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Experiencing branded apps

Direct and indirect effects of engagement experiences on continued branded app use

van Berlo, Z.M.C.; van Reijmersdal, E.A.; van Noort, G.

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Experiencing Branded Apps: Direct and Indirect Effects of Engagement Experiences on Continued Branded App Use

Zeph M. C. van Berlo, Eva A. van Reijmersdal, and Guda van Noort

University of Amsterdam, Amsterdam, The Netherlands

ABSTRACT

This study aimed to gain insight into how people engage with branded apps and adopted the media engagement framework to examine how different types of engagement experiences are associated with the continued use of branded apps. In this study, three *types of engagement experiences* were identified that are important in the context of branded apps: (1) hedonic, (2) utilitarian, and (3) symbolic engagement experiences. A cross-sectional survey study was conducted among a sample of 298 Dutch smartphone users. Structural equation modeling (SEM) was used for the analyses. The results demonstrate that, overall, branded app engagement experiences affect continued app use in two distinct ways: indirectly, via app attitude, through hedonic and utilitarian experiences, and directly through symbolic experiences.

Introduction

The development and use of mobile applications (or apps) have proliferated in recent years. In 2019, over five million apps were available to download across the three major app stores (i.e., Google Play, Apple App Store, and Amazon Appstore). Each month, on average, an additional 16,000 new apps are released (Statista Research Department 2021). Brand managers have picked up on this and many brands have released their own "branded apps," making apps a relevant advertising tool. Branded apps are "software that is downloadable to a mobile device and prominently displays a brand identity, often via the name of the app and the appearance of a brand logo or icon, throughout the user experience" (Bellman et al. 2011, 191).

Not every branded app, however, is equally successful. Mobile testing service StarDust reported in 2013 that about half of the apps available in the major apps stores could be considered *zombie apps*. These are apps that, despite being available for download in an app store, are no longer supported by their developers—often because the apps had failed to attract (and sustain) sufficient traffic. A recent report on the global app market (Statista Research Department 2021) identified that not even a third of all downloaded apps are used at least ten times and that about a quarter of all downloaded apps are never used more than once. This is problematic for brands and app developers when taking into account that the mobile app market was valued at over $187.6 billion in 2021 (Grand View Research 2021). For brands, having to discontinue an app will thus often mean a considerable loss of investment. But also for consumers, discontinued apps can be problematic because they clutter app stores and complicate consumers' search for relevant (and up-to-date) apps and information. It is thus important to study what moves consumers to *continue* their *use* of particular apps once they have decided to download a branded app from the app store.

To better understand what drives continued branded app use, we adopt the media engagement

CONTACT Zeph M. C. van Berlo ✉ z.m.c.vanberlo@uva.nl 🖂 Amsterdam School of Communication Research, University of Amsterdam, PO box 15791, 1001 NG Amsterdam, the Netherlands

Zeph M. C. van Berlo (PhD, University of Amsterdam) is an assistant professor in persuasive communication, Amsterdam School of Communication Research, University of Amsterdam.

Eva A. van Reijmersdal (PhD, University of Amsterdam) is an associate professor of persuasive communication, Amsterdam School of Communication Research, University of Amsterdam.

Guda van Noort (PhD, Vrije Universiteit) is a full professor and chair of persuasion and new media technologies, Amsterdam School of Communication Research, University of Amsterdam.

framework (Calder and Malthouse 2008; Calder, Malthouse, and Schaedel 2009). According to this framework, media offer engagement through media experiences. These experiences are best described as consumers' perceptions concerning the value a medium offers them while using it (Calder, Malthouse, and Schaedel 2009), for example, the perceptions that an app offers convenience or enjoyment. These experiences subsequently can lead to so-called engagement consequences, such as increased media use, clicks, likes, or shares. We depart from previous work that has adopted the media engagement framework by modeling the effects of engagement experience types directly (instead of as a higher-order construct). Engagement experience types are defined as sets of individual experiences (e.g., "This medium is helpful" or "This medium is useful") that together constitute a distinct type of engagement experience (e.g., utilitarian engagement). In this study, we propose three types of app engagement experiences that ultimately predict continued app use.

The current study makes several contributions to the literature. First, the current study contributes to the media engagement literature by identifying three engagement experience types (i.e., hedonic, utilitarian, and symbolic) relevant in the context of branded apps. This extends the work by Stocchi et al. (2018, Stocchi, Pourazad, and Michaelidou 2020), who have identified hedonic and utilitarian motivations as important drivers of willingness to pay and continued use of branded apps. Second, by identifying a direct and an indirect path (via app attitude) for the effects of app engagement experience types on continued app use, this study offers novel theoretical insights into the mechanisms underlying continued branded app use. Third, whereas prior research adopting the media engagement framework (e.g., Calder, Malthouse, and Schaedel 2009; Malthouse and Calder 2011; Wu 2016; Zhou et al. 2022) often treats engagement as a higher-order construct, we show that considering "types of engagement experiences" (e.g., hedonic, utilitarian, symbolic) instead can ultimately offer nuanced insights into the workings of engagement in the context of branded apps.

Theoretical Background

Media Engagement Framework

In the literature, there are various perspectives on how to operationalize media engagement (de Oliveira Santini et al. 2020). One of the main contemporary perspectives is proposed by Calder and Malthouse (2008) in their media engagement framework. In this framework, engagement is conceptualized not as a behavior (e.g., click, like, comment, or download) but as a motivational experience (or set of experiences) that drives this behavior.

Calder, Malthouse, and Schaedel (2009) identified various key experiences that media users have when engaging with media. They found that engagement experiences that express users' personal relevance to a medium were especially important in this context. Media engagement, in a broader context, is described as follows: "[media] users seek stimulation and inspiration from the [medium], they want to use the [medium] to facilitate their interactions with other people, they feel the [medium] affirms their self-worth, they get a sense of intrinsic enjoyment in using the [medium] itself, they feel it is useful for achieving goals and they value input from other users" (Calder, Malthouse, and Schaedel 2009, 327).

Prior research into the effects of media engagement has often considered media engagement, conceptually, as a single higher-order construct (Calder, Malthouse, and Schaedel 2009, Calder, Isaac, and Malthouse 2016; Malthouse and Calder 2010, 2011; Mersey, Malthouse, and Calder 2010; Zhou et al. 2022). This means that they modeled the effects of engagement as the effect of the relative sum of *all* experiences. An exception can be found in Malthouse, Calder, and Tamhane (2007), who showed that, using an exploratory procedure, in a magazine ads context, several (but not all) engagement experience types (called experience factors in their paper) were associated with enhanced attitudes toward the ad. Notably, the knowledge that not *all* engagement experience types affected advertising effectiveness in the same way would have been lost if engagement would have been modeled as a higher-order construct. To be able to differentiate between the relative effects of different media engagement experience types, we adopt a confirmatory method in this study that is in line with the exploratory approach taken by Malthouse, Calder, and Tamhane (2007).

Over the years, the media engagement framework has been applied in various media contexts, ranging from magazines (Kilger and Romer 2007; Malthouse, Calder, and Tamhane 2007; Malthouse and Calder 2010), newspapers (Calder, Isaac, and Malthouse 2016), (news) websites (Calder, Malthouse, and Schaedel 2009; Kilger and Romer 2007; Mersey, Malthouse, and Calder 2010), and mobile social media networks (Malthouse et al. 2016; Verma 2021; Wu 2016) to television (Calder, Isaac, and Malthouse 2016;

Kilger and Romer 2007) and clickstream data (Zhou et al. 2022). Overall, media engagement is positively related to, for example, affective advertising responses (e.g., Calder, Isaac, and Malthouse 2016; Malthouse, Calder, and Tamhane 2007; Malthouse and Calder 2010; Wu 2016), intention behaviors (e.g., Calder, Malthouse, and Schaedel 2009, Calder, Isaac, and Malthouse 2016; Kilger and Romer 2007), readership behaviors (e.g., Mersey, Malthouse, and Calder 2010), and willingness to pay (Zhou et al. 2022). In the context of branded apps, in particular, Stocchi et al. (2018, Stocchi, Pourazad, and Michaelidou 2020) found that hedonic and utilitarian engagement experiences are important drivers of willingness to pay and continued use of branded apps. If anything, these findings show that different engagement experiences can lead to different outcomes of engagement (e.g., continued use), which underlines the importance of examining how different app engagement experience types can explain the continued use of branded apps.

Introducing Three Types of App Engagement Experiences

Branded apps differ from other mobile phone apps in that they are used by advertisers as a marketing tool. They are pull (rather than push) media (Bellman et al. 2011), which means that consumers decide for themselves whether to seek out and engage with a branded app (Son 2017), rather than that it is "pushed" to them by a brand (e.g., like a television commercial is pushed to its audience). Branded apps are used by advertisers for ulterior motives; therefore, users may be less willing to interact with these apps and have different experiences than with non-branded apps. However, at the same time, when compared to other forms of interactive advertising, such as websites, branded apps are potentially more engaging and offer additional opportunities in terms of consumer engagement (Kim, Lin, and Sung 2013; Seitz and Aldebasi 2016; Stocchi et al. 2018).

Different branded apps do not need to deliver the same experiences to be engaging. In fact, because the content of branded apps can be diverse (e.g., Bellman et al. 2011; Van Noort and Van Reijmersdal 2019), it seems likely that the types of engagement experiences branded app users have when interacting with branded apps are also diverse. A branded app from an airline, for example, might be considered more functional by its users and offer convenience (a utilitarian experience), whereas a branded app from a soft drink brand might use gamification to create a more

experiential experience to evoke feelings of enjoyment among its users. In sum, branded apps can evoke various types of experiences with their users, which we believe results in different types of app engagement.

In this study, three types of engagement experiences are considered for explaining branded app use: (1) hedonic, (2) utilitarian, and (3) symbolic engagement experiences. Previous research has shown that consumers tend to attach hedonic (sometimes called experiential), utilitarian, and symbolic benefits to branded products and services (Berthon et al. 2007; Diallo et al. 2021; Kim and Phua 2020). That mobile apps can offer value through utilitarian and hedonic app benefits seems well established (Tang 2019); however, contrary to their non-branded counterparts, branded apps are also believed to offer symbolic value associated with the brand that is embedded in the app (Stocchi, Michaelidou, and Micevski 2019). Ultimately, this is grounded in the idea that brands, as objects with symbolic meaning, are used by consumers to represent themselves (Bagozzi et al. 2021).

Hypotheses Development

The First Engagement Experience Type: Hedonic

Hedonic engagement experiences are experiences that give media users a sense of intrinsic enjoyment, arousal, or relaxation while engaging with a medium (Chen and Fu 2018). Several studies (e.g., Hsu and Lin 2015, 2016; Yang 2013) have linked hedonic engagement experiences to increased app use. Notably, however, this relationship is often found to be mediated by app attitude (Hsu and Lin 2016; Kim, Lin, and Sung 2013; McLean et al. 2020).

This indirect path, via app attitude, would conceptualize the effect of hedonic media engagement on app use as a media context effect. Media context research (Bronner and Neijens 2006) suggests that media experiences not only translate into potential direct behavioral responses to the medium (e.g., usage, readership) but may also affect users' evaluation of the medium. Concretely, the effect of hedonic engagement experiences on app use would then consist of two parts. First, hedonic experiences lead to an overall more positive evaluation of the (branded) app. And second, this more positive evaluation of the app would subsequently lead to continued app use (Ahmed, Beard, and Yoon 2016).

Notably, however, not all empirical evidence supports this indirect effect. Chen and Fu (2018), for example, showed that hedonic engagement experiences only affected the intention to use apps directly—and

showed that the relationship between these variables via app attitude (in their paper app satisfaction) was non-significant. Theoretically, a direct effect could be explained by adopting the hedonic contingency hypothesis (Wegener and Petty 1994), which states that people who are in a positive mental state (experiencing hedonic engagement) are more willing to use and be attentive to the message that is causing this mental state (Wegener and Petty 1994). That is, from a hedonic point of view, people who are in a positive mental state would be expected to want to try to remain in that state and thus prolong the positive experience—or potentially try to recreate the experience in the future (e.g., fostering reuse intentions). This approach conceptualizes app use as a direct consequence of hedonic engagement and would thus mean that we would expect to find a positive direct relationship between hedonic engagement and app use.

In sum, we have identified two potential paths for explaining the effect of hedonic engagement experiences on app use: an indirect one, via app attitude, and a direct one. When comparing the two, the evidence for the indirect path seems most convincing. However, because the two paths do not seem to exclude one another, the effects of hedonic engagement experiences on app use might have both a direct and an indirect component. We hypothesize the following:

H1a: Hedonic engagement experiences will positively affect continued app use indirectly via app attitude.

H1b: Hedonic engagement experiences will positively affect continued app use directly.

The Second Engagement Experience Type: Utilitarian

In addition to hedonic engagement experiences, utilitarian (or functional) engagement experiences are also important to consider when studying branded apps (e.g., Żyminkowska 2019). Utilitarian engagement experiences are experiences that give media users a sense of convenience—the feeling that the medium that they engage with makes their life easier or helps them with performing a particular task. Branded apps, in particular, are often designed to offer utility and to help consumers perform tasks, for example, making online payments, finding information about public transport or flights, or online shopping (Feng and Xie 2019; M. Kim et al. 2017).

Utilitarian experiences, in particular, are dependent on the match between the needs of the user engaging with a particular branded app and the task that is being facilitated by a given app. If these do not match (i.e., are incongruent), then utility is not expected to be experienced. For example, whether users experience utility from engaging with a particular banking app is dependent on whether these users need to make a payment or check their account balance (i.e., tasks that the app facilitates). Only if these users need to perform a task the app helps them to accomplish, then they are expected to experience utility; if not, then they likely do not experience utility.

This means that we would expect app users to be more inclined to continue using a particular app when this app offers some kind of utility—as not using the app would make the task at hand more difficult. However, this expectation is conditional on whether these users are looking to perform a task that is facilitated by the app. Consequently, this rules out a direct effect of utilitarian engagement experiences on app use, because a direct effect would not allow for the dependency of utility on the needs of the user.

Similarly to our expectation for hedonic engagement experiences, we expect utilitarian engagement experiences to have an indirect effect on continued app use via app attitude. As an app facilitates specific tasks, it is expected to be appreciated, which is believed to lead to a more positive app attitude and subsequent usage (Hsu et al. 2015). These expectations are supported by empirical evidence. For example, McLean et al. (2020) found that perceived usefulness and ease of use positively affected app attitude over time (e.g., after using an app for a year) and Li and Fang (2019) found a similar positive association between ease of use and app attitude in a study of branded app users. In summary, apps that are liked better are more likely to be used and therefore satisfaction with a branded app is expected to lead to continued app use. The following hypothesis is proposed:

H2: Utilitarian engagement experiences will positively affect continued app use, indirectly, via app attitude.

The Third Engagement Experience Type: Symbolic Engagement

Symbolic experiences are engagement experiences that often resonate with one's personal values (or *self*) and promote the building of social bonds and personal identity (Nagy and Koles 2014). In particular, branded apps that offer symbolic value are expected to satisfy consumers' social and personal needs for prestige, uniqueness, and conformity (Huang 2012). Concretely, these could be elements such as virtual

brand communities that would allow user membership and experience identification with set communities, or narrative scripts that communicate goals, values, and beliefs (Nagy and Koles 2014). Notably, brand indicators (e.g., logos and slogans) are believed to offer symbolic value (Van Berlo, Van Reijmersdal, Smit, et al. 2021) and could thus be considered elements that evoke symbolic experiences.

Different from hedonic and utilitarian engagement experiences, symbolic engagement experiences are believed to be rooted in the relationship between the consumer and the brand, rather than in the affordances of the app. As vehicles of symbolic meaning, consumers use brands to shape and communicate their personal identities (Wei et al. 2022). This is in line with symbolic interactionism, which suggests that the symbolic meaning of—in this case—brands, is used by people to construct their social realities dynamically and to enhance their self-presentation (Hansen 2009).

For this reason, we expect symbolic engagement experiences to promote continued app use directly. Empirical support for this is found in a recent study by Li and Fang (2021), who identified a positive direct relationship between the person–brand fit and branded app use. Notably, however, no indirect effect of symbolic engagement experiences on continued app use is expected via app attitude. Because the symbolic value of branded apps is believed to originate from the brand, rather than from the app, an indirect effect via app attitude seems unlikely. In sum, we propose the following hypothesis:

H3: Symbolic engagement experiences will positively affect continued app use directly.

Method

Participants and Procedure

For this study, we conducted a cross-sectional survey among a sample of 298 smartphone users (50.0% female). Participants were part of an online panel owned by the online market research company PanelClix. The age of the participants varied between 18 and 76 years ($M = 42.54$, $SD = 14.55$), and about half of them were college graduates (51.4%). Based on these characteristics, the sample was representative of the average smartphone user in the Netherlands (Statistics Netherlands [CBS] 2020).

After giving informed consent, the participants were asked to fill out an online questionnaire, which included questions about the last branded app the participants had used on their smartphones. Previous studies into the effects of media consumption (e.g., Voorveld et al. 2013) have shown that this is an effective method for studying overall media usage. Branded apps had to meet two criteria to be considered in the current study. They had to (1) show a clear brand identity (e.g., by having a logo or a brand name incorporated into the content of the app) and (2) have been developed by brands that offer consumer products or services. Examples of branded apps are the H&M (clothing store) app and the Vodafone (telecom provider) app. Apps that were not considered for this study were social media apps (e.g., WhatsApp, Snapchat, and Facebook). Where such apps might have a clear brand identity, they are not clearly used as a marketing tool for a *paid product or service* and therefore do not meet the second criterion. The choice of the app was recorded by the participant and evaluated by one of the researchers. Overall, 70 unique brands were reported, of which 33 were goods brands and 37 were service brands. People who failed to choose a branded app were not included in the study.

In the questionnaire, participants were asked to evaluate the branded app they had selected and indicate how often they use it. Subsequently, the levels of engagement with the app were measured with 11 media engagement experiences, each corresponding with one of the three media engagement types (i.e., hedonic, utilitarian, symbolic). After finishing the questionnaire, the respondents were thanked and paid for their participation. An overview of the scale information, measurement items, and descriptive statistics can be found in Table 1.

Measurement Model

To determine the fit of the proposed measurement model for app engagement, we used the *R* statistical package *Lavaan* (version 0.6–11; Rosseel 2012). The model was estimated with maximum likelihood (ML) estimation and robust standard errors to account for non-normality in the data. There were no missing data. Suggestions by Hu and Bentler (1999) were followed when evaluating the fit of the model. Because the chi-square statistic is sensitive to sample size (Kline 2015), we primarily considered the fit indices comparative fit index (CFI), root mean square error of approximation (RMSEA), and standardized root mean square residual (SRMR). Hu and Bentler (1999) suggest that a CFI cutoff of .90 to .95 can be considered acceptable if the SRMR value is below .08. They state that the SRMR is

Table 1. Overview measurement items and variance-covariate matrix with mean structure and covariance estimates.

Items	M	SD	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Hedonic engagement[a]																	
1. *Using this app makes me feel good*	4.34	1.42	–														
2. *This app makes me happy*	4.84	1.33	.70	–													
Utilitarian engagement[b]																	
3. *This app helps me*	5.17	1.27	.26	.26	–												
4. *This app is useful*	5.40	1.13	.24	.29	.73	–											
5. *This app is handy*	5.67	1.02	.25	.35	.63	.76	–										
6. *This app makes my life easier*	5.76	0.98	.30	.42	.58	.69	.85	–									
Symbolic engagement[a]																	
7. *This app makes me more interesting*	3.14	1.60	.47	.32	.17	.14	.00	−.03	–								
8. *This app makes me think differently about certain things*	3.57	1.63	.44	.32	.17	.18	.06	.04	.72	–							
9. *I use information from this app when I am talking with acquaintances*	3.62	1.68	.46	.41	.05	.13	.06	.06	.55	.54	–						
10. *This app gives me something to talk about with others*	3.13	1.71	.49	.39	−.01	−.02	−.06	−.03	.58	.53	.73	–					
11. *This app makes me feel like I belong to a group*	3.19	1.65	.50	.40	.11	.12	−.01	.00	.66	.55	.53	.64	–				
App attitude[c]																	
12. … *Not good/good*	6.07	0.89	.38	.43	.30	.40	.42	.47	.13	.13	.14	.09	.15	–			
13. … *Negative/positive*	5.99	0.98	.36	.42	.27	.34	.38	.40	.19	.18	.20	.18	.20	.78	–		
Continued app use[d]																	
14. *I use this app more than other apps*	3.79	1.60	.30	.30	.31	.31	.22	.24	.39	.39	.29	.28	.39	.31	.24	–	
15. *I spend a lot of time on this app*	3.23	1.54	.45	.38	.11	.09	.01	.05	.52	.45	.49	.55	.60	.23	.25	.62	–

Note. Raw correlations are shown to the left of the diagonal. Items are adapted from [a]Calder et al. (2009), [b]Hsu and Lin (2015), [c]Li et al. (2002), and [d]Zott et al. (2000).

more sensitive than the other fit indices to misspecifications in the model and suggest comparing the CFI in combination with the SRMR. Additionally, the RMSEA should preferably be lower than .05 and not higher than .08. A higher value could be considered acceptable only if a nonsignificant *p*-close value is found—indicating that the model is a *close-fitting* model (Hu and Bentler 1999; Kline 2015).

We estimated an unconstrained model, which rendered an insufficient fit, χ^2 (80) = 280.25, $p < .001$; CFI = .90; RMSEA = .09, 95% confidence interval [CI] [.08, .10], *p*-close < .001, SRMR = .07. Overall, the fit indices indicate a poor fit for the unconstrained model. A step-by-step approach for adding the residual correlations was used to improve the fit of the model. This means that after each residual correlation that was added the model was estimated again and the modification indices were examined respectively to improve the fit of the model. Only correlations between residuals of indicators that measure the same engagement experience type were considered. We added four residual correlations (see Figure 1). The final model had an improved fit compared to the unconstrained model, χ^2_{diff} (4) = 99.09, $p < .001$.

Convergent and Discriminant Validity

To determine the convergent validity of the model, we used the Fornell-Larcker criterion (Fornell and Larcker 1981). Fornell and Larcker suggest that the average variance extracted of all latent variables should be above .50 and preferably above .70. In addition, the composite reliability should be greater than .70 for good convergent validity. As shown in Table 2,

both requirements were met, verifying the convergent validity of the construct.

To establish discriminant validity, we estimated heterotrait-monotrait ratio of correlations (HTMT) values following suggestions by Henseler, Ringle, and Sarstedt (2015). To establish discriminant validity between two constructs, the HTMT value should be below 0.90. As shown in Table 2, all HTMT values were below this threshold, establishing the discriminant validity of the constructs. Altogether, this means that both the convergent and discriminant validity of our model was established.

Results

Hypothesis Testing

To test the hypotheses, we estimated a path model (as shown in Figure 1) with ML estimation and robust standard errors to account for non-normality in the data. There were no missing data. The model had a good fit, χ^2 (76) = 153.92, $p < .001$; CFI = .96; RMSEA = .06, 95% CI [.05, .07], *p*-close = .119, SRMR = .06. The CFI value of .96 is considered satisfactory in combination with the SRMR value of .06. Also the RMSEA of .06 indicates a satisfactory fit.

The results, as shown in Figure 1, indicated that *hedonic* ($p < .001$) and *utilitarian* ($p = .001$) experiences have a positive direct effect on app attitudes—but not on continued app use (hedonic: $p = .989$; utilitarian: $p = .495$). This implies that whenever people experience a branded app as either being enjoyable or convenient, they are expected to evaluate the app more positively, but are not expected to use the app
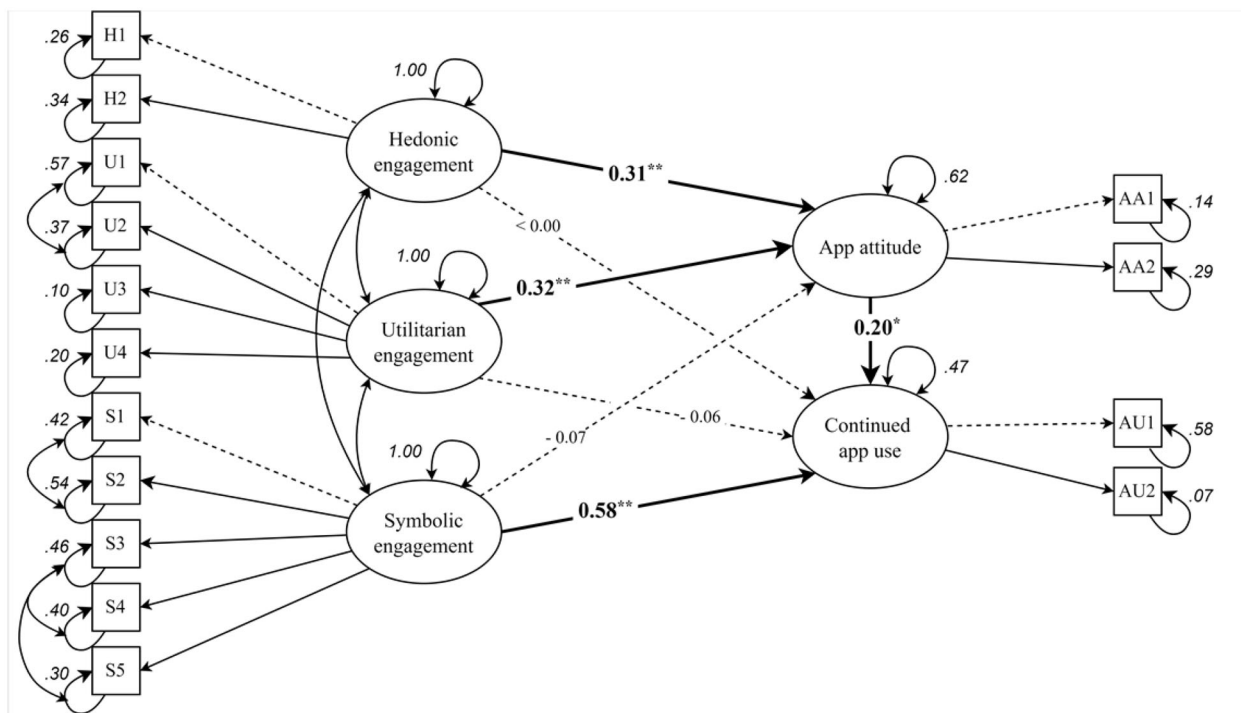
Figure 1. Path model with unstandardized regression coefficients. Paths in bold indicate significant positive effects, dotted paths indicate insignificant effects. Standardized regression coefficients can be found in Table 3. Error variances (in italics) are standardized. $**p \leq .001$; $*p < .05$.

Table 2. Descriptive statistics, reliability and validity criteria, and covariances of latent variables.

	M	SD	α	CR	AVE	1	2	3	4	5
1. Hedonic engagement	4.59	1.26	.82	.82	.70	–	.42	.65	.54	.54
2. Utilitarian engagement	5.50	0.97	.90	.85	.66	**.40**	–	.11	.50	.25
3. Symbolic engagement	3.33	1.37	.88	.84	.58	**.67**	.03	–	.23	.71
4. App attitude	6.03	0.88	.87	.87	.78	**.52**	**.50**	.22	–	.37
5. Continued app use	3.51	1.41	.77	.79	.67	**.52**	.05	**.72**	**.28**	–

Note. α: Cronbach's alpha; CR: composite reliability; AVE: average variance extracted. Covariances are shown to the left of the diagonal, and the hetero-trait-monotrait ratios of correlations (HTMT) are shown to the right of the diagonal. Covariances presented in bold are significant at the .002 level.

more often. Moreover, as shown in Table 3, significant indirect effects were found for hedonic and utilitarian experiences on continued app use (via app attitude). These findings support hypotheses 1a and 2. However, hypothesis 1b is not supported.

Furthermore, the results indicate that *symbolic* experiences are positively associated with continued app use ($p < .001$). No such association was found with app attitude ($p = .329$). This means that when branded app users experience an app as being stimulating and inspiring, this is expected to drive app use directly; however, it is not expected to affect this person's attitudes toward the app. The data supports hypothesis 3.

Discussion

In this study, we aimed to examine how three important types of branded app engagement experiences (i.e., hedonic, utilitarian, and symbolic) affected app attitude and continued app use. Drawing on a sample

representative of Dutch smartphone users, the study revealed two distinct paths explaining the effects of app engagement on continued app use: an indirect path, via app attitude, from hedonic and utilitarian experiences, and a direct path, from symbolic experiences.

Effects of App Engagement on Continued Use

First, the results showed that hedonic and utilitarian engagement experiences only affect continued app use indirectly via app attitude. These findings are in line with our expectations based on the media engagement framework (Calder and Malthouse 2008) and media context research (Bronner and Neijens 2006). Contrary to our expectations, based on the hedonic contingency hypothesis (Wegener and Petty 1994), no direct effect was found of hedonic engagement experiences on continued app use. Ultimately, both the effects of hedonic engagement experiences and

Table 3. Standardized regression coefficients for direct and indirect effects on continued app use.

	App attitude				Continued app use			
Direct effects	b*	SE	95% CI		b*	SE	95% CI	
Hedonic engagement	0.46	0.11	0.23	0.68	<0.00	0.10	−0.20	0.20
Utilitarian engagement	0.33	0.08	0.17	0.48	−0.05	0.07	−0.18	0.09
Symbolic engagement	−0.10	0.10	−0.30	0.10	0.69	0.08	0.53	0.85
App attitude	.	.	.	.	0.16	0.06	0.04	0.28
Indirect effects								
Hedonic engagement > app attitude	.	.	.	.	0.07	0.04	<0.01	0.14
Utilitarian engagement > app attitude	.	.	.	.	0.05	0.02	0.01	0.10
Symbolic engagement > app attitude	.	.	.	.	−0.02	0.02	−0.05	0.02

Note. Regression coefficients presented in bold are significant at the .05 level.

utilitarian engagement experiences seem fully explained by users' attitudes toward the app.

Second, the results showed that symbolic engagement experiences affected continued app use directly, rather than indirectly via app attitude. A notable difference between hedonic and utilitarian engagement experiences on the one hand and symbolic engagement experiences on the other hand, however, seems to be that where the effect of hedonic and utilitarian engagement experiences can be explained by users' evaluation of the app (i.e., the effect is mediated by app attitude), symbolic engagement experiences affect continued app use directly. This suggests that hedonic and utilitarian engagement experiences seem rooted in the affordances of the app, whereas symbolic engagement experiences seem rooted in the affordances of the brand.

Theoretical and Managerial Implications

The results of the current study have both theoretical and practical implications. Theoretically, the current study contributes to the media engagement framework. Whereas prior research adopting the media engagement framework (e.g., Calder, Malthouse, and Schaedel 2009; Malthouse and Calder 2011; Wu 2016; Zhou et al. 2022) often treated engagement as a higher-order construct, the findings of our study show that considering "types of engagement experiences" instead can offer more nuanced insights in the workings of media engagement than when engagement is treated as a higher-order construct. For this reason, moving forward, researchers are advised to differentiate between types of media engagement experiences, rather than treating media engagement as a single (higher-order) construct, when studying the effects of media engagement.

Also, the current study contributes to the media engagement literature by identifying three engagement experience types (i.e., hedonic, utilitarian, and symbolic) relevant in the context of branded apps. Where previous research had already identified hedonic and utilitarian engagement experiences as important drivers of continued use of branded apps (e.g., Stocchi et al. 2018, Stocchi, Pourazad, and Michaelidou 2020), the current study demonstrates that symbolic engagement experiences play a significant role as well. Concretely, this suggests that consumers not only continue to use branded apps because they like the app or find it convenient (e.g., hedonic and utilitarian motivation) but also because of the symbolic value the app offers by being branded.

Furthermore, this study offers novel insights into the mechanisms underlying continued branded app use by identifying a direct and an indirect path (via app attitude) for the effects of app engagement experience types on continued app use. The findings show that hedonic and utilitarian engagement experiences only affect continued app use indirectly by contributing to the overall value of the app, whereas symbolic engagement experiences were found to be directly associated with continued app use. By identifying these distinct paths for the effects of media engagement on continued app use, the study underlines the notion that not every type of engagement experience renders a similar response.

The practical implications of our study are mostly related to effective branded app design in terms of continued use. Overall, the study shows that improving the consumer app experience can lead to more positive evaluations of the app and continued app use. This is important because these might spill over to brand responses and ultimately lead to more positive brand evaluations (Calder, Hollebeek, and Malthouse 2017).

A clear managerial implication of the current findings is that to drive app use, it is important to focus on functionalities that offer users symbolic engagement experiences. Branded apps that can inspire their users, or represent what their users find important in life, are more likely to be used more often. This means that, in addition to offering apps with a clear brand image, branded app developers have to provide branded content or functionalities that resonate with

the personal identities of the users of the app. To do so, detailed knowledge about the user base seems essential. Potentially, offering users the option to personalize the branded app might also result in stronger symbolic engagement experiences.

Ultimately, however, what type of experiences are most important to focus on for a specific branded app will depend on the goal at hand—and should thus be a strategic goal-directed decision. For example, if the goal is instead to boost the overall evaluation of a branded app (e.g., because the app has been receiving poor reviews), then focusing on facilitating hedonic and utilitarian experiences would be a better strategic choice because these have been found to positively affect users' attitude toward the branded app. However, if the goal is to have existing users use the branded app on a (more) consistent basis (or even increase usage), then a strong focus on symbolic experiences seems most valuable. Contrary to hedonic and utilitarian experiences, which only affect app use indirectly, symbolic experiences seem to show a strong direct positive effect on continued app use.

Limitations and Suggestions for Future Research

Future research is needed to extend the current findings in multiple ways, for example, by exploring additional types of branded app engagement experiences, by investigating how experiences relate to specific app features, and by studying the generalizability of the findings across branded apps.

First, by applying the media experience framework, this study identified three important engagement experience types for branded app engagement. However, this does not rule out that there are additional relevant engagement experiences for branded apps. Future research should therefore focus on identifying additional types of branded app engagement experiences. Two approaches are suggested in the literature: a bottom-up approach, by conducting qualitative interviews (see Calder and Malthouse 2008), or a top-down approach, by considering additional theories and frameworks.

Second, where the current study offers insight into which experience types lead to particular app responses, it remains unclear which app functionalities and characteristics facilitate these engagement experiences. Future research could therefore focus on examining specific branded app functionalities, characteristics, and design features to determine which exact functionalities should be integrated into branded apps to elicit certain engagement experiences. Examples of such functionalities are those that offer

users the ability to personalize and customize a branded app to their preferences (likely offering symbolic experiences) or search buttons that facilitate the searching of information (likely offering utilitarian experiences). Those insights would complement the findings of this study and would facilitate the decision-making process for both branded app developers and (brand) managers who decide which functionalities and characteristics to include when developing or auditing branded apps.

Third, future research is to examine whether the same mechanisms as in the present study hold for various types of branded apps. Bellman et al. (2011), for example, showed differential effects of informational versus experiential branded apps on purchase intentions and brand attitude. In line with this, one could argue that different types of engagement experiences could predict continued app use for informational versus experiential branded apps. Another relevant type of branded app to examine would be gamified branded apps (Van Berlo, Van Reijmersdal, and Eisend 2021). When engaging with this type of branded app, the experiences consumers have (and seek) might arguably be different than when engaging with regular branded apps (Van Berlo, Van Reijmersdal, and Waiguny 2022). Ultimately, this could imply that different engagement experience types might be driving the effectiveness of this kind of app.

ORCID

Zeph M. C. van Berlo ⓘD http://orcid.org/0000-0002-1008-8654
Eva A. van Reijmersdal ⓘD http://orcid.org/0000-0002-3950-3524
Guda van Noort ⓘD http://orcid.org/0000-0002-6314-1455

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