



Inclusion of brand in self predicts future use

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Abstract

Predicting future consumer behavior is a core objective of marketing research. However, it is an elusive target, typically measured by highly imperfect proxies. Here, we test a measure adapted from self-expansion theory, Inclusion of Brand in Self (IBIS), that uses a single item to assess the degree to which a brand is incorporated into a consumer's sense of self. In three studies, we demonstrate that IBIS significantly predicts future consumption and purchase. IBIS was at least as strong a predictor as purchase intent, sometimes even outperforming it. IBIS shows promise as an efficient and pragmatically useful predictor of future purchase.

Keywords Brand relationships · Market research · Consumer behavior · Purchase prediction

Introduction

Consumer psychologists and market researchers consider brands to be much more than Ogilvy's classic definition of brand as “the intangible sum of a product's attributes” (Keller 1993). Brands confer psychological benefits that go beyond products (Belk 1988), imply the endorsement of specific values (Berland and Farrelly, 2010), and are sometimes anthropomorphized as having personalities (Aaker 1997). In this spirit, one prominent conceptualization of brands has been the notion of brand relationships, the suggestion that consumers sometimes see brands as part of their self-concepts and a reflection of their own self-image (Fournier 1998).

As with interpersonal relationships, relationships with brands entail cognitive and emotional connections with the self, and so incorporating consumer-brand relationships into models of consumer behavior should improve the prediction of brand engagement. Consumer behavior is strongly related to whether customers see themselves as having a

positive “relationship” with the brand, analogous to having a strong relationship with another person (e.g., Escalas and Bettman 2003, 2005; Ferraro et al. 2011). These investigations found that consumer behavior is influenced by feelings of strong ties to brands, and people are sensitive to whether brands reflect desired identities. Knowing the strength of the relationship between a person and a brand may provide more information than knowing purchase intent in isolation, as intent is relatively affectively “cold” and motivationally weak (Park et al. 2010). For example, strong brand connections can overcome weak intentions; people might intend to stop eating m&m's, but eat them anyway, if brand connections are strong (Trump et al. 2015).

The importance of the customer-brand relationship is thus well-established, so an efficient, survey-friendly measure of it would be useful for marketing research. The goal of the current paper is to present and validate a short measure of self-brand connection (Inclusion of Brand in Self; IBIS) as a broadly useful tool for marketing research. We focus on IBIS's ability to predict future purchasing, comparing it with a measure of purchase intent. Purchase intent captures only a subset of respondents' beliefs (Zaller 1992) and is subject to a range of biases and inaccuracies (e.g., Kahneman and Tversky 1979; Morwitz et al. 2007; Roese and Vohs 2012). Given these limitations, new measures that improve the prediction of brand-relevant behavior would be a useful contribution, especially a measure like IBIS that should broadly tap closeness and emotional appeal without requiring respondents to introspect on motivation.

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Theoretical background

Brand relationships

Fournier (1998) theorized that consumers can view brands as relationship partners, and as a result brands overlap with people's self-definitions. Subsequent research has borne out the idea that strong customer-brand relationships are tied to perceptions of and behaviors towards brands in the present and future. Consumers use brands to help self-identify (Ahuvia 2005) and can use brands with which they feel connected to express their "real" selves (Malar et al. 2011). Self-brand connection is also connected to loyalty—customers will upgrade a product from a brand they feel close to, rather than ceasing to use the brand, when dissimilar users also start using it (Park et al. 2010).

Other findings focus on a strong brand relationship as a precursor to purchasing. As with human relationships, customer relationships with brands include cognitive, emotional, and behavioral components (Payne et al. 2008). Correspondingly, more emotional aspects of brand relationships relate to willingness to pay while more cognitive aspects relate to word-of-mouth behavior (Nyffenegger et al. 2015). Customers deepen their commitment to businesses with which they feel as if they have an experiential relationship (Wu et al. 2019). They also want brands to take desired stances on divisive issues, and will be alienated if they do not (Key et al. 2021; Vredenburg et al. 2020).

As marketing strategy began to focus more deliberately on building relationships (Althathal et al. 2019; Kumar and Kaushik 2020), measuring relationship quality itself became important. Brands deliberately target satisfaction, trust, and commitment (Chang and Chieng 2006). Customers feel closer relationships with brands they feel have values that are congruent with their own (Elsanouby et al. 2024). Additionally, consumer-brand relationships can be strengthened when brands use effective storytelling in their communications (Crespo et al. 2023).

Correspondingly, several measures for strength of brand relationship and its various components have been created.

Generally, these are multi-item scales, such as the 8-item Bagozzi et al. (2017) brand love scale. As brand relationships themselves are multi-dimensional, measuring brand relationships has the potential to bloat marketing research surveys. Thus, a more concise measure that taps the complexity of customer-brand relationships while keeping its tie to consumer behavior is desirable.

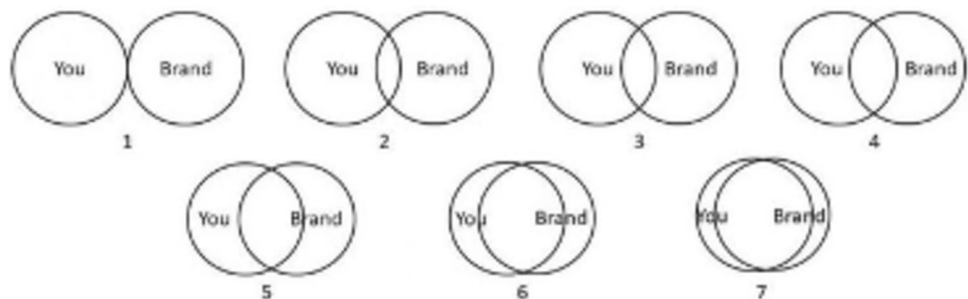
The inclusion-of-other-in-self model

The self-expansion literature gives insights into how strength of human relationships can be efficiently measured, which we suggest can be applied to brand relationships. The self-expansion model (Aron and Aron 1997) states that people are motivated to self-expand and that relationships with other people provide an avenue to do so; including others in one's own self-concept allows for self-expansion. Correspondingly, as people include their partners in their self-concepts more, they have more satisfying relationships (Aron and Aron 1997; Aron et al. 2013).

Part of the self-expansion framework is its accompanying measure, Inclusion of Other in Self (IOS). The measure is extremely efficient, operationalizing relationships using a single-item visual scale (see Fig. 1). The scale displays seven pairs of circles, overlapping to various degrees, with one circle in each pair labeled "self" and the other labeled "other". The overlap between circles increases with each response option. Respondents select the pair that best describes their relationship with the other person.

In a series of studies (Aron et al. 1991), IOS predicted both feelings of closeness and behavioral closeness, in contrast to prominent measures of the time such as the Sternberg Intimacy Scale (Sternberg 1997) and the Relationship Closeness Inventory (Berscheid et al. 1989), while also being highly efficient. The measure is effective because it captures the self-other overlap component of relationships related to motivations and emotions without requiring more difficult introspection into the relationship and has minimal susceptibility to desirability biases (Strong and Aron 2006). The measure is also quite versatile; although IOS and the self-expansion model have historically focused on relationships with significant others, they have been extended to

Fig. 1 Inclusion of Brand in Self (IBIS) measure



other targets, including social groups (Tropp and Wright 2001), communities (Mashek et al. 2007), and even nature (Dutcher et al. 2007).

An idea similar to IOS that relates to customer/brand relationships is the theory of the Extended Self (Belk 1988). This perspective posits an inner core self that can be extended to encompass external constructs, such as possessions, places, and other people, or even non-material entities, such as digital assets or consumer brands (Belk 2013, 2014). Thus, the self can be said to extend or overlap with these external entities; the more a person identifies the other as “part of me”, the greater that overlap.

Several researchers have more explicitly applied self-expansion and self-extension to brands. For example, using a response-time paradigm originally created by Aron and colleagues to demonstrate overlap in the cognitive representation of self and other beloved people (Aron et al. 1991), Trump and Brucks (2012) found that words describing characteristics (e.g., courageous) that participants associated with both themselves and a loved brand were more easily accessible than non-shared characteristics. Response times provide indirect measures of cognitive associations, but the approach lacks the efficiency needed to pragmatically apply self-expansion in a typical market research survey. Reimann et al. (2012) found that close self-brand relationships are also linked to the brain area responsible for urging, addiction, and interpersonal love, and theorize that this is because self-brand connections relate to constructs such as brand attachment (Thomson et al. 2005), devotion (Pichler and Hemetsberger 2007), and love (Carroll and Ahuvia 2006). Also, Reimann and Aron (2014) carefully specified the ways in which self-expansion can be used to understand brand-related cognition and behavior. Although this chapter is an extremely careful and generative exploration of IOS and brand, it is conceptual and does not explore or demonstrate the measure’s utility. It builds a strong argument, however, that IOS could serve as a potent measure of consumer attitudes about brands.

The current research

In sum, the idea that measuring the strength of a customer-brand relationship is useful in predicting future consumer behavior has strong theoretical and empirical support. The Inclusion of Other in Self model suggests an IOS measure should efficiently tap that relationship. However, to our knowledge, there is no evidence showing that this measure, which we term *Inclusion of Brand in Self* (IBIS), prospectively predicts actual future engagement with brands.

With the objective of filling this gap in the literature in mind, we conducted three studies to examine the predictive impact of IBIS. Our primary hypothesis is that IBIS predicts future behavior. However, we also hypothesized that IBIS

would uniquely and prospectively predict brand use above and beyond purchase intent. We use purchase intent as a comparison point as it has a long history of use in marketing research (despite its limitations) and is also a single-item measure. IBIS should tap a rich set of motivations and emotions, thus capturing variance in future behavior not captured by purchase intent.

Methodology

Study 1

In Study 1, participants reported IBIS and purchase likelihood for a variety of beverage brands, and then reported their usage of each brand for several weeks. Beverages were chosen because their purchase and usage cycles are short enough to be observed during the diary study period, and because the category contains many examples of strong and salient brands.

Method

Undergraduate participants ($N = 163$; 77.30% female, age 18–34, $M_{\text{age}} = 19.50$) were recruited from a psychology course participant pool to participate in a six-week online diary study. A sensitivity power analysis reveals that this sample size can detect an effect size of $r = 0.22$ (80% power, $\alpha = 0.05$). Upon registering for the study, one to nineteen days before the diary period began, participants completed a preliminary battery of measures related to brand attitudes (as well as several measures for another study unrelated to the current paper). For each brand, they reported purchase intent (“in the future, I ____ buy X”) using a 5-point Likert-type scale (definitely will not, probably will not, might or might not, probably will, and definitely will).

They also reported their relationship with each brand using the Inclusion of Brand in Self (IBIS) measure (Fig. 1).

Note that brand names (e.g., Aquafina) replaced the word “Brand” in the measures completed by participants.

This measure, derived from the Inclusion of Other in the Self measure (Aron et al. 1991), displays seven pairs of circles that overlap increasingly with one another, and respondents select the circles that best describe their relationship with X (where X is the brand in question). This 7-point scale was coded as 1 (least overlap between self and brand) to 7 (most overlap).

During the study period, participants were sent an online questionnaire every Sunday night. This questionnaire was available from 6 pm until the next day at 6 pm. In this questionnaire, participants reported their consumption behavior for the previous week, by responding to the question “How



many drinks of ____ did you have in the past week?” for each brand under investigation.

The brands used in the study included four categories of beverage, with several brands in each category. These included beer (Budweiser/Bud Light, Miller/Miller Lite, Corona, and Blue Moon), carbonated beverages (Coke, Pepsi, and Sprite), bottled water (Aquafina, Dasani, and Fiji), and coffee (Starbucks, Coffee Bean & Tea Leaf, Dunkin’ Donuts, and a branded campus coffee shop).

Analytic approach The current analysis used a multilevel linear modeling (mixed-effects modeling) approach. This was chosen because of the data’s hierarchical structure; that is, multiple observations per participant, with each participant having multiple observations for each brand. A multilevel model can account for correlations of errors from observations within participants as well as brands; this is important, as evidence suggests that assuming independence of errors in multilevel data leads to inflated Type I error rate (Barcikowski 1981). By including random intercepts for each participant and brand (i.e., giving each participant and brand a separate intercept and error term), variability related to the differences between participants and brands is modeled appropriately. The multilevel models were implemented with maximum likelihood estimation using the R package lme4, and marginal r-squared coefficients were found using the performance package.

Several data screening methods were applied prior to all analyses. A key advantage of multilevel models is that they do not require complete data from each participant, allowing for the removal of any missing values without compromising the dataset. In each study, participants who missed surveys were not removed; however, participants were removed for missing the initial survey containing the IBIS measure.

Results and discussion

A multilevel Poisson model (Bates et al. 2015) was fit using the 10,933 observations of each participant’s record of beverage consumption for every brand over the course of the study, entering random intercepts for participant and brand. The covariance matrix was unconstrained, and fit models used the REML (REstricted Maximum Likelihood) criterion. In calculating p values, we used the R package lmerTest to run lme4 models through Satterthwaite approximation tests to estimate the degrees of freedom (these estimated degrees of freedom scale the model estimates to best approximate the F distribution; Kuznetsova et al. 2013).

Purchase intent and IBIS were treated as simultaneous fixed-effects predictors, with significant effects being found for both IBIS ($b=0.34$, 95% CI [0.32, 0.37], $SE=0.01$, $p<0.001$) and purchase intent ($b=0.30$, 95% CI [0.26, 0.34], $SE=0.02$, $p<0.001$), with the model’s marginal

$R^2=0.20$. As the predictors were on different scales, to compare the magnitude of these coefficients, the variables were standardized by converting them to z-scores. Comparing the standardized beta coefficients, IBIS ($\beta=0.63$, 95% CI [0.59, 0.67] $SE=0.02$, $p<0.001$) displayed a significantly stronger effect than purchase intent ($\beta=0.43$, 95% CI [0.37, 0.48], $SE=0.03$, $p<0.001$), as demonstrated by non-overlapping confidence intervals. By exponentiating the standardized beta coefficients, we obtain incident rate ratios, which reveals that an increase in IBIS of one standard deviation predicted 1.88 times more drinks that week (95% CI [1.80, 1.96]), whereas an increase in purchase intent of one standard deviation predicted 1.53 times more drinks that week (95% CI [1.44, 1.62]).

Study 1 showed that, consistent with hypotheses, IBIS prospectively predicted consumption of beverages, and that this predictive relationship held even when controlling for stated likelihood to buy. Indeed, in this instance, IBIS was a stronger predictor of actual future consumption than was purchase intent. At least in the context of beverages, Study 1 constitutes strong evidence of the utility of IBIS as a proxy for future behavior.

Study 2

Although Study 1 showed that IBIS was a strong predictor of future purchase, the outcome was measured retrospectively, with participants recalling the previous week’s consumption of each beverage brand. However, this reliance on retrospective self-report is subject to memory biases and social desirability. Study 2 ameliorated this issue by obtaining reports of behaviors at the time they took place: participants reported the streaming platforms on which they watched media, and were instructed to complete these reports at the time of viewing.

Method

Undergraduate participants ($N=205$; 73.17% female, age 18–33, $M_{age}=19.61$) were recruited from a psychology course participant pool to participate in a one-week online study. A sensitivity power analysis reveals that this sample size can detect an effect size of $r=0.19$ (80% power, $\alpha=0.05$). As in Study 1, upon registering, one to two days before the study period began, participants completed a preliminary battery of measures. Participants were shown a list of media streaming platforms and asked to select the ones that they use. The platforms shown were Netflix, Hulu, HBO Max, Disney Plus, Amazon Prime Video, Peacock, Paramount Plus, and three optional text entry boxes for platforms not listed. For each of the selected platforms, they reported usage intent (“How often do you predict you will watch X in the future?”) using an 11-point Likert-type scale



(0 = *Never* to 10 = *Very often*). They also completed IBIS for each selected platform.

During the study period, participants were emailed a survey link each morning, and were reminded to complete the survey, indicating which platform they were about to use each time they watched something on a media streaming platform. Thus, the key outcome measure in Study 2 was the number of times each platform was viewed.

Results and discussion

A multilevel Poisson model was fit using the 675 observations of each participant's report of views of every platform over the course of the study. Usage intent and IBIS were again treated as simultaneous fixed-effects predictors, with significant effects being found for both IBIS ($b = 0.20$, 95% CI [0.14, 0.27], $SE = 0.03$, $p < 0.001$) and usage intent ($b = 0.13$, 95% CI [0.08, 0.18], $SE = 0.02$, $p < 0.001$), with the model's marginal $R^2 = 0.22$. Comparing the magnitude of the effects using standardized coefficients, IBIS ($\beta = 0.34$, 95% CI [0.23, 0.46], $SE = 0.06$, $p < 0.001$) was essentially identical in strength (0.002 higher) to usage intent ($\beta = 0.34$, 95% CI [0.21, 0.47], $SE = 0.06$, $p < 0.001$). Exponentiating these standardized coefficients to obtain incident rate ratios showed that a 1 standard deviation increase in IBIS predicted 1.41 times more views that week (95% CI [1.26, 1.58]), and a 1 standard deviation increase in usage intent predicted 1.41 times more views that week (95% CI [1.24, 1.60]).

Study 2 showed that, consistent with hypotheses, IBIS prospectively predicted viewing of media platforms, and that this relationship held even after controlling for stated likelihood to watch. That IBIS was as strong a predictor of future use as usage intent provides further evidence that IBIS predicts substantial unique variance in future behavior.

Study 3

Studies 1 and 2 used self-reported consumption as a dependent variable. Thus, these reports were unverifiable and potentially subject to social desirability. To address this limitation, Study 3 examined a new category, food delivery services (e.g., DoorDash), for which consumption was verified using screenshots of receipts.

Method

Undergraduates ($N = 127$; 68.50% female, age 18–32, $M_{\text{age}} = 19.91$) were recruited from a psychology course participant pool to participate in a two-week online study. A sensitivity power analysis computed with the R package *pwr* reveals that this sample size can detect an effect size of $r = 0.25$ (80% power, $\alpha = 0.05$). As in Studies 1 and 2,

participants completed a preliminary battery of measures upon registering for the study. Participants were shown a list of food delivery services and asked to select the ones that they use. The services shown were Grubhub, DoorDash, UberEats, Postmates, ChowNow, Seamless, Caviar, Toast, and three optional text entry boxes for services not listed. For each of the selected food delivery services, they reported purchase intent ("How often do you predict you will order from X in the future?") using an 11-point Likert-type scale (0 = *Never* to 10 = *Very often*). They also completed IBIS for each selected service.

During the study period, participants were emailed a survey link each morning, and were reminded to complete the survey each time they ordered food delivery or pickup. In the survey, participants indicated the food delivery service that they used and verified their order with a screenshot or photo of their receipt. Thus, the key outcome measure in Study 3 was the number of times food was ordered from each service.

Results and discussion

As participants submitted verification screenshots of their responses, the data were manually checked to ensure alignment between the survey responses and the screenshots. If discrepancies were found, participants were contacted for clarification. For those who did not respond, the relevant data points in question were excluded. A multilevel Poisson model was fit using the 276 observations of each participant's report of orders for every food delivery service over the course of the study. Purchase intent and IBIS were again treated as simultaneous fixed-effects predictors, with significant effects being found for both IBIS ($b = 0.26$, 95% CI [0.10, 0.42], $SE = 0.08$, $p = 0.001$) and purchase intent ($b = 0.14$, 95% CI [0.04, 0.25], $SE = 0.05$, $p = 0.008$), with the model's marginal $R^2 = 0.20$. Comparing the standardized beta coefficients, IBIS ($\beta = 0.45$, 95% CI [0.17, 0.73], $SE = 0.14$, $p = 0.001$) had a similarly strong effect as did purchase intent ($\beta = 0.39$, 95% CI [0.11, 0.69], $SE = 0.15$, $p = 0.008$), as shown by overlapping confidence intervals. Exponentiating these standardized coefficients to obtain incident rate ratios showed that a 1 standard deviation increase in IBIS predicted 1.56 times more orders that week (95% CI [1.18, 2.07]), and a 1 standard deviation increase in purchase intent predicted 1.48 times more orders that week (95% CI [1.12, 2.00]).

Study 3 showed that, consistent with hypotheses, IBIS prospectively predicted orders of food delivery services, and that this relationship held even when controlling for stated likelihood to order. These results further support IBIS as a proxy for future purchase behavior, now generalizing beyond beverage purchases and media consumption.



General discussion

The current studies provide the first empirical evidence that Inclusion of the Brand in Self prospectively predicts consumption in a consumer context. IBIS was a significant predictor of consumers' actual (not merely predicted) behavior after controlling for stated purchase intent in three different categories. In addition, although stated future purchase intent was a statistically significant predictor of actual future usage in the weeks following the statement, IBIS was a significantly stronger predictor in Study 1 and statistically similar in Studies 2 and 3.

Limitations

It should be noted that the current studies were conducted on a student sample; given the density of the behavioral observations in these studies, this choice was necessary because of funding constraints and to minimize attrition. Although ethnically diverse, this sample is not representative of the broader population. It is conceivable, for example, that younger participants might identify with brands in a different way than the population at large. In addition, these studies were conducted on only three categories (beverages, media streaming platforms, and food delivery services). These categories were chosen because they are frequently used, producing behavior density that was possible to consistently observe during the study periods. Whether IBIS would exhibit similar predictive power in other categories is not yet known. Importantly, these studies go beyond previous work by using IBIS to examine actual future usage; and predicting actual behavior rather than behavioral intentions, and prospectively rather than cross-sectionally, is the most important goal of marketing research.

That IBIS is a single-item measure is potentially a limitation. It is true that customer-brand relationships are multi-faceted, and researchers interested in specific components of these relationships, such as brand love, would need to use scales specific to those concepts. However, this would not be an issue for researchers, particularly those running commercial marketing research studies, who need an efficient measure of brand perception that relates to sales. Some researchers have made the case that single item measures can perform as well as multi-item measures (e.g., Bergkvist & Rossiter 2007; Matthews et al. 2022), and the use of a single item to measure a multi-faceted construct is also not unusual, as in the case of the single-item self-esteem scale (Robins et al. 2001).

Practical implications

The current results suggest that marketing research industry practitioners can use IBIS to predict future purchase behavior, which is an elusive target. The most common approaches to proxying future behavior in market research

are reports of purchase intent, sales data and other financial outcomes, longitudinal studies in which respondents are tracked over time, and reports of past purchase history; all of these face significant limitations. Purchase intent measures are a snapshot of attitudes, expressed at a given moment in the context of a survey, and thus reflect only a subset of potentially relevant beliefs (Zaller 1992). Moreover, various biases, such as the planning fallacy (Kahneman and Tversky 1979), distort predictions of behavior in consistent ways. Linking individual respondents' attitudes and behaviors to group-level financial outcomes rarely yields the granularity needed to understand processes at the individual level. Longitudinal studies are expensive, often riddled with missing data, and are hard to generalize from, given the challenges of obtaining representative samples. Reports of past purchases, because they reflect consumers' habits, can contribute to predictions of future behavior (Ji and Wood 2007), but such reports may not be accurate (see the robust literature demonstrating biases and errors in memory about previous choices; Baron and Hershey, 1988; Mather et al. 2000; Roese and Vohs 2012). In sum, market researchers would benefit from an improved predictor of the outcome that is most important to them, and we argue that IBIS can markedly improve researchers' ability to proxy it.

Additionally, to the extent that the goal of many contemporary marketing efforts is to explicitly create a stronger relationship with customers (Pera and Viglia 2016), IBIS itself can be used a key performance indicator (KPI). Compared to other more complex measures of brand relationship strength, IBIS can easily be incorporated into marketing research studies and be tracked over time relative to competitors, thus making it an attractive metric. Future research is necessary to examine the use of IBIS in tracking studies. However, its strong theoretical base compares favorably to other KPIs like the Net Promoter Score (NPS), which is less theoretically driven (Kato et al. 2023).

Theoretical implications

The current results extend customer-brand relationship theory by suggesting that customers might prioritize brands that help them self-expand. This is consistent with research on customer loyalty showing that superficial product features do less to build customer loyalty than deeper connections (Kato 2021). It is also consistent with research on the importance of brand storytelling (Crespo et al. 2023), as prioritization of a brand might happen as the story of a customer growing closer to a brand unfolds. While the current research links self-expansion to future purchase, future research could examine if self-expansion also has a protective function for brands, as customer might, for example, judge brands during a controversy less harshly if they have already grown close to them.



Additionally, the results suggest that customers are able to make holistic judgments about how close they feel to brands, cutting across the various emotional and cognitive factors that are involved. This raises questions of which factors are primary when making these judgments. More emotional factors might be important drivers of IBIS's association with future purchasing (cf. Nyffenegger et al. 2015), but future research is necessary to examine this.

Conclusion

The holistic nature of IBIS makes it particularly useful in the context of consumer attitudes and behavior. Most evaluations of brands and products, such as opinion measures and forecasts of future behavior, are direct and focused evaluations of the brand or product itself. This specificity can be valuable, but has a paradoxical weakness: it necessarily omits many of the factors that predict consumer behavior, including both “hot” factors like emotional reactions and “colder” factors like availability, propinquity, and habit. IBIS, conversely, is more general. Guided by self-expansion theory in the context of interpersonal relationships, its likely antecedents include the ability to signal status (Han et al. 2010; Bellezza et al. 2017), the desire to confirm or branch out into new identities (Oyserman 2009; Chernev et al. 2011; Sheehan and Dommer 2020; Warren and Mohr 2019), and the experience of behavioral closeness (Aron et al. 1991; Reimann and Aron 2009). Thus, the multiple potential mechanisms that underlie responses to IBIS are, perhaps counterintuitively, a strength of the measure, particularly with respect to its predictive value in a consumer context. That is, because IBIS responses could potentially arise from a variety of antecedent sources, the measure captures factors that respondents might not explicitly identify. In sum, the current research demonstrates that the Inclusion of Brand in Self measure can simply, efficiently, powerfully, and prospectively predict future behavior.

Appendix

Methodological data appendix

Study 1

See Table 1.

Table 1 Pearson correlations, means, and standard deviations for model predictors

	<i>M</i>	<i>SD</i>	2	3
1. IBIS	2.27	1.83	0.63	0.32
2. Purchase intent	2.90	1.43	–	0.24
3. Usage	.50	1.99		–

Significant correlations ($p < .05$) are in bold

Study 2

See Table 2.

Table 2 Pearson correlations, means, and standard deviations for model predictors

	<i>M</i>	<i>SD</i>	2	3
1. IBIS	3.59	1.71	0.70	0.36
2. Purchase intent	6.39	2.66	–	0.33
3. Usage	1.56	2.46		–

Significant correlations ($p < .05$) are in bold

Study 3

See Table 3.

Table 3 Pearson correlations, means, and standard deviations for model predictors

	<i>M</i>	<i>SD</i>	2	3
1. IBIS	3.29	1.74	0.54	0.26
2. Purchase intent	4.92	2.79	–	0.21
3. Usage	.46	1.11		–

Significant correlations ($p < .05$) are in bold

Data availability The data that support the findings of these studies are available on the Open Science Framework at <https://osf.io/a3nx2/>.

Declarations

Conflict of interest The authors report that there are no competing interests to declare. On behalf of all authors, the corresponding author states that there is no conflict of interest.



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