinant of consumers' utility assessment, a more nuanced investigation is warranted, given that risk perception theory (Dowling & Staelin, 1994; Dowling, 1986) distinguishes between financial, social, and performance risk dimensions.

Addressing this study gap, we report an original experimental study among consumers in rural India. The findings provide empirical support for the assumption that consumers at the base of the pyramid consider access and ownership differently. This in turn explains their greater inclination to use access-based services compared to higher-income consumers. In a second study, we assess the robustness of our results and explore alternative explanations, specifically whether the

effects of access-based services differ from ownership-related risk reduction strategies (e.g., warranties).

2 | RISKS AT THE BASE OF THE PYRAMID

The base of the pyramid describes the large share of the world's population in the lowest-income segment, the majority living in developing economies and in rural areas (Karnani, 2007; London et al., 2010).¹ Challenges faced by these consumers include a severely limited income, scarcity of potable water, poor nutrition, limited access to basic health and education services, limited work or entrepreneurial opportunities, and inadequate energy sources, among others (Banerjee & Duflo, 2007). These chronic restrictions imply a lack of access to products or services that could improve living conditions (Blocker et al., 2013; Hill, 2002). For instance, according to Fahad and Wang (2018), small subsistence farmers often cite lack of access to assets as a major constraint. Overall, these restrictions are particularly evident in the fact that many of these consumers do not participate in economic exchanges: "If nonconsumption were a company in Nigeria, or in almost any other emerging market, it would have a monopoly in most industries" (Ojomo, 2016).

The dominance of nonconsumption reflects the difficulty to deal with perceived risks, especially around consumption and ownership. Poverty increases risk aversion (Haushofer & Fehr, 2014) because small deviations can have severe consequences at the subsistence level. As Radermacher and Brinkmann (2011, p. 63) explain: "The poor in developing countries are exposed to numerous risks in their daily lives. [...] However, the capacity [...] to deal with such risks is often very limited." In line with this notion, Melesse and Cecchi (2017) describe risk aversion among farm households in developing countries as a key trigger for "poverty traps."

Different approaches for how consumers at the base of the pyramid may deal with risks have been discussed in the literature, such as micro-insurance, spreading risks over multiple households, or taking on parallel occupations in various sectors (Banerjee & Duflo, 2007; Radermacher & Brinkmann, 2011). Additionally, Hill (2008, p. 82) suggests that to achieve livelihood improvements, consumers are forced to seek alternatives to conventional consumption strategies, such as "communities where sharing of possessions regularly occurs." Therefore, services that provide shared access may be a viable alternative.

3 | ACCESS-BASED SERVICES

According to Schaefers et al. (2016, p. 4), access-based services "are defined as services that allow customers to access a good, physical facility, network, labor, or space for a defined period of time, in return

¹There are differing views on how much available money per capita per day should be used as a threshold to define the base of the pyramid (Karnani, 2007). While Prahalad and Hart (2002) used an annual income per person of USD 1500 (i.e., USD ~4 per day) as cutoff point, Hammond et al. (2007) consider those with an annual income below USD 3000 (i.e., USD ~8 per day) as the base of the pyramid. Instead of choosing a threshold that may appear to be arbitrary (London et al., 2010, p. 583), we examine effect across different income levels.

for an access payment, while legal ownership remains with the proprietor, who is often the service provider." In contrast to ownership, customers do not acquire full property rights to the product but engage in "temporary and circumstantial consumption" (Bardhi & Eckhardt, 2012, p. 882).

Two key differences between access and ownership are specifically relevant for the base-of-the-pyramid context. First, there is a notable price difference between access and ownership of the same good. Access-based services require only a fee per usage unit (e.g., per hour/day), while ownership requires an upfront payment of the purchase price that is substantially higher. This price difference makes access more affordable than ownership (Lovelock & Gummesson, 2004). Although over time, accumulated fees can be higher than the purchase price (Durgee & O'Connor, 1995), the individual payments are lower, leading to a lower initial barrier to benefit from a product.

Second, access and ownership differ in the involved risks and responsibilities. Owners face several risks regarding product choice—such as financial, performance, and social risks (Kaplan et al., 1974)—, the property's obsolescence, and insufficient capacity utilization (Berry & Maricle, 1973). With ownership, consumers' (limited) existing resources are bound to a purchased asset without the ability to spontaneously reverse the process, resulting in lower financial flexibility in case of need (e.g., unforeseen, large payments). Moreover, ownership includes the responsibility for maintenance and repair. Access-based services only entail risks related to choosing between alternative services. Therefore, access represents a way for consumers to avoid the burdens of ownership (Schaefer et al., 2016). Both characteristics of access—lower prices and avoiding the burdens of ownership—suggest it to be a relevant consumption mode at the base of the pyramid.

However, access-based services come with their own inherent disadvantages, as the societal impacts of these new business models have recently been debated and heavily critiqued. Specifically, in some access-based services, narrow economic interests of key participants have been found to outweigh the ideals of reciprocity and societal benefits, leading to problematic issues such as worker exploitation, discrimination, and privacy concerns (e.g., Murillo et al., 2017). Additionally, according to risk perception theory, the effect of risks on consumption depends on consumers' subjective evaluations behavior is viewed as being subjective (Dowling & Staelin, 1994; Mitchell, 1999). To better understand the potential of access-based services for addressing low-income challenges, it is thus important to consider the different dimensions of consumers' risk perceptions.

4 | HYPOTHESES DEVELOPMENT

4.1 | Intentions toward ownership and access at the base of the pyramid

As Zainudeen et al. (2007, p. 6) explain, at the base of the pyramid, "[a]mong non-owners, the key barrier to ownership is affordability." For consumers with high monetary constraints,

access should thus be more affordable than ownership. Karnani (2007, p. 102) supports this assumption: "The BoP proposition correctly celebrates the "shared access" model as a way to make products more affordable to the poor." Similarly, Blocker et al. (2013, p. 1199) explain that this perspective "aligns with the needs of poor consumers because the emphasis shifts from possession of products, which typically requires substantial income, to having ability to "access" products and services." Moreover, the reduced financial flexibility that comes with investing resources in ownership should further contribute to a preference for access. Schaefer et al. (2018) found that the availability of access can reduce nonconsumption among consumers at the base of the pyramid; although the study did not directly compare access and ownership, the results suggest that low-income consumers may be more inclined to access a product than to purchase and own it.

H1: *Among consumers at the base of the pyramid, intention to use an access-based service is higher than intention to purchase the corresponding product. Thus, as income decreases, the intention to use an access-based service increases, while purchase intention decreases.*

4.2 | Risk perception of ownership and access

Risk perception theory focuses on the subjectively perceived level of risk inherent in any purchase decision (Dowling & Staelin, 1994). Generally, perceived risk negatively influences purchase behavior (Li et al., 2020). However, due to its subjective nature, individual risk assessment may focus on different dimensions, namely financial, performance, and social risk (DelVecchio & Smith, 2005; Horton, 1976; Lee et al., 2021).

Perceived *financial risk* describes uncertainty regarding the potential loss that a consumption decision may result in (Horton, 1976). Because of the burdens of ownership, perceived risk is considered to be a key concept for distinguishing ownership from access (Schaefer et al., 2016). Perceived financial risk primarily depends on a product's price (Sun, 2014). As the purchasing price required for obtaining ownership is higher than the fee for obtaining access, the former is characterized by a higher potentially negative outcome. Additionally, access does not entail opportunity costs to the same extent as ownership due to its temporary nature. Making a wrong purchase decision for an access-based service thus entails lower financial damage. These differences in perceived financial risk between ownership and access should be more pronounced among base of the pyramid consumers, who would put a far greater proportion of their income at risk than consumers with higher income. Specifically, with lower income, the severity of a wrong purchase decision should be greater; the less costly access option should thus be perceived to entail less risk. This assumption is supported by recent findings (Schaefer et al., 2018).

Performance risk captures aspects such as the risk of not being able to use a product due to post-purchase product failure

(e.g., Hubert et al., 2017). Greater perceived performance risk thus reflects a higher likelihood of reduced utility due to a product performing below expectations (DelVecchio & Smith, 2005; Horton, 1976), as well as additional costs and efforts required for dealing with performance issues (Schaefer et al., 2016). In the specific context of access-based services, Lang et al. (2019) found perceived performance risk of fashion rental services to negatively influence consumers' attitudes and, in turn, renting intentions. However, in contrast to ownership, in an access-based service, the responsibility for performance issues rests with the service provider. Consumers only pay for actual usage and do not have to worry about maintenance or other follow-up investments. Accordingly, prior research found that performance risk is viewed as greater, the higher the perceived price of an offer is (Sun, 2014). The perceived performance risk of ownership should thus exceed that of merely paying for accessing the same product. Additionally, when considering severity, the perceptual difference in performance risk between ownership and access should be greater for low-income consumers, who are faced with more resource restrictions.

Perceived social risk describes the extent to which purchase decisions are believed to influence one's social standing (DelVecchio & Smith, 2005). As Horton (1976, p. 696) describes, "to the extent that a product class is ego-involving or self-expressive, there is ego risk associated with making a poor brand choice." Consumers' purchase decisions and possessions serve as cues for others to form impressions about themselves, which is described in the concept of the extended self (Belk, 1988). This reflects the burdens of ownership, which emanate in part from the long-term commitment of owning a product (Schaefer et al., 2016). Although what a consumer accesses is likely to affect others' perceptions on her/his social standing as well (Belk, 2014), such decisions are more short-term and flexible (Bardhi & Eckhardt, 2012). When comparing ownership and access, the latter should thus be perceived as having less social risk. This should be especially true at the base of the pyramid, because in light of resource restrictions, committing to ownership represents a riskier decision than deciding to access a product.

Overall, we therefore hypothesize that perceptions of financial, performance, and social risk of access compared to ownership will be lower among base-of-the-pyramid consumers than among consumers with higher disposable income.

H2: *Among consumers at the base of the pyramid, access-based services are perceived to entail less (1) financial, (2) performance, and (3) social risk than ownership of the corresponding product. Thus, as income decreases, the perceived risk of access (ownership) decreases (increases).*

4.3 | Mediating effects of risk perception dimensions

The effects hypothesized above are likely to be interrelated. Specifically, expectancy value theory (Ajzen & Fishbein, 1980) proposes

that consumers' decision to purchase a product or service depends on the expected performance and the value attached to the different performance dimensions. In line with this assumption, prior research found risk perceptions to be a predictor of consumers' purchase/usage intentions (Lang et al., 2019; Lee et al., 2021). We thus assume that the differences in consumers' responses to the two consumption modes (i.e., purchase/usage intentions) are explained by their different perceptions regarding the entailed risks.

H3: *The increase in usage intentions for an access-based service among consumers at the base of the pyramid (H_1) is mediated by (a) perceived financial risk, (b) perceived performance risk, and (c) perceived social risk.*

Figure 1 illustrates the hypothesized direct and indirect effects of access versus ownership as well as the moderation via income.

5 | STUDY 1: RISK PERCEPTIONS OF ACCESS AND OWNERSHIP

5.1 | Method

5.1.1 | Setting and data collection

To test our hypotheses, we conducted an experimental study with one manipulated between-subjects factor (consumption mode: access vs. ownership) and one measured variable (household income). For the context, it was important to select a product category relevant to consumers at the base of the pyramid with regard to potential livelihood improvement. At the same time, it needed to be a product category affected by affordability constraints. Based on these criteria, we chose water filters as the study context.

Our study was conducted in rural areas of the Indian state of Rajasthan. Although the state accounts for 10.5% of the country's geographical area, approx. 5.5% of the population, and about 18.7% of the livestock, it has only 1.2% of the total surface water available in the country (BIPR, 2016). This setting further motivated selecting water filters as the study context.

Data collection was based on paper-and-pencil questionnaires used in personal interviews. Scenario descriptions and the questionnaire were translated from English into Hindi by a professional translator and translated back into English by one of the authors to ensure consistency. To recruit respondents, we closely cooperated with a local nongovernmental organization, which had experience with government projects for survey-based data collection. Support from the organization also increased trust and involvement among respondents. Interviewers randomly selected one of the two scenarios, explained it to respondents, and then surveyed the questionnaire items. To ensure adequate execution of the data collection procedure, a two-day pretest in the field was conducted, after which one of the authors discussed potential questions with all

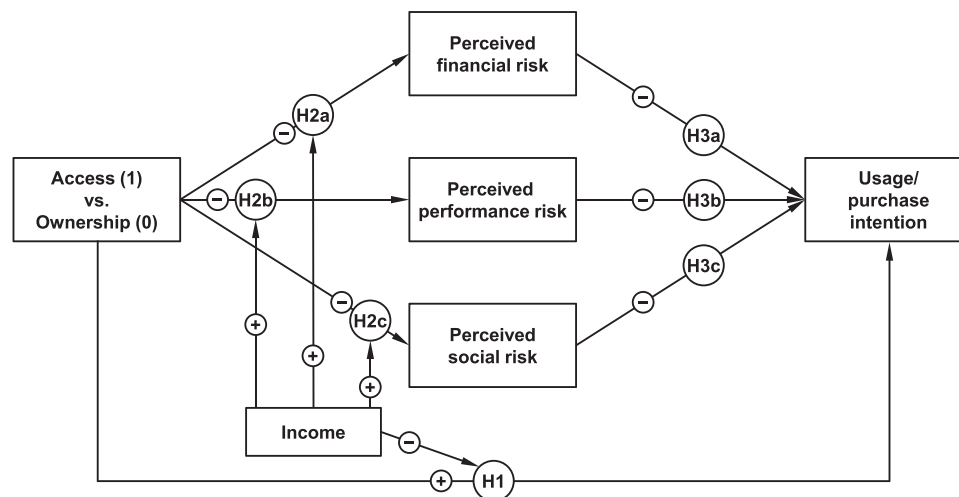


FIGURE 1 Conceptual model

interviewers. Data collection then took place for approximately 30 days during which interviewers provided regular updates to one of the authors.

Complete questionnaires were obtained from 173 respondents. In line with recommendation from DiLalla and Dollinger (2006), invalid responses were excluded from the final analysis for the following reasons: one respondent reported an income twice as high as the next highest reported income, 12 cases exhibited straight-lining answering patterns (Menictas et al., 2011), and 24 respondents reported inconsistent scores across quality control items. The final analyzable sample thus consisted of 136 individuals, equally distributed across both experimental conditions. Respondents were 75% males with a mean age of 35.9 years ($SD = 9.51$).

5.1.2 | Manipulations

We manipulated consumption mode (access vs. ownership) by describing two different offers (see Appendix A). In the ownership condition, respondents were told that a fictional company was offering water filter units for acquisition in their village. The features of the filter were explained, accompanied by a picture depicting a filter unit in an exemplary home. The purchase price of the filter was stated to be INR 2550 (approx. USD 35), and respondents were told that the actual filter needed replacement after 4000 liters for a price of INR 1500 (approx. USD 20). All prices were based on real water filter products sold in the Indian market. In the access condition, respondents were told that the fictional company was offering access to water filter units that would be put in their home. The described features and the picture were identical to the ownership condition. The quoted price was INR 300 (approx. USD 4) per month for 20 L of filtered water per day. Thus, while the prices naturally differed between the two conditions, we ensured that when assuming a water consumption of 20 L/day (= 600 L/month) and a usage period of 6 months, the total price of the access option (INR 1800) was lower

than the purchase price in the ownership condition, but higher than the required replacement of the filter. A realism check question ("The situation described in the beginning of the survey was realistic."; 5-point scale) revealed that both scenarios were perceived as highly and equally realistic ($M_{\text{own}} = 4.47$; $M_{\text{access}} = 4.31$; $F(1,134) = 1.77$; $p = .19$). A question for understanding ("The questionnaire was easy to understand."; 5-point scale) showed similar results ($M_{\text{own}} = 4.25$; $M_{\text{access}} = 4.22$; $F(1,134) = 0.07$; $p = 0.79$).

5.1.3 | Measures

Established scales were used to capture the three risk dimensions. Perceived financial risk, perceived performance risk, and perceived social risk were each measured with three items based on DelVecchio and Smith (2005). Each construct's average variance extracted exceeded the squared correlations with the other two constructs ($r^2 < 0.18$), indicating discriminant validity (Fornell & Larcker, 1981). Respondents' purchase/usage intention was measured with a single item based on Kozup et al. (2003). Depending on the experimental condition, the items either referred to purchasing access/using or purchasing/owning the water filter. Appendix B lists all variables and their psychometric properties.

5.1.4 | Income levels

Respondents reported their monthly household income at the end of the survey. In our sample, it ranged from INR 3500 (approx. USD 47) to INR 45,000 (approx. USD 605), with a median of INR 10,000 (approx. USD 135), a mean of INR 12,980.15 (approx. USD 175), and a standard deviation of INR 7783.79 (approx. USD 105). Importantly, no income differences existed between the ownership condition ($M = 12,582.35$, $SD = 6977.04$) and the access condition ($M = 13,377.94$, $SD = 8548.61$; $F(1,134) = 0.35$, $p = 0.55$).

5.1.5 | Common method bias

As data were collected from the same respondents at the same point in time, we addressed common method bias as recommended by Podsakoff et al. (2003). First, respondents were encouraged to answer honestly and were informed that there were no right or wrong answers. Second, participants were assured confidentiality. Third, the underlying conceptual model was not disclosed to participants to prevent implicit theorizing. Additionally, we conducted Harman's single-factor test (Podsakoff et al., 2003) by performing an exploratory factor analysis with all items. More than one factor emerged and the first factor explained only 25.1% of the variance. Additionally, a single-factor confirmatory factor analysis (CFA) model yielded a poor model fit ($\chi^2 [44] = 417.33$; $\chi^2/df = 9.49$; RMSEA = 0.25; SRMR = .192; CFI = 0.40; NNFI = 0.26). When all items were loaded on their theoretical constructs, fit was significantly improved ($\chi^2 [36] = 64.64$; $\chi^2/df = 1.80$; RMSEA = 0.076; SRMR = 0.050; CFI = 0.95; NNFI = 0.93; $\Delta\chi^2 [8] = 312.35$, $p < 0.001$).² These results indicate that common method bias is not a problem in this study.

5.2 | Results

To investigate the hypothesized direct, mediated, and moderated effects, we analyzed the data using PROCESS (version 3.4.1), a regression-based approach developed by Hayes (2018).

5.2.1 | Direct effects

The independent variables in the regression equations were consumption mode, income, and the consumption mode \times income interaction; respondents' age and gender were included as covariates. For usage/purchase intention, there were significant effects³ of access ($b = 0.93$, $t(130) = 4.50$, $p < 0.001$), income ($b = 0.00004$, $t(130) = 3.47$, $p < 0.001$), and the access \times income interaction ($b = -0.0001$, $t(130) = -3.52$, $p < 0.001$). A spotlight analysis (Irwin & McClelland, 2001) based on 10th, 25th, 50th, 75th, and 90th percentiles revealed that among respondents with low income (10th percentile; INR 6,000; approx. USD 81), usage intention for the access-based service was significantly higher than purchase intention in the ownership condition ($b = 0.63$, $t(130) = 4.45$, $p < 0.001$). As income increased, this effect was reduced in magnitude. The detailed spotlight analyses results that support H_1 are exhibited in Table 1. Using the regression beta coefficient estimates, Figure 2a displays intentions at different income levels. We used the Johnson-Neyman technique to determine the value of

income at which usage/purchase intention is no longer significantly different across access and ownership (Johnson & Fay, 1950). This occurs when income exceeds INR 14,097 per month (approx. USD 190). In other words, access led to higher usage intentions at monthly household income levels below INR 14,097, but had no effect above this value. This assessment revealed another notable result. For respondents with a monthly household income above INR 28,664 (approx. USD 385), the effect of access on usage intention was reversed ($b = -0.50$, $t(130) = -1.98$, $p < 0.05$), indicating that respondents with a high income prefer ownership.

For the predicted mediators, we first ran a regression on perceived financial risk, for which the negative influence of consumption mode ($b = -1.46$, $t(130) = -4.19$, $p < 0.001$) indicates that access was perceived to bear less financial risk than ownership. Moreover, significant effects of income ($b = -0.0001$, $t(130) = -2.73$, $p < 0.01$), and the access \times income interaction ($b = .0001$, $t(130) = 3.32$, $p < .01$) were found. Thus, in line with H_{2a} , access is perceived to entail less financial risk at lower income levels; as income increases, this difference is reduced. The spotlight analysis showed that among respondents in the 10th through 50th income percentile, financial risk of access was perceived to be lower than that of ownership, while no significant influence was found among participants in the 75th and 90th percentiles (see Figure 2b and Table 1). The income level at which financial risk is no longer significantly different across access and ownership is INR 13,656 (approx. USD 183); above INR 29,496 (approx. USD 397), access is perceived to bear greater financial risk than ownership.

For perceived performance risk, the negative influence of access was marginally significant ($b = -0.55$, $t(130) = -1.84$, $p = 0.07$). However, in contrast to our assumptions (H_{2b}), neither income ($b = 0$, $t(130) = -.32$, $p = 0.75$) nor the access \times income interaction ($b = 0$, $t(130) = 0.16$, $p = 0.87$) exerted an influence. Performance risk was perceived to be lower in the access condition compared to the ownership condition across all income levels (see Figure 2c and Table 1).

The regression on perceived social risk revealed further surprising results. Consumption mode exerted a marginally significant positive influence ($b = .45$, $t(130) = 1.78$, $p = .08$), indicating that access was perceived to entail greater social risk than ownership. No effects were found for income ($b = 0$, $t(130) = 0.41$, $p = 0.68$) or the access \times income interaction ($b = -0.00002$, $t(130) = -1.18$, $p = 0.24$). However, a spotlight analysis, as illustrated in Figure 2d and Table 1, showed that in contrast to H_{2c} , the difference in perceived social risk diminished with higher income. While respondents in the 10th through 50th income percentiles viewed the social risk of access to be higher than that of ownership, no such difference emerged among respondents with an income above INR 10,853 (approx. USD 146).

5.2.2 | Conditional process analysis

We tested H_3 with a conditional process model (PROCESS model 8), based on 5,000 bootstrap samples. A moderated mediation was evident for perceived financial risk, as the bootstrap confidence interval (CI) of the moderated mediation index (Hayes, 2015)

²Because the assumption of multivariate normality for the observed variables did not hold, we applied Satorra-Bentler corrected chi-square and robust standard errors using maximum likelihood estimation in the CFA. As the difference between two Satorra-Bentler scaled chi-square values is not chi-square distributed, the chi-square difference test was based on the corrected scaled difference chi-square statistic, as described by Satorra and Bentler (2010).

³We report unstandardized regression coefficients, as these are the preferred metric in causal modeling when the independent variable is dichotomous (Hayes, 2018, p. 43).

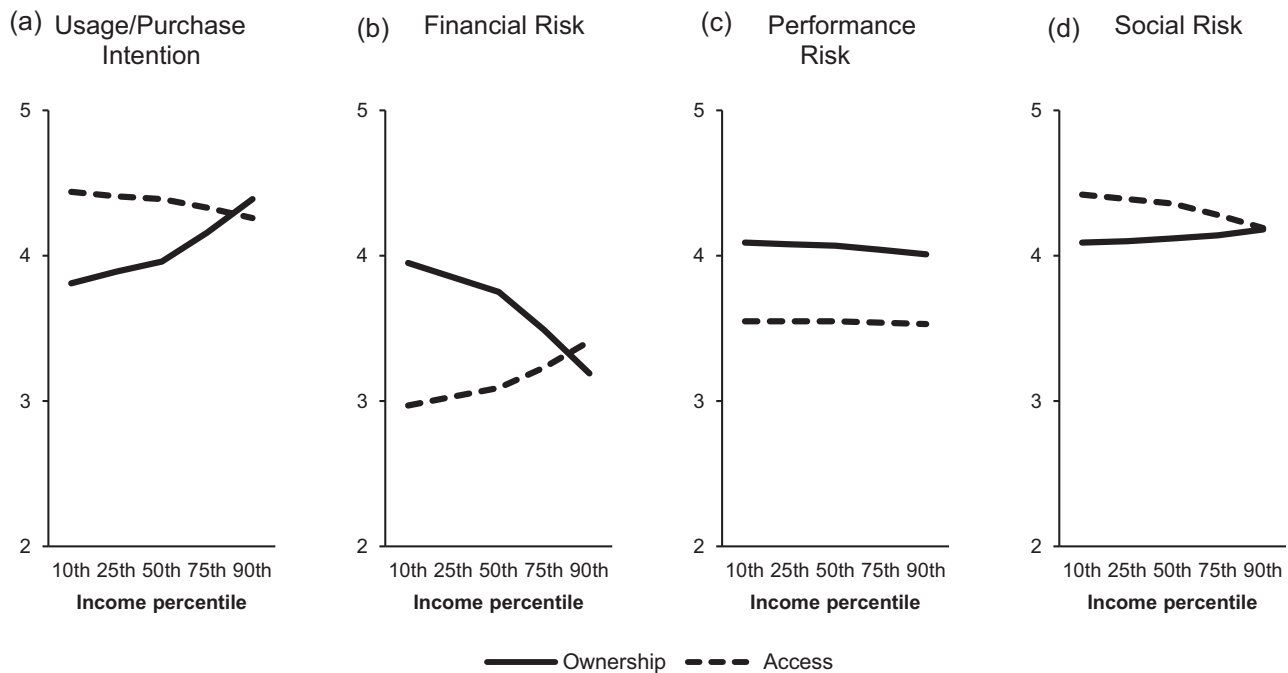
TABLE 1 Study 1: Spotlight analyses estimated marginal means and regression results

Income percentile	Usage/purchase intention			Financial risk		
	Ownership	Access	<i>b</i>	Ownership	Access	<i>b</i>
10th	3.81	4.44	0.63**	3.95	2.97	-0.98**
25th	3.89	4.41	0.53**	3.85	3.03	-0.82**
50th	3.96	4.39	0.43**	3.75	3.09	-0.66**
75th	4.16	4.33	0.18	3.49	3.23	-0.26
90th	4.39	4.26	-0.13	3.19	3.41	0.22
Income percentile	Performance risk			Social risk		
	Ownership	Access	<i>b</i>	Ownership	Access	<i>b</i>
10th	4.09	3.55	-0.53*	4.09	4.42	0.33 [†]
25th	4.08	3.55	-0.53**	4.10	4.39	0.29 [†]
50th	4.07	3.55	-0.52**	4.12	4.36	0.24 [†]
75th	4.04	3.54	-0.50**	4.14	4.28	0.14
90th	4.01	3.53	-0.48*	4.18	4.19	0.02

Note: Covariates included are gender and age.

* $p < 0.05$; ** $p < 0.01$.

[†] $p < 0.1$.

**FIGURE 2** Study 1: Results by consumption mode and income. Values are estimated marginal means; covariates included are gender and age; all variables were measured on five-point scales

excludes zero (index = -0.000018; SE = 0.00001; 99% CI: -0.00004 to -0.00004). The results, depicted in Figure 3, indicated that among respondents with low household income (10th income percentile), the higher usage intention for access compared to purchase intentions for ownership is partly explained by a lower perceived financial risk of

access ($B = 0.225$, SE = 0.07, 99% CI: 0.074 to 0.430). This result supports our assumptions and is in line with previous findings (Schaefers et al., 2018). Additionally, however, a marginally significant indirect effect via perceived social risk is evident ($B = 0.066$, SE = 0.04, 90% CI: .007 to .143). This process emerges from a higher perceived

social risk for access than ownership, and a positive relationship between social risk and usage/purchase intentions—both findings being in contrast to our assumptions. In addition to these indirect effects, consumption mode exerted a positive direct effect on usage/purchase intentions ($b = 0.33$, $t(130) = 2.30$, $p < 0.05$). The two mediating effects as well as the direct effect remained significant among respondents in the 25th and 50th income percentiles, but gradually reduced their magnitude. In the 75th and 90th income percentiles, neither a direct effect nor any mediated effects were evident.

No indirect effect was observed for performance risk (H_{3b}). Independent of respondents' household income, access led to lower perceived performance risk than ownership. At the same time, however, performance risk was unrelated to usage/purchase intentions ($b = -0.01$, $t(130) = -0.21$, $p = 0.83$).

5.3 | Discussion

Study 1 investigated the influence of consumption mode (access vs. ownership) on differences in usage/purchase intentions among

consumers at the base of the pyramid, as well as the mediating process via perceived risks. The results support the assumption that such consumers exhibit a higher intention to access a product than to purchase it (H_1). In line with H_{2a} , low-income consumers perceive access to entail less financial risk than ownership. At the same time, however, regardless of income, the performance risk of access is perceived to be lower than that of ownership. This finding is in contrast to our assumptions (H_{2b}). One possible explanation is that the product selected for our study (i.e., water filter) relates to a fundamental human need, which might be equally relevant across income groups. The severity component of perceived performance risk would thus capture health consequences of a malfunction rather than the consequence of having to deal with maintenance and repair, which would be independent of resource restrictions. For social risk, a counterintuitive finding emerged. Opposite to our assumption (H_{2c}), low-income consumers perceived access to entail greater social risk than ownership, while among higher income group, no difference could be observed. These consumers thus consider access to have a greater likelihood and/or severity of negative evaluations of their social standing. This result is especially intriguing as it may indicate

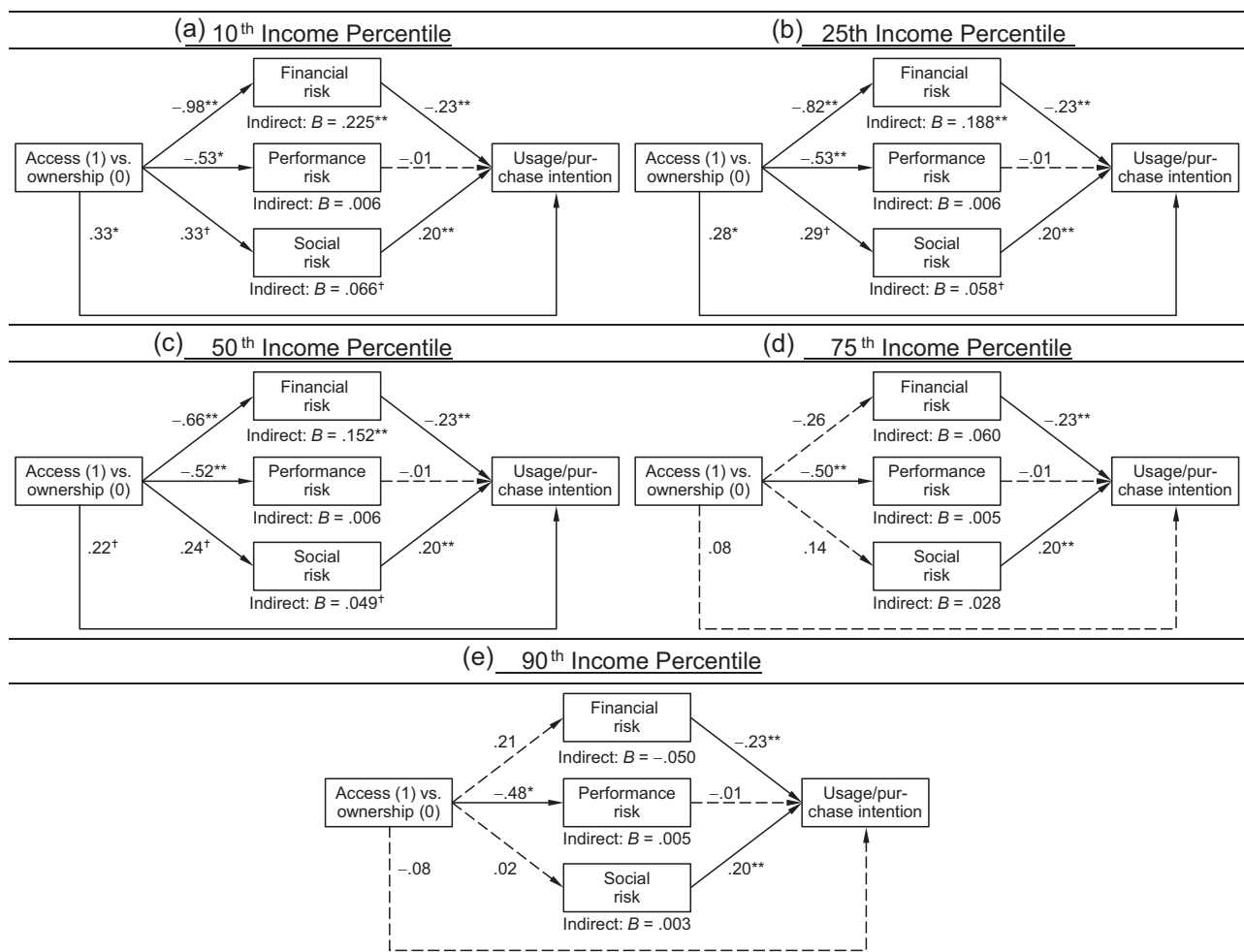


FIGURE 3 Study 1: Indirect effects of access on usage/purchase intention at different income levels. Covariates included were gender and age; indirect effects results were estimated with 5000 bootstrap samples. ** $p < 0.01$, * $p < 0.05$, † $p < 0.1$

that the link between possessions and a consumer's self (Belk, 1988) especially applies at the base of the pyramid.

6 | ACCESS VERSUS OWNERSHIP-RELATED RISK REDUCTION

The findings of Study 1 reveal that consumers at the base of the pyramid in fact perceive access differently than ownership with regard to the entailed risks and responsibilities and that, in consequence, they show greater inclination to use an access-based service than purchase the accessed good. This implies that companies should opt for access-based services instead of ownership as a way of making products affordable. Compared to selling ownership, however, access-based services require fundamentally different business processes. For instance, service providers need to implement mechanisms for monitoring the base for estimating the access fee (e.g., access period or usage intensity); due to the larger amount of smaller value transactions, automated billing processes are likely to be required; maintenance processes need to be implemented. Before making a fundamental shift to access-based services, it is thus likely that companies used to selling ownership would first evaluate alternatives for reducing risk of ownership to increase purchase likelihood.

A common strategy for reducing ownership risk is the inclusion of a warranty (Boshoff, 2002). The obligation of a manufacturer to compensate buyers in case of product failure signals quality (Akdeniz et al., 2013; Blair & Innis, 1996) and influences risk perception (Shimp & Bearden, 1982). As Chu and Chintagunta (2011) show, warranties are perceived as an insurance against purchase-related risks. Similarly, Chang and Wu (2012, p. 379) state that "Without certain warranties (...), shoppers may be afraid of losing money following from repairing and replacing products."

However, extant research does not provide insights into whether or how access-based services elicit different perceptions than ownership with a warranty. In Study 2, we therefore explore whether including a warranty leads to similar effects as offering an access-based service at the base of the pyramid. The results should thus reveal whether companies can achieve similar perceptions and behavior among low-income consumers by resorting to warranties as when taking the more complex and long-winded road of offering access-based services.

7 | STUDY 2: RISK PERCEPTIONS OF ACCESS AND OWNERSHIP WITH WARRANTY

The primary purpose of the second study is to further explore possible structural differences between access and ownership, specifically ownership that includes a warranty. Furthermore, we again test the basic assumptions regarding access-based services (Hypotheses 1-3), to ascertain the robustness of the Study 1 results.

7.1 | Method

7.1.1 | Setting & data collection

Study 2 was again a scenario-based experiment with one manipulated between-subjects factor (consumption mode: access; ownership; ownership with warranty) and income as a measured variable. The context remained identical to Study 1. In a qualitative pretest in the field, we checked whether the manipulations were understood as intended. Data were again collected in rural areas of Rajasthan in cooperation with the same no-governmental organization as in Study 1. The interviews were conducted in different villages to ensure that none of the Study 1 respondents participated in Study 2.

After about 30 days of data collection, questionnaires from 218 respondents were obtained. Data cleaning again led to the exclusion of individual cases: two participants reported household incomes almost twice as high as the next highest reported income; five respondents did not provide any income information; five cases were eliminated due to straight-lining answering patterns; 29 respondents exhibited inconsistent scores or failed to correctly respond to quality control items. The final analyzable sample therefore comprised 177 individuals, almost equally distributed across the three experimental conditions ($n_{\text{access}} = 50$; $n_{\text{ownership}} = 64$; $n_{\text{warranty}} = 63$). Compared to Study 1, the sample was more balanced in gender (55% males) and comprised respondents of a higher average age ($M = 38.4$ years; $SD = 9.24$).

7.1.2 | Manipulations

The stimuli for access and ownership were identical to those of Study 1. The ownership with warranty condition included the same description as ownership, plus a sentence explaining an extended five-year warranty (see Appendix A). The realism check ("The situation described in the beginning of the survey was realistic."; 5-point scale) did not uncover differences across the three conditions ($M_{\text{own}} = 4.17$; $M_{\text{access}} = 4.00$; $M_{\text{warranty}} = 4.02$; $F(2,174) = 0.81$; $p = 0.45$). Although the values were slightly below those obtained in Study 1, they were still significantly above the scale's midpoint. Similar results were obtained for understanding ("The questionnaire was easy to understand."; 5-point scale; $M_{\text{own}} = 3.98$; $M_{\text{access}} = 3.92$; $M_{\text{warranty}} = 4.11$; $F(2,174) = 1.04$; $p = 0.35$).

7.1.3 | Measures

We measured perceived financial, performance, and social risk, as well as respondents' purchase/usage intention using the same scales and items as in Study 1 (see Appendix B). Comparisons with the squared correlations between the three risk dimension scales ($r^2 < .23$) indicated adequate discriminant validity (Fornell & Larcker, 1981).

7.1.4 | Income levels

Respondents' monthly household income, again reported at the end of the survey, ranged from INR 3000 (approx. USD 41) to INR 40,000 (approx. 538), with a median of INR 7000 (approx. USD 94), a mean of INR 9324.86 (approx. USD 125). Compared to Study 1, the respondents in this sample thus had a lower average income. However, considering the similar income distribution and the fact that the focus of our studies is on low-income consumers, we deemed the sample equally well-suited for hypotheses testing. Importantly, no significant differences ($F(2,174) = 2.19, p = 0.11$) in income were evident between the three experimental conditions ($M_{\text{ownership}} = 8,000$; $M_{\text{access}} = 9,420$; $M_{\text{warranty}} = 10,595.24$).

7.1.5 | Common method bias

We again assessed common method bias. An exploratory factor analysis resulted in more than one factor, with the first factor explaining only 26.1% of the variance. Similarly, a single-factor CFA exhibited a poor model fit ($\chi^2 [44] = 382.42$; $\chi^2/\text{df} = 8.69$; RMSEA = .208; SRMR = .187; CFI = .58; NNFI = .48), significantly worse than the designated factor structure ($\chi^2 [36] = 82.44$; $\chi^2/\text{df} = 2.29$; RMSEA = 0.085; SRMR = .055; CFI = 0.94; NNFI = 0.91; $\Delta\chi^2 [8] = 364.46, p < 0.001$). As in Study 1, common method bias was judged not to be a problem.

7.2 | Results

Data analysis was again based on PROCESS (Hayes, 2018). In contrast to Study 1, however, the independent variable consumption mode was multicategorical. We therefore used simple dummy coding with ownership as the reference group to compare the effects of access and ownership with warranty. Thus, the independent variables in the regression equations were access versus ownership (D_1), ownership with warranty versus ownership (D_2), income, as well as the $D_1 \times \text{income}$ and $D_2 \times \text{income}$ interactions. Age and gender were again included as covariates.

The regression on usage/purchase intention revealed a significant interaction between consumption mode and income ($\Delta R^2 = 0.12$; $F(2,169) = 13.74$; $p < 0.001$). Specifically, significant effects were evident for income ($b = 0.00004, t(169) = 2.00, p < 0.05$) and access (D_1 ; $b = 0.99, t(169) = 3.62, p < 0.001$), but not for warranty (D_2 ; $b = -.44, t(169) = -1.55, p = 0.12$). The $D_1 \times \text{income}$ ($b = -0.0001, t(169) = -2.36, p < 0.05$) and the $D_2 \times \text{income}$ ($b = 0.0001, t(169) = 2.04, p < 0.05$) interactions were both significant. Observation of the estimated marginal means, illustrated in Figure 4a, and spotlight analyses (Irwin & McClelland, 2001) revealed interesting patterns. The effect of access versus ownership confirmed the findings of Study 1: Usage intention for the access-based service was significantly higher than purchase intention among respondents in the 10th (INR 4000; approx. USD 54) through 75th (INR 10,000; approx. USD 135) income

percentiles (p 's < 0.05). For high-income respondents (90th percentile; INR 18,000; approx. USD 242), this effect was reversed, although not reaching statistical significance ($b = -0.09$; $t(169) = -.29$; $p = 0.77$). In contrast, the inclusion of a warranty revealed very different results: Among respondents in the 90th income percentile, a warranty led to higher purchase intention than both ownership without a warranty ($b = 0.52, t(169) = 1.82, p = 0.07$) and access ($b = 0.60, t(169) = 2.45, p < 0.05$). For respondents in the 10th through 50th percentile, however, purchase intention in the warranty condition was significantly lower than usage intention in the access condition (p 's < 0.01). Interestingly, compared to ownership without a warranty, inclusion of a warranty led to lower purchase intention among respondents in the 10th ($b = -0.23, t(169) = -1.11, p = 0.27$) and 25th income percentiles ($b = -0.17, t(169) = -0.92, p = 0.36$), although both effects did not reach statistical significance. Thus, among low-income consumers a warranty does not increase purchase intentions but may even be detrimental.

For perceived financial risk, the interaction between consumption mode and income was marginally significant ($\Delta R^2 = 0.02$; $F(2,169) = 2.54$; $p = 0.08$). In line with Study 1, access was perceived to entail less financial risk than ownership (D_1 ; $b = -0.80, t(169) = -3.03, p < 0.01$); however, the effect of income was only marginally significant ($b = -0.00003, t(169) = -1.70, p = .09$) and the $D_1 \times \text{income}$ interaction did not reach significance ($b = .00003, t(169) = 1.10, p = 0.27$). Nevertheless, the spotlight analyses (Figure 4c) revealed a pattern similar to Study 1. Among respondents in the 10th through 75th income percentiles, access was perceived to encompass less financial risk than ownership (p 's < 0.001), while no such difference was evident among respondents in the 90th percentile ($b = -.32, t(169) = -1.11, p = 0.26$). Comparing access and ownership with a warranty revealed that both alternatives lead to similar perceptions of financial risk in the 10th through 75th income percentiles. Respondents in the 90th income percentile, however, perceived a warranty to entail less risk than access ($b = -.43, t(169) = -1.83, p = 0.07$).

For performance risk, a consumption mode \times income interaction is evident ($\Delta R^2 = .03$; $F(2,169) = 3.22$; $p < .05$). However, this is completely due to the D_2 (ownership with warranty vs. ownership) \times income interaction ($b = -.0001, t(169) = -2.27, p < .05$), while no other variable exerts a significant influence. The estimated marginal means, illustrated in Figure 4d, indicate that, similar to Study 1, access lowers performance risk, although this effect is only (marginally) significant in the 50th ($b = -.27, t(169) = -1.83, p = .07$) and 75th ($b = -.31, t(169) = -2.09, p < .05$) income percentiles. Ownership with a warranty, however, leads to very different performance risk perceptions. While no differences are evident in the 10th and 25th income percentiles (p 's $> .22$), a warranty leads to less perceived performance risk in the 50th through 90th income percentiles (p 's $< .05$), with a greater difference at higher income levels.

Finally, the regression on perceived social risk produced no consumption mode \times income interaction ($\Delta R^2 = .003$; $F(2,169) = .29$; $p = .75$). Lending mild support to the findings of Study 1, the greater perceived social risk of access compared to ownership is approaching significance ($b = .41, t(169) = 1.41, p = .16$). Ownership with a

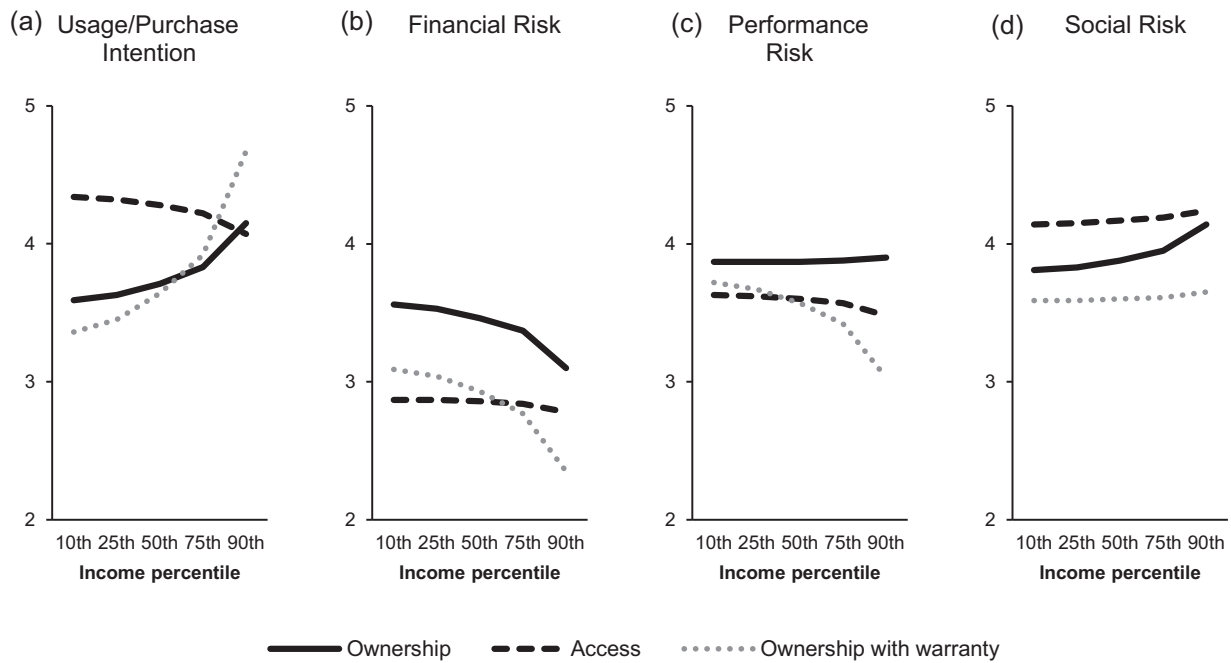


FIGURE 4 Study 2: Results by Consumption Mode and Income *Note.* Values are estimated marginal means; covariates included are gender and age; all variables were measured on five-point scales

warranty does not lead to less perceived social risk than ownership without a warranty. Compared to access, however, a marginally significant effect is evident ($b = -.54$, $t(169) = -1.87$, $p = .06$).

7.3 | Discussion

Study 2 explored whether including a warranty when selling ownership at the base of the pyramid leads to similar results as offering an access-based service. The results indicate that among higher income consumers, a warranty decreases ownership risk and leads to greater purchase intentions than both ownership and access. Among low-income consumers, however, a fundamentally different picture emerged. On the one hand, compared to ownership, a warranty is related to less financial risk than ownership. On the other hand, the pattern for ownership with warranty is very different than the reactions elicited by access. These differences are most prevalent for the higher usage intentions exhibited towards the access-based service than the purchase intentions for ownership. In addition to these exploratory findings, the results of Study 2 confirmed the hypotheses testing results obtained in the first study.

8 | GENERAL DISCUSSION

One of the many challenges consumers at the base of the pyramid face is the lack of affordability of products. This especially applies to durables due to their high prices as well as the burdens of ownership.

In this setting, we have investigated whether services that offer access instead of ownership are in fact a better and more socially responsible way for low-income consumers to acquire goods. Our investigation thus not only addresses the benefits that Prahalad and Hammond (2002, p. 52) described for companies: “companies targeting the BOP market are finding that the shared access model (...) not only widens their customer base but increases asset productivity as well”. At the same time, by considering consumers’ intentions and the underlying processes, we also examine the potential of access to make products more affordable (Karnani, 2007).

In Study 1, we tested for differences between access and ownership and found low-income consumers to perceive access as entailing less financial and performance risk than ownership. The differences in financial risk explain why such consumers exhibit greater intentions to access a good instead of purchasing ownership. These effects were not found for consumers who dispose of a higher income. Interestingly, at the base of the pyramid, access is perceived to come with greater social risk than ownership, indicating that aspects such as the extended self and status may play a role even when resource restrictions are high.

Study 2 then explored whether similar reactions could be achieved by merely enhancing ownership with a warranty. Due to the fundamental differences between selling ownership and providing an access-based service, companies might resort to warranties as a risk reduction strategy that is easier to implement. However, although a warranty does generally reduce perceived risk compared to ownership, the effects are less pronounced among low-income consumers. Additionally, in contrast to access, a warranty does not lead to greater purchase intention.

8.1 | Theoretical and methodological contributions

By investigating access-based services at the base of the pyramid, we provide further evidence for a link that was conceptualized in extant literature (e.g., Karnani, 2007; Lovelock & Gummesson, 2004), but has received only scant attention in empirical studies (Schaefers et al., 2018). Drawing from risk perception theory, our empirical results provide a novel, nuanced, and theory-driven explanation for why low-income consumers perceive access differently than ownership and react accordingly.

Extant research has recently critically evaluated access-based services and the sharing economy (e.g., Buhalis et al., 2020; Murillo et al., 2017). While critical reflections are clearly justified, we contribute to a different perspective that examines the potential of access-based services to have a positive impact on consumers' lives outside of the dominant scope of industrialized economies.

The distinction between access and ownership also contributes to the literature on consumers' risk perception. Thus far, extant studies primarily focused on either ownership (e.g., Chang & Wu, 2012; Schaefers et al., 2016) or access (e.g., Lang et al., 2019). By contrasting both, our findings offer a more nuanced view and allow for comparisons across consumption modes.

On a more general level, our results contribute to the growing body of transformative consumer research (Blocker et al., 2013; Martin & Hill, 2015) and the increasing interest of marketing research to contribute to improved livelihood of subsistence consumers (Viswanathan et al., 2021). As Viswanathan et al. (2021, p. 126) state: "research on low-income and low-literate consumers should occupy a larger focus in marketing research because improvements in their well-being can have broad ripple effects." Our results suggest that access-based services offer one of several approaches for achieving such improvements.

On a methodological level, our studies do not assign consumers to the base of the pyramid based on a fixed income level but rather examine effects across different income levels. In light of the ongoing discussion about arbitrary thresholds (London et al., 2010), we thus offer a more fine-grained examination.

8.2 | Managerial implications

Our findings have important implications for companies as well as public policy makers addressing low-income consumers. First, our results suggest that firms intending to address the base of the pyramid should pursue access-based services instead of trying to sell ownership, as the former find greater acceptance in financially constrained contexts. This would offer greater potential for market success, due to higher purchase intent among low-income consumers.

Second, our findings indicate the applicability of the sharing economy for overcoming ownership risks at the base of the pyramid. Temporary access may reduce budget constraints, thereby making monetary resources available for expenses that add to better living conditions, such as education or medical care. Systematically applying the sharing economy

concept to different product categories (e.g., vehicles, power generators), should not only increase affordability but also allow for a more efficient use of natural resources. By offering access-based services, companies would thus not only contribute to their financial bottom line, but also have a positive societal impact due to improved access. For the base of the pyramid, access should thus not only be considered through a profit perspective, but also through the lens of socially responsible activities.

Third, the results of our second study suggest that there is no easy way to address low-income consumers. Although it may require less effort to complement existing ownership-centric business models with warranties, such a step is not likely to induce consumers at the base of the pyramid to purchase. Instead, companies selling ownership should make the effort of transitioning to access-based business models when marketing to the base of the pyramid.

8.3 | Limitations and future research

When interpreting the empirical results, certain limitations should be considered. First, both studies were based on hypothetical scenario descriptions and captured self-reported data that consist of perceptions and intentions. Future research should examine low-income consumers' actual behavior towards access-based services.

Second, our studies did not account for long-term effects of access compared to ownership. Using an access-based service for a longer period of time may lead to the accumulated fees exceeding the purchase price of the accessed product (Durgee & O'Connor, 1995). Future studies should thus consider possible downsides of access.

Third, our studies only focused on consumers. It is reasonable to assume that access-based services may also give small-scale entrepreneurs at the base of the pyramid the chance to access products for their business that otherwise would not be affordable. Future research should thus look beyond consumption, as strengthening entrepreneurial activities may have an even greater impact (Viswanathan et al., 2010).

Fourth, in contrast to our hypothesis, consumers across income levels perceive access to entail less performance risk than ownership. As discussed, this result may be due to the focal product (i.e., water filter) addressing a basic human need. Future studies should evaluate whether differences in performance risk perception emerge for less fundamentally relevant products.

Another important aspect to consider is how the Covid-19 pandemic has affected the sharing economy (Hossain, 2021; Meenakshi, 2021). Contamination concerns, in which consumers are reluctant to use objects that have been touched by someone else, have been identified as a barrier for consumers' adoption of access-based services (Hazée et al., 2019). More than ever before, consumers are now concerned about hygiene risks (Akhmedova et al., 2021), on top of the more established perceived financial, performance, and social risks (Kaplan et al., 1974). This is especially the case for those access-based services in which consumers share tangible objects such as fashionwear, car sharing, and accommodation (Batool et al., 2020). Future research should thus examine to what extent

these contamination/hygiene risks are a detriment to the identified opportunities at the base of the pyramid.

Finally, the counterintuitive finding that low-income consumers perceive access to entail greater social risk than ownership is intriguing and requires further research. This result suggests that even among consumers who face resource restrictions, aspects such as the role of possessions for the extended self or the potential of gaining status through ownership are relevant. This finding may indicate the relevance of conspicuous consumption (Veblen, 1899) at the base of the pyramid. Prior research has shown that consumers in lower income segments have a relatively high need for status and therefore engage in conspicuous consumption activities, such as owning a luxury bag (Han et al., 2010). At the same time, the sharing economy reflects a trend towards more "liquid" relationships with possessions (Bardhi & Eckhardt, 2017), which may run counter to the desire for possession-related status. Future research should thus examine these developments for the specific context of low-income consumers.

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DATA AVAILABILITY STATEMENT

Research data are not shared.

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APPENDIX A

TABLE A1 Scenario descriptions and stimulus material

A: Access (Studies 1 & 2)

[Fictional company name] is a company that offers water filters to produce clean drinking water. From the company, you can get access to a water filter that is put in your home but that you do not have to buy. [Company] will also take care of the maintenance of the filter and will replace it after its functional time period.

The price you have to pay for the use of the water filter called “Pure Plus Gold” is Rs. 300 INR per month. You will then be able to obtain 20 liters of clean drinking water per day. No electricity is required to use the water filter.

With the water filter “Pure Plus Gold” that you get access to at your home through the local sales representative of [company], you are able to do the following:

- Fill in water from a well or a river or any other water source close to your home

TABLE A1 (Continued)

A: Access (Studies 1 & 2)

- Filter this water and remove most germs, bacteria, and other ingredients in the water that harm your health
- Improve the taste of your drinking water

B: Ownership (Studies 1 & 2)

[Fictional company name] is a company that offers water filters to produce clean drinking water. You can buy a water filter from [company] and put in your home.

The price for the water filter called “Pure Plus Gold” is Rs. 2550 INR and has a storage capacity of 20 liters. The actual filter has to be replaced after 4000 liters and costs Rs. 1500 INR. No electricity is required to use the water filter.

With your own water filter “Pure Plus Gold” that you purchase from the local sales representative of [company], you are able to do the following:

- Fill in water from a well or a river or any other water source close to your home
- Filter this water and remove most germs, bacteria, and other ingredients in the water that harm your health
- Improve the taste of your drinking water

C: Ownership with warranty (Study 2)

[Fictional company name] is a company that offers water filters to produce clean drinking water. You can buy a water filter from [company] and put in your home.

The price for the water filter called “Pure Plus Gold” is Rs. 2550 INR and has a storage capacity of 20 liters. The actual filter has to be replaced after 4000 liters and costs Rs. 1500 INR. No electricity is required to use the water filter.

The “Pure Plus Gold” water filter comes with an extended five-year warranty: [company] guarantees the water filter's functionality; should the filter malfunction, it will be replaced within 24 h at no further charges.

With your own water filter “Pure Plus Gold” that you purchase from the local sales representative of [company], you are able to do the following:

- Fill in water from a well or a river or any other water source close to your home
- Filter this water and remove most germs, bacteria, and other ingredients in the water that harm your health
- Improve the taste of your drinking water

(Continues)

APPENDIX B

TABLE B1 Items, reliability measures, and descriptives (Study 1/Study 2)

	Cronbach's alpha	Construct reliability	AVE	Factor loadings	Indicator reliability	Mean (SD)
Perceived financial risk ^a (DeVecchio & Smith, 2005)	.86/.77	.87/.78	.69/.55			
fr ₁ Considering the investment involved, [using/purchasing] a water filter is risky.				.70/.59	.50/.35	3.29/2.94 (1.23)/(1.08)
fr ₂ Given the financial commitment, I may regret [using/purchasing] a water filter.				.98/.81	.96/.66	3.36/3.06 (1.17)/(1.06)
fr ₃ I could lose a significant amount of money if I ended up with a water filter that didn't work.				.79/.80	.62/.64	3.53/3.05 (1.24)/(1.18)
Perceived performance risk ^a (DeVecchio & Smith, 2005)	.84/.76	.84/.81	.64/.58			
pr ₁ I am likely to have problems with the performance of this water filter.				.70/.71	.49/.51	3.69/3.50 (1.07)/(1.03)
pr ₂ If a water filter malfunctions, the consequences can be fairly severe.				.81/.74	.65/.54	3.84/3.67 (1.03)/(.97)
pr ₃ [Using/Buying] the wrong water filter can lead to very negative consequences.				.89/.83	.79/.69	3.87/3.69 (1.04)/(.92)
Perceived social risk ^a (DeVecchio & Smith, 2005)	.84/.94	.78/.94	.56/.83			
sr ₁ If I [use/buy] a water filter, other people will ask me questions about it.				.99/.90	.98/.80	4.22/3.88 (.83)/(1.03)
sr ₂ Other people will judge me depending on the water filter I use/purchase].				.59/.95	.34/.91	4.18/3.85 (.92)/(1.02)
sr ₃ If I [use/buy] a water filter, I will probably have to explain to some people how I chose it.				.60/.89	.36/.79	4.26/3.92 (.83)/(.98)
Purchase/usage intention ^b (Kozup et al., 2003)						
pi How likely is it that you would [purchase access to/purchase] an astro Pure Plus water filter?				–	–	4.21/3.97 (.65)/(.98)
Income (INR)						12,980.15/9,324.86 (7,783.79)/(7,030.60)
CFA model fit Study 1: SB χ^2 (23) = 32.78; χ^2 /df = 1.43; RMSEA = .056; SRMR = .044; CFI = .98; NNFI = .97						
CFA model fit Study 2: SB χ^2 (23) = 41.38; χ^2 /df = 1.80; RMSEA = .067; SRMR = .047; CFI = .97; NNFI = .96						

Note: Satorra-Bentler corrected chi-square based on maximum likelihood estimation with robust standard errors.

^afive-point Likert scale anchored by 1 "totally disagree" and 5 "totally agree".

^bfive-point scale anchored by 1 "very unlikely" and 5 "very likely".